



TEZPUR UNIVERSITY



ANNUAL REPORT 2014-15



Annual Report

2014-15



Specialized Knowledge Promotes Creativity

Tezpur Univeristy

Napaam, Tezpur 784028, Assam



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Vision

To develop human excellence and inculcate leadership through hard work and creativity.

Mission

To render Tezpur University one of the most preferred destinations of students, faculty and scholars / and employees. To be in the top 50 Universities of the world.

The objectives of the University shall be

1. to disseminate and advance knowledge by providing instructional and research facilities in such branches as in:

- (i) existing and emerging areas of Science, Technology, humanities and Social Sciences .
- (ii) employment oriented and inter-disciplinary courses .
- (iii) areas of study which are of special and direct relevance to the region and meet the local and regional aspirations for development.
- (iv) courses that promote national integration and studies of cultural heritage of the region and in particular, the diverse ethnic, linguistic and community cultures of the State of Assam.

2. to utilize distance education techniques and modern communication technologies like ICT to provide access to higher education for large segments of the population, and in particular, the disadvantaged groups such as those living in remote and rural areas.

3. to provide an innovative system of university level education, flexible in regard to methods and pace of learning, combination of courses, eligibility for enrolment, age of entry, conduct examination and operation of the programmes with a view to promote learning and encourage excellence in new fields of knowledge.

4. to reach out for improvements of the socio-economic conditions and welfare of the people of that state, their intellectual, academic and cultural development through teaching, research and innovation.



Twelfth Convocation

Tezpur University

20 November 2014



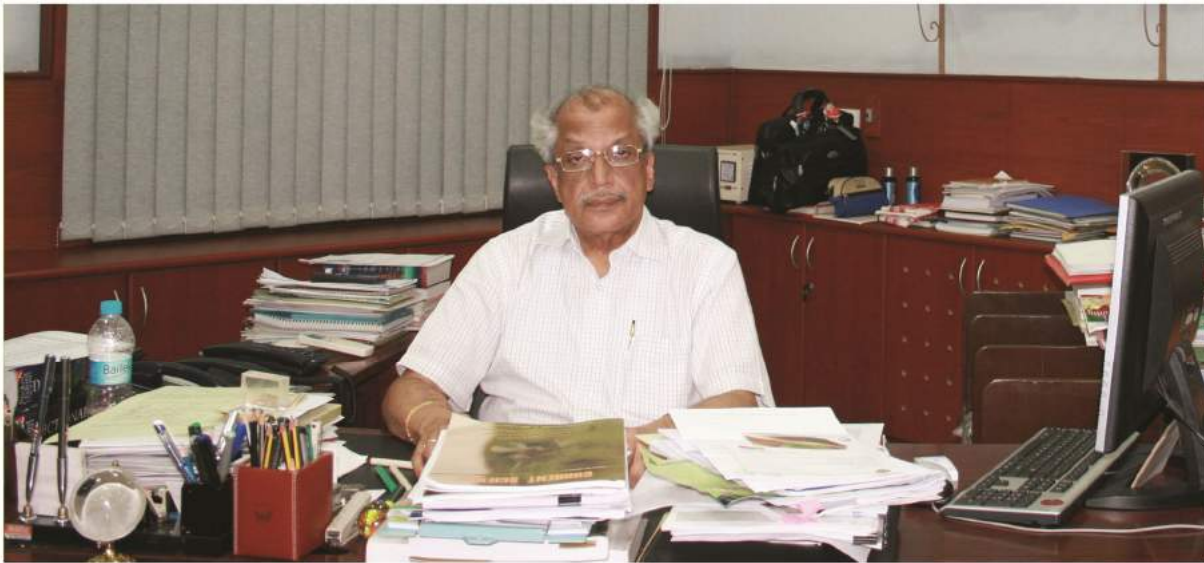
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28 October 2015

From the Vice-Chancellor's Desk



Professor Mihir K. Chaudhuri, *FASc, FNA*
Vice-Chancellor

The annual report of an institution is a compilation of faithful recordings of what have been achieved, and also perhaps what couldn't be achieved, during the year under report. The stakeholders of the texts are : (1) The students, (2) The faculty and (3) The non-teaching staff including both technical as well as administrative parlance.

Currently, we have nearly 3300 students and 230 teachers. The university runs academic programmes leading to B. Tech, M. Tech, Integrated Masters and two years Masters in Sciences, Humanities & Social Sciences and Languages, Commerce and Business Administration, and PhD in all subjects being taught here. The Government of India policy on reservation and rosters are very strictly adhered to. ICT applications get adequate importance on the campus. Continuously updated teaching and research labs, computational supports and library provide state-of-the-art facilities enabling the graduating students a very good academic support and training. Research at various levels, undergraduate through PhD, receives preference on skill development. Students placement On-campus and off-the-campus bears testimony to the quality of teaching and research imparted in the university. Interestingly, many of our graduates go for higher education in the domain of their choice



both in India and abroad. More than 200 students qualified NET, SLET and GATE during the year. Co-curricular and extra-curricular activities are duly encouraged empowering our students to fetch several prizes and awards in national and international events including debates, quizzes, drama and other cultural events namely, music and dance. All these have been highlighted in the designated pages of this report. Some of our research scholars had stints abroad in the course of their PhD research during 2014-15. It is important to mention that the university follows semester system, continuous evaluation and flexible Choice Based Credit Transfer mechanisms. These help us not only to maintain academic discipline on the campus but also flexible learning opportunities to the students.

One of the very important events of our university is the Convocation. The XIIIth Convocation was held on 20 November 2014 on the campus. The Hon'ble President of India Shri Pranab Mukherjee was the Chief Guest of the function. It was very heartening to have HIM on our campus for a night.

In an institution of higher learning, as we know, teaching and research must go hand in hand, and to this end our university has a very vibrant research culture across the academic departments from engineering and technology through liberal arts. Nearly 75 crore rupees has been secured by our faculty as sponsored research grants and facilities, and published nearly 600 research papers in peer-reviewed international and national journals. A few patents have also been filed for. While one of our faculty members, Professor A. K. Mukherjee of the department of MBBT received "National Bioscience Award" for career development, another colleague of the same department, Dr. SumanDasgupta has received "Innovative Young Biotechnology Award" both being awarded by the Department of Biotechnology, Government of India. Dr. Ashwini K. Phukan of the department of Chemical Sciences has been awarded "Chemical Research Society of India (CRSI)" Bronze Medal this year. Several other colleagues of the university have also received academic accolades and honours during the year under report. Professor Mihir K. Chaudhuri had the privilege of attending the Banquet hosted by the Hon'ble President of India in honour of the visiting US President Mr. Barack Obama and the first lady Mrs. Michelle Obama at the RashtrapatiBhavan on 25 January 2015.

"Cleanliness is next to Godliness" –in addition to the curricular activities, keeping our campus clean and developing sustainable hygienic environment –is a part of our holistic mission. Thus, over many years we have been trying to maintain our campus as Green and Clean as possible. I am happy that this endeavor of ours has drawn the attention of the parents and guardians as well as visitors from the country and abroad. Like the previous year, this year also university continued its outreach programme including creation of public toilet facilities both within and outside the university campus. Selectively identified villages have also been duly looked after and nurtured.

All in all, the year 2014-15 was quite eventful and rewarding despite severe financial constraints. It is hoped that the year ahead will be far better for the university.

Mihir K. Chaudhuri

CONTENTS

▪ Annual Report 2013-14: A Gist	5
▪ Tezpur University: An overview	15
▪ Financial Profile	18
▪ Report from the Dean, Research & Development	21
▪ Report from the Dean, Students' Welfare	23
▪ Statutory Bodies	
The Board of Management	30
The Planning Board	31
The Academic Council	33
The Finance Committee	36
The Building Committee	37
▪ Academic Departments and Centres	
▪ School of Engineering	40
Dean, School of Engineering	41
Dept of Civil Engineering	43
Dept of Computer Science and Engineering	47
Dept of Electronics and Communication Engineering	55
Dept of Energy	65
Dept of Food Engineering and Technology	75
Dept of Mechanical Engineering	85
▪ School of Humanities and Social Sciences	
Dean, School of Humanities and Social Sciences	97
Dept of Cultural Studies	99
Dept of English and Foreign Languages	105
Dept of Hindi	113
Dept of Mass Communication and Journalism	117
Dept of Social Work	123
Dept of Sociology	127
Centre for Assamese Studies	133
Chandraprabha Saikiani Centre For Women's Studies	137
▪ School of Management Sciences	
Dean, School of Management Sciences	139
Dept of Business Administration	141
Dept of Commerce	148
Centre for Disaster Management	149
IPR Cell	151
▪ School of Sciences	
Dean, School of Sciences	157
Dept of Chemical Sciences	159
Dept of Environmental Sciences	175
Dept of Mathematical Sciences	185
Dept of Molecular Biology and Biotechnology	193
Dept of Physics	206
DBT Nodal Centre	217
▪ Centre for Open and Distance Learning	219
▪ Central Facilities	
The Central Library	223
Centre for Inclusive Development	229
Centre for Innovation, Incubation and Entrepreneurship	235
Computer Centre	239
Engineering Cell	243
Health Centre	245
Horticulture Section	249
Internal Quality Assurance Cell	251
International Office	252
▪ Programmes Organised by the University	253
▪ The Year in Figures	258



Tezpur Univeristy

Annual Report 2014-15

A Gist

UNIVERSITY PROFILE

Name of the University	: Tezpur University
State	: Assam
Address	: Napaam, Tezpur 784028, Sonitpur District
Year of Establishment	: 1994
Type of University	: Unitary Type Residential Central University

HIGHLIGHTS OF THE YEAR 2013-2014

Vice Chancellor	: Professor Mihir Kanti Chaudhuri, FASc, FNA
Pro Vice-Chancellor	: Professor Amarjyoti Choudhury, PhD (Oxon)
Registrar	: Dr Biren Das, PhD (Gau)

Total number of

Academic Departments	19
Academic Centers	5
Academic Programmes	63
Students	3300
Female	1382
Male	1915
International students	3
Teachers	226
Female	50
Male	176
Teachers (General)	126
Teachers (SC/ST/OBC)	29, 17, 54
Non-teaching Employees	260
Female	28
Male	232
Non-teaching Employees (General)	105
Non-teaching Employees (SC/ST/OBC)	38, 23, 94
Non-teaching Employees	260
Female	28
Male	232
Non-teaching Employees (General)	103
Non-teaching Employees (SC/ST/OBC)	39, 24, 94
Departments under UGC-SAP DRS1	6
Departments under UGC-SAP DRS2	3
Departments under DST-FIST	8
Papers published by Faculty	588
Conference proceedings	130
Books produced by Faculty	16
Book chapters produced by Faculty	90
Sponsored ongoing projects	147
Total financial outlay	₹ 4583.03 lakh
Sponsored projects beginning 2014-15	38
International collaborative research projects	9
Grants received for the projects beginning 2014-15	₹ 1148.30 lakh
Seminars/Workshops organized by various Departments/Centres	73
Seminars/Workshops attended by Faculty abroad and in India	201
Talks given by Faculty abroad and in India	113



• International visits by Students and Faculty	23
• International Visitors to the University	21
• International Fellowships	6
• Awards received by Faculty	26
• Students who qualified NET, SLET, GATE	56, 47, 141

FINANCIAL PROFILE

Annual budget for the financial year 2014-15

Plan	: ₹ 6867.96 lakh
Non Plan	: ₹ 4885.25 lakh

Funds utilised for Infrastructural Development

Total outlay on this count

Building	: ₹ 1776.93 lakh
Library books	: ₹ 67.77 lakh
Campus development	: ₹ 111.86 lakh

INFRASTRUCTURAL DEVELOPMENT

The following constructional activities were taken up and completed during 2014-15:

- Construction of RCC 3 Storied School Building of Kendriya Vidyalaya (KVCUT) in the campus.
- Construction of RCC 3 Storied Type B&C residential building (2 Blocks – 36 Unit)
- Construction of RCC 3 Storied Type C residential building (1 Block – 18 Unit)
- Construction of RCC 3 Storied Type B residential building (1 Block – 18 Unit)
- Construction of RCC 3 Storied Building for Extension of Central Library.
- Construction for Extension RCC 2 Storied Academic Building for School of Management Sciences.
- Construction of RCC 3 Storied Academic Building for School of Humanities and Social Sciences.
- Construction of Assam Type Machine House for the Department of Mechanical Engineering.
- Construction of Extension part of DG Shed.

FURTHER HIGHLIGHTS OF THE YEAR

A number of noteworthy events took place in the University during the period, which includes the following:

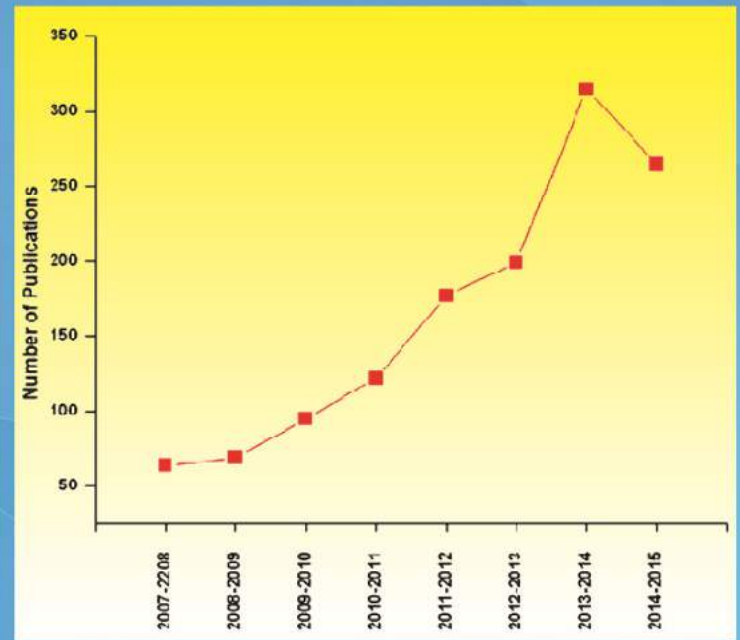
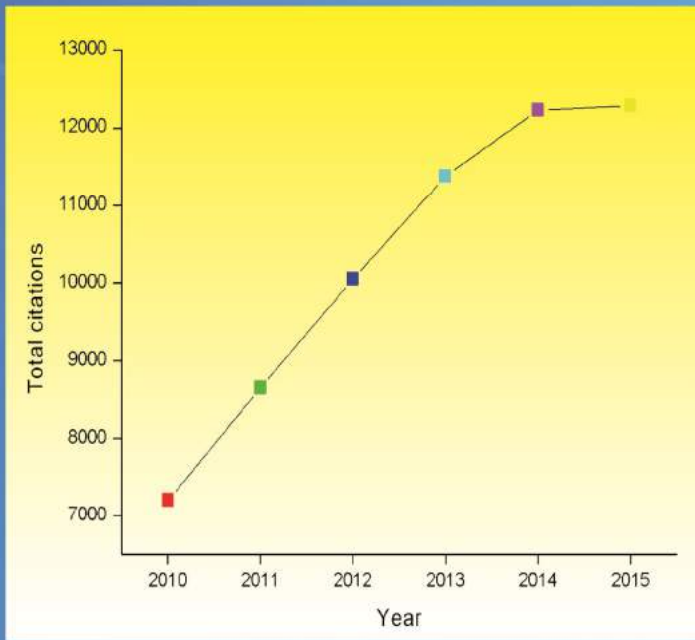
- The Twelfth Convocation of the University was held on November 20, 2014 where the students and the scholars who had qualified in the year 2013 and 2014 were conferred degrees by the President of India and the Governor of Assam.
- Tezpur University applied for three patents and three copyrights during the year, out of which two copyrights have been registered.
- The Department of Computer Science and Engineering has been selected by the MHRD, Government of India, for establishing a Centre of Excellence on Machine Learning Research and Big Data Analysis for the period 2014-2019.
- The Bioinformatics Infrastructure Facility (BIF) at the Department of Molecular Biology and Biotechnology has been ranked fifth amongst the BIF centres in India in terms of quality publications in the field of Computational Biology and Bioinformatics.
- The University has made its website accessible to persons with multiple disabilities and has also published its booklet TU at a Glance in Braille script for the benefit of visually impaired people.
- The University was accorded the approval of UGC for starting BVoc Programmes in Renewable Energy & Energy Management and Food Processing.

- The University has initiated collaboration with the University of Tokyo, National University of Science and Technology, MISIS College of New Materials and Nanotechnology, Moscow, Earth Networks Inc., USA and Russian State University, Moscow during the year 2014-15.
- The Sanskritik Samaj, Assam has conferred Shikya Guru Award for the year 2015 on Professor MihirKanti Chaudhuri, Vice Chancellor, Tezpur University, in recognition of his remarkable contributions to the world of education, research and institution building.
- Professor Mihir Kanti Chaudhuri has also been honoured with the Green Chemistry Institutes Distinguish Honored Lecture Award by the American Chemical Society.
- Professor S K Sinha of the Department of Computer Science and Engineering was awarded the US Patent on Evaluation of risk of conflict for security solutions integration along with two co-authors.
- Dr Biren Das, Registrar, Tezpur University, was selected for the Fulbright-Nehru International Educational Administrators Seminar 2014-15 held in the USA.
- Professor A K Nath, Department of Hindi was awarded the International Hindi SeviSaraswatiSamman by Abhyuday Bahuddeshiya Sanstha, Wardha, Mauritius in May 2014.
- Dr A K Nath, Department of English and Foreign Languages, has been awarded a UGC-DAAD Exchange of Senior Scientist Fellowship to carry out research at the University of Hamburg and Max Planck Institute of Evolutionary Anthropology, Germany.
- The English translation of the celebrated Assamese novel Miri Jiyori done by Dr Suranjana Barua was awarded the first Pallavi Barua Bhuyan Translation Award on May 27, 2014.
- Professor Prabuddha Ganguly, MHRD IPR Chair Professor, Tezpur University, was conferred the Lifetime Achievement Award in IPR by the legal fraternity under the banner of Legal Era in India on 2 August 2014.
- Professor Ashok Kumar of the Department of Physics was awarded Commonwealth Fellowship to work in the UK during October-December 2014.
- Ms Shreemoyee Bordoloi, Department of Chemical Sciences, won the First Prize at the German Water Partnership Awards India, 2014.
- Professor Niranjana Karak received the Ninth foundation Polymer Award by SukumarMaiti Foundation (2014).
- The second edition of SCRIPTURE, e-magazine of the School of Engineering, was launched.
- Mr Rishabh Sarma, Department of Mathematical Sciences, was part of the Indian delegation representing India at the Asian Science Camp held at NTU, Singapore during 24-29 August 2014.
- The University completed the first part of the English translation of the works of KalaguruBishnuprasadRabha and presented the completed volume to the family of Kalaguru in a function organised by the University on 29 September 2014.
- The University organised a week-long program to sensitize people about cleanliness as a part of Swachh Bharat Abhiyan during October 2-6, 2014.
- The University debate team won the Northeast leg of The Great Debate 2014 organised by the British High Commission in partnership with the Debating Society, IIT Guwahati during 16-17 October 2014.
- Sri Sarbananda Sonowal, Honourable Union Minister of State for Sports and Youth Affairs, inaugurated the last TechXetra, annual technical festival of Tezpur University during 17 -19 October 2014.
- The University observed the Rashtriya Ekta Divas (National Unity Day) on the Birth Anniversary of SardarVallabhbhai Patel on 31 October 2014.
- The University quiz team was adjudged the National Champion in the final leg of Sweden India Nobel Memorial Quiz held in the University of Delhi on 1 November 2014.
- The University observed National Education Day on the Birth Anniversary of Bharat Ratna Maulana Abul Kalam Azad on 11 November 2014.

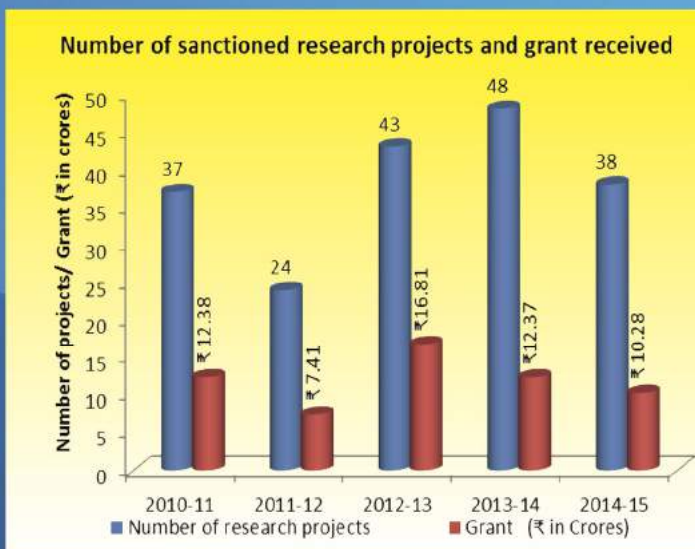


- Mr Arindam Khan, Department of Civil Engineering, was invited to participate in the final round of the Defi Bouygues Construction Challenge held in Ile-de-France during 25-28 November 2014.
- A team from Myanmar led by the Chief Ministers of Sagaing and Kachin accompanied by the Indian Ambassador to Myanmar visited the University on 4 December 2014 and held talks with the Faculty and Officials of the University towards possible collaboration in various fields.
- The Seventh Biennial International Conference of Indian Association for Asian and Pacific Studies was organised by the University during 20-22 December 2014.
- The University organised Oratory (BhaashanShailee) and Essay Competitions on 24 December 2014 to celebrate the Birth Anniversary of Shri Atal Bihari Vajpayee.
- The University Team received the Best Literary Team Award in the 30th Inter University East Zone Youth Festival during 5-9 January 2015.
- The University organised several competitions among students as a part of the 22nd Foundation Day of the University on 21 January 2015.
- Professor Mihir K Chaudhuri, Vice Chancellor, Tezpur University, attended the banquet hosted by the President of India in honour of the visiting US President Mr Barack Obama and the First Lady Ms Michele Obama at the Rashtrapati Bhavan, New Delhi, on 25 January 2015.
- Prof Ashwini K Phukan, Department of Chemical Sciences, was awarded Chemical Research Society of India (CRSI) Bronze Medal 2015 at the 17th CRSI National Symposium in Chemistry, NPL Pune during 5-8 February 2015.
- Mr. Bitupon Borthakur, Department of Chemical Sciences was awarded the Royal Society of Chemistry (RSC) fellowship to participate in the 9th CRSI-RSC joint symposium and the 17th CRSI National Symposium in Chemistry held at National Chemical Laboratory, Pune during 5-8 February 2015.
- A sixteen member team of Tezpur University participated in the 30th Inter University National Youth Festival organised by the Association of Indian Universities, New Delhi and the Ministry of Youth Affairs and Sports, Government of India at Devi Ahilya University, Indore during 12-16 February 2015.
- InSciGnis, the second annual mega science festival was organised by the Students' Science Council of Tezpur University during 28 February– 1 March 2015.
- The University Team received The Best Regional and Folk Team Award in the Eighth South Asian Universities International Youth Festival during 7-11 March 2015.
- A one-day workshop on All India Survey on Higher Education (AISHE) – How to conduct was organised on 14 March 2015.
- The First Networking-cup-Discussion Meeting on INSPIRE Faculty Award (Eastern and North-Eastern Zone) was organised during 20-21 March 2015.
- Ms Jurismita Puzari, final year MA (MCJ) student from the University, was awarded the National Silver Karmaveer Chakra and the AFRC Apeejay Karmayuga Bronze Chakra by the Indian Confederation of NGOs on 21 March 2015.
- Mr Nikhil K Mahnot, research scholar, Department of Food Engineering and Technology, was awarded the Fulbright-Nehru Doctoral Research Fellowship for the session 2015-16.
- Dr Suman Dasgupta, Department of Molecular Biology and Biotechnology, was awarded the Innovative Young Biotechnologist Award 2014 by the Department of Biotechnology, Government of India.
- Professor A K Mukherjee, Department of Molecular Biology and Biotechnology, was awarded the National Bioscience Award for Career Development 2013 by the Department of Biotechnology, Government of India.
- Two students from the School of Engineering of the University were awarded GE Foundation Fellowships.
- Mr Anowar Hussain, Department of Molecular Biology and Biotechnology, was awarded the Visiting Research Associateship from the University of Colorado, USA and the JSPS Hope Fellow from the Government of Japan.
- Ms Rupamoni Thakur, research scholar, Department of Molecular Biology and Biotechnology was selected for participation in the Lindau Nobel Laureates Meeting 2015.

Highlights of our Performance



Until 2015



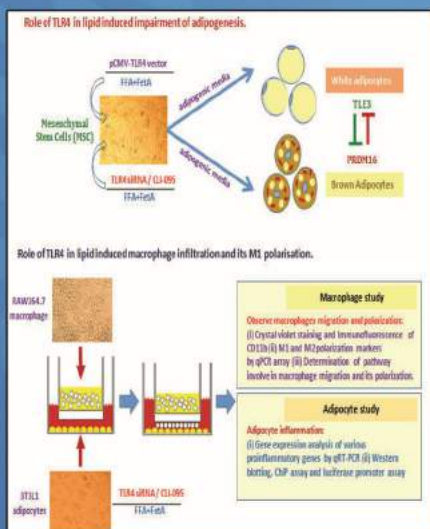
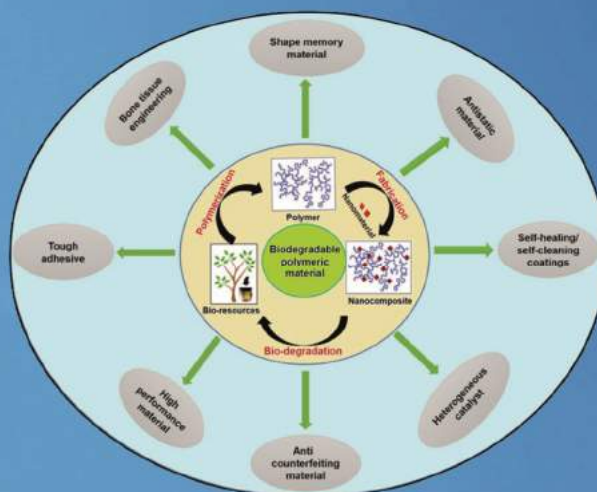
Number of Publications	1625
Sum of the times cited	12287
Sum of Times Cited without self-citations	9626
Citing Articles	9084
Citing Articles without self-citations	8147
Average Citations per Item	7.56
h-index	43



Our Notable Achievements During the year

Prof Niranjana Karak

During the period of 2014-15, Prof Niranjana Karak, Department of Chemical Sciences received two prestigious National Awards in recognition of his outstanding contributions in the respective fields. The 9th Foundation Polymer Award for the year 2014 by Prof. Sukumar Maiti Polymer Award Foundation, Kolkata and 4th Dr. S. S. Deshpande National Award for the year 2014 by Holkar (Model, autonomous) Government Science College Governing committee, Indore. Prof. Karak is the first recipient from North-East to receive these awards. In fact, he is the first person from a University to receive Dr. S. S. Deshpande national award. Foundation Polymer Award is given to recognize the contribution of Scientist/Technologist, in the field of Polymer Science and Technology, whereas Dr. S. S. Deshpande national award is given to recognize the contribution of Scientist in the field of Chemical Sciences. The first award for contributions of last ten years, while second one of last three years.



Dr Suman Dasgupta

Dr Suman Dasgupta, Assistant Professor, Department of Molecular Biology and Biotechnology has been awarded the Innovative Young Biotechnologist Award (IYBA) for the year 2014 by the Department of Biotechnology (DBT), New Delhi.

The IYBA award is presented, each year, by the Department of Biotechnology, Ministry of Science & Technology, Government of India, to outstanding young scientists below the age of 35 years with innovative ideas and desirous of pursuing research in the frontier areas of biotechnology. The award consists of financial support for a project along with cash award of Rs.1, 00,000/- (Rupees One Lakh Only) every year during the period of the project.

Dr Dasgupta is one among 14 to be conferred the Award for 2014.

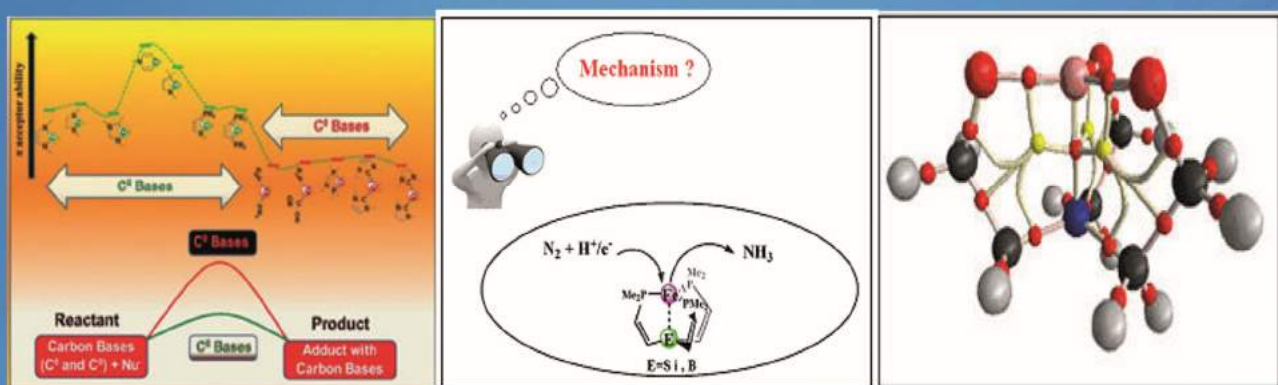
Prof Prabuddha Ganguli

The legal fraternity in India under the banner of LEGAL ERA conferred upon Prof Prabuddha Ganguli, MHRD IPR Chair Professor at the University, The Lifetime Achievement Award for his continued contribution in the field of IPR at the 3rd National IPR Conclave, Mumbai, 1-2 August 2014.

Prof Ganguli is the Honorary Scientific Consultant for Innovation and IPR matters to the Office of the Principal Scientific Adviser, Government of India, a member of the Advisory Board of the IPI, Washington, a member of the International Editorial Board, World Patent Information, and a consultant to the World Intellectual Property Organisation.

Prof Ashwini Kumar Phukan

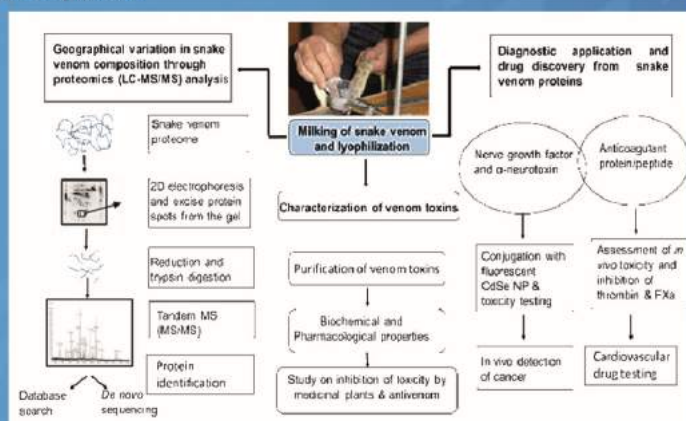
The CRSI (Chemical Research Society of India) bronze medal was awarded to Prof Phukan in recognition of his contributions to research in chemistry. Prof Phukan's work revolves around understanding the reactivity of different carbon bases, mechanistic studies on dinitrogen functionalization and efforts toward understanding the nature of intramolecular interactions in main group and transition metal compounds.



Prof Asish K Mukherjee

Prof Asish K Mukherjee, Department of Molecular Biology and Biotechnology received the prestigious National Bioscience Award for Career Development of DBT, Ministry of Science and Technology, Govt. of India. This award carries a cash prize of ₹ 2,00,000/- and a trophy along with a citation and a project research grant of ₹15,00,000/- for a period of three years for career development.

Prof Mukherjee, who has been working on snake venom for more than 20 years has made significant contribution in characterization and elucidated of mechanism of action of several novel and/or new toxins particularly anticoagulant proteins from snake venom. Several of these non-toxic anticoagulant proteins/peptides are found to be more potent than the commercial anticoagulant/thrombolytic drugs suggesting their therapeutic application as peptide-based cardiovascular drugs.



Besides, Prof Mukherjee also has made a magnificent contribution in the development of cost-effective, environmental-friendly, microbial technologies/ processes to combat the environmental pollution and industrial application of microbial enzymes and biosurfactant as green chemicals.

Prof Mukherjee also received the, Sreenivasaya Memorial Award-2014, of the Society of Biological Chemists of India for his outstanding contribution in Biochemistry and allied sciences. This award was conferred upon him in the annual meeting of the Society held at KIIT University, Bhubaneswar, December, 2014.



Seminal Books Published by members of the Faculty and

Dr Arup Kumar Nath, 2014. *Impact of Code Switching Mixing in Assamese: A Synchronic Study*. Guwahati: Publication Board Assam.

'Code-Switching-Mixing'-induced Changes in Modern Assamese and their Future Implication' by Dr. Arup Kumar deals with various phonetic and morphological changes that have taken place in the Assamese language inflicted by the linguistic phenomena called 'Code-Switching' and 'Code-Mixing'.

Dr Chandan Kumar Sharma, 2014. *Samaj Nirmanar Adi Akhora (Preliminary Exercises in Society Building)*. Guwahati: Aank Baak.

Samaj Nirmanar Adi Akhora (Preliminary Exercises in Society Building) is a collection of articles on various aspects of contemporary society, culture and polity of Assam in the background of the unfolding national and global processes. The articles are polemical in nature. Although they apparently deal with disparate issues covering a broad spectrum, their intellectual foundation rests on the author's engagement in upholding important human ideals and welfare of the people at large.

Dr D P Nath and Prof M MSarma (Ed). 2014. *Lakshminath Bezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond*. Guwahati : Perfect Imagers.

Considered the architect of modern Assamese literature, Lakshminath Bezbaroa's (1864-1938) literary genius and intellectual prowess continue to exert a tremendous influence on the literary scene of Assam. And yet Bezbaroa was much more than a litterateur. An advocate of Assamese cultural and linguistic nationalism, Bezbaroa's life and writings epitomized the contradictory impulses of a transitional phase in the history of modern Assam. This volume, dealing with a wide range of topics encompassing the extremely varied range of his works and experiences, has been brought out on the occasion of the 150th birth-anniversary of Bezbaroa. Working on the existing discourse available on Bezbaroa, the articles in the volume make significant departures and also introduce radically new ways of looking at Bezbaroa and his times.

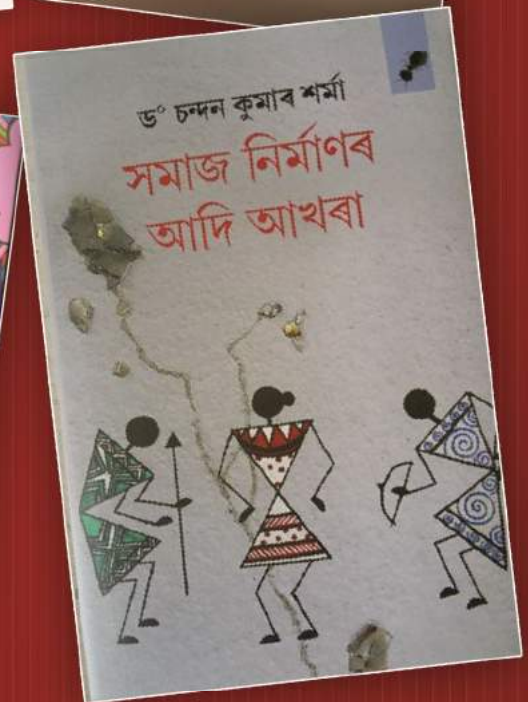
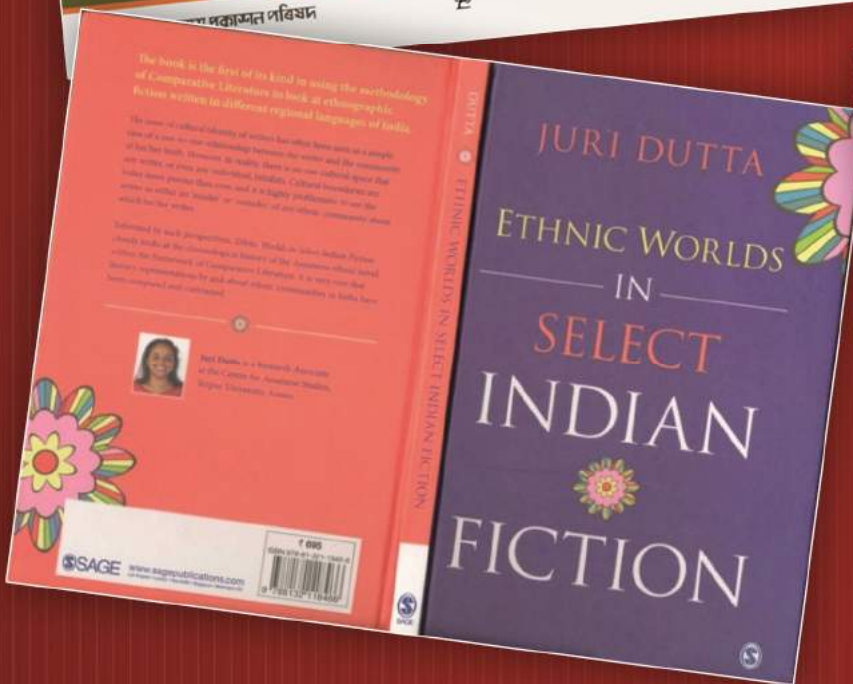
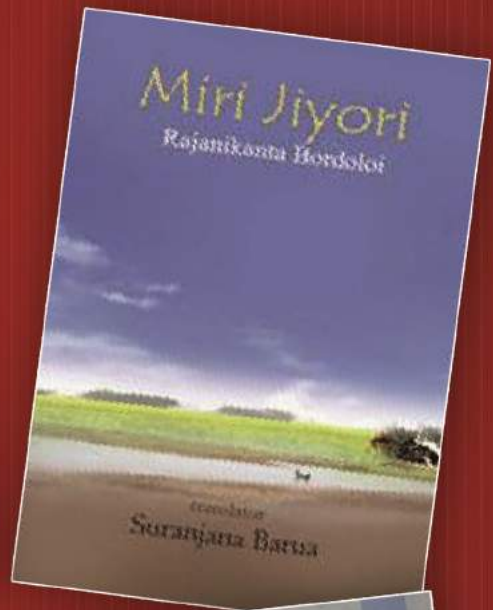
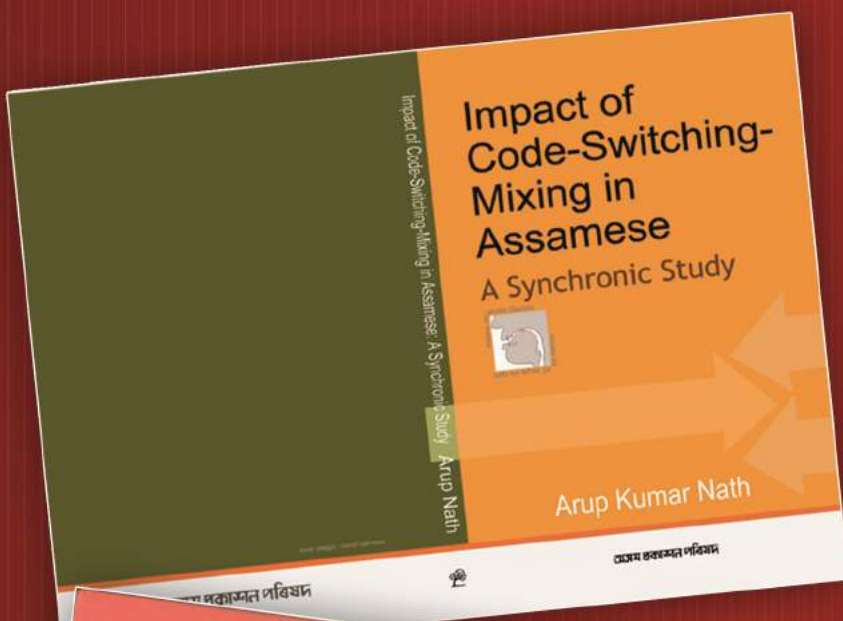
Dr Juri Dutta, 2014. *Ethnic Worlds in Select Indian Fiction*. New Delhi: SAGE Publication India.

The book is the result of a research project undertaken by Dr Juri Dutta at the Centre for Assamese Studies, Tezpur University. The issue of cultural identity of writers has often been seen as a simple case of a one-to-one relationship between the writer and the community of his/her birth. However, in reality, there is no one cultural space that any writer, or even any individual, inhabits. Cultural boundaries are today more porous than ever, and it is highly problematic to see the writer as either an 'insider' or 'outsider' of any ethnic community about which he/she writes. Informed by such perspectives, *Ethnic Worlds in Select Indian Fiction* closely looks at the chronological history of the Assamese ethnic novel within the framework of Comparative Literature. The book is the first of its kind in using the framework of comparative literature to look at ethnographic fiction written in different regional languages of India. It is very rarely that literary representations by and about ethnic communities in India have been compared and contrasted.

Dr Suranjana Barua, 2014. *Miri Jiyori (Translation)*. Guwahati: Publication Board Assam

Miri Jiyori (1894) is a love story by Rajanikanta Bordoloi set in the Miri (now referred to as the Misings) community. A passionate story about doomed love, it was written at a time when the novel as a literary form was yet in a nascent stage. With a deeply sympathetic portrayal of a young Miri couple who matured from being childhood companions to a deeply committed but doomed couple in love, the novel is also a statement on the Mising community as well as a compassionate plea of humanism. The novel has been translated for the Centre for Assamese Studies, Tezpur University, by Dr. Suranjana Barua and published by Publication Board Assam in 2012. This translated version includes an extensive Translator's Note that deals with the various issues of translating an epochal text such as *Miri Jiyori* in view of various translation theories as well as challenges afforded by the act of translation (which include, amongst others, its socio-political, linguistic and cultural dimensions).

Research Staff of School of Humanities and Social Sciences





TEZPUR UNIVERSITY: AN OVERVIEW

Established by an Act of Parliament in 1994, the University has completed its 21 years of existence with a profound and significant service in the field of higher education. The activities of the University can be discussed on the following counts.

Academic achievements

During 2014-2015 the University, like the previous years, was able to make significant academic achievements. As many as three new academic departments were established during this year. A good number of graduating students qualified international/national level exams, namely, GATE, CSIR-UGC NET & JRF, CAT, etc. and were able to earn respectable placements. Students and faculty members of the University received prestigious fellowships such as Fulbright-Nehru Fellowships, Alexander von Humboldt Fellowships, Charles India Trust SOAS Visiting Fellowship, and UGC-DAAD. The research contributions of the University continued to receive international recognition with a higher h index. A good number of researchers received awards/recognition for their significant contributions. Some of these were the Chemical Research Society of India Bronze Medal, the 4th Dr S S Deshpande National Award, and the Material Research Society of India (MRSI) Medal. The students of the University continued with their prowess in cultural fests, quizzes, debates and the like winning the Best Folk Orchestra Award in the South Asian Universities International Youth Festival 2015 (SAUFEST-2015), and the National Championship Award of Sweden India Nobel Memorial Quiz, 2014. There was also a significant rise in the student placement. In Business Administration it reached 85% while in Engineering (B Tech) it reached 66%. A good number of students on other programmes also got their placements through campus recruitment processes.

The CIIE and the Inspired Teachers' Network

The Centre for Innovation, Incubation and Entrepreneurship (CIIE) of the University has been active in creating awareness, conducting training programmes and exploring the possibilities of commercializing potential indigenous technologies. The Centre has encouraged grass root innovators to undertake innovative projects. An innovation exhibition hall called TUNNOVATION has been established for showcasing the indigenously developed articles. The Centre has regularly conducted skill development trainings amongst the unemployed youths of the locality. On the other hand, the Inspire Teachers' Network of the University (which is formed with 22 faculty members from various disciplines) has been inspiring their colleagues by setting high standards of research and innovation.

Research & Consultancy

A total of 147 research projects funded by UGC, DST, DBT, DOI, AICTE, DAE, DRDO, DRL, ICMR, MoES, MoFPI, MNRE, ICSSR, Deity, MSME and others are currently being carried out at the University with a financial outlay of ₹ 4,583.03 lakh. During the concerned year 38 research projects with a total budget of ₹ 1148.30 lakh were sanctioned and three Departments were accorded the UGC-SAP DRS-II. The faculty of the University published during the concerned year a total of 824 publications that includes research papers in journals and conferences, and books and book chapters. The Departments of Civil Engineering, Chemical Sciences, Computer Science and Engineering, Energy, Business Administration are engaged in consultancy services with industries and government departments/agencies and earned during the year a total consultancy fee of ₹ 2,16,352.00. Collaborative research activities with reputed institutions like CDFD, Hyderabad; IICB, Kolkata; IUCAA, Pune; CDRI, Lucknow; the University College of London (under UKIERI); the University of Nottingham; MAKIAS, Kolkata; NPL, New Delhi are continuing.



Extension work in the surrounding areas

The Centre for Inclusive Development has been coordinating the extension work in the surrounding areas of the University. Some of the extension activities carried out during the year includes: (i) drinking water outlets to the market complex of Amolapam, the village adopted by the University; (ii) construction of a bore well with concrete platform in the cremation ground of Amolapam; (iii) initiation of a project at Jawani (a nearby village) to generate energy for electrification, cooking, irrigation, agro-industry, etc from the locally available biomass iv) installation of two plants – the Anaerobic Digestion Plant and the Gasification Plant for generating and distributing energy through pipelines; (v) installation of biogas plants in 32 households at Jawani and (vi) awareness programme on improved earthen cook stoves amongst the surrounding villagers. In the concerned year the IPR Cell of the University organized one workshop on GI certification for Muga cultivators of the State of Assam.

Efforts made towards skill development

In the concerned year, skill development was accorded top priority by the University. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) thus was initiated and several training programmes were held for students and the local people. The Centre for Innovation, Incubation and Entrepreneurship of the University organized training programmes like the Skill Development on Fabrication of Aluminium Building Materials for the unemployed local youths. The University also started during the concerned year B Voc in Renewable Energy and Food Processing under the Department of Energy and Food Engineering and Technology; Diploma in Paralegal Practice under the Community College Scheme of the UGC. Other short term job oriented courses like Air Ticketing, Healthcare Informatics Management also continued in the concerned year.

Efforts made towards women empowerment and gender sensitization

The University has always been giving due emphasis on women empowerment and gender sensitization. Gender balance has been faithfully maintained in the official committees and decision making processes. The process of engagement of students as Gender Champions has been initiated. The Chandraprabha Saikiani Centre for Women's Studies (CSCWS) has been actively involved in organizing programmes relating to women empowerment and gender sensitization. A course on Women's Studies under CBCS was introduced.

Efforts made for industry-academia interface

Interface meetings with industries like ONGC, NRL, T& I took place during the concerned period. Apart from seminars and workshops the University events like TechXetra, Sampark received industrial patronage. During the year various Departments of the University collaborative research work with industrial houses like Earth Networks Inc., Kaiser Fluids Inc., CDAC, OIL, NRL, Asian Paints, Cleanopolis Energy Systems were also initiated. In a major boost to the industry-academia linkages, the University is in the process of instituting an Industry Chair Professor seat in the Dept of Chemical Sciences in collaboration with Vinati Organics Ltd., Mumbai.

Status of e-governance in campus administration and admission related activities

E-governance mechanisms in campus administration and admission related activities were started in the concerned year. A video conferencing facility was installed to connect the University with the National Knowledge Network (NKN). The e-governance platforms now operational at the University include the Employees' Leave Processing System, the Recruitment Portal, the Financial Accounting System, the Provident Fund Management System, the Income Tax Processing System, the Employee Payroll



System, the Medical Inventory System, the PhD Student Information System, the Research Project Fund Management System, the Cheque Processing System, the Anti-Sexual Harassment Portal, the Tezpur University Entrance Examination Portal, the Admission Processing System, the Examination System, the Grade Card Generation System (this system automatically generates students' grade cards), the Alumni Association Portal. Besides, there has been e-mail facility for intra-office as well as inter-office communication.

Other achievements

The University has the distinct track record of hundred percent utilization of the funds made available to it this far under the XII Plan General Development Grant and Additional Grant. Also, the University was able to utilize during the financial year 2014-15 about 100% of the Non-Plant Grants (including internal resources). The Annual Report and the Annual Accounts of the University for 2013-14 were submitted before the Parliament on time.

The University has made its Website accessible to people with multiple disabilities. It has also brought out a braille version of its information brochure called Tezpur University at a Glance.

The Statutory Authorities of the University

- ❖ The Board of Management;
- ❖ The Academic Council;
- ❖ The Planning Board;
- ❖ The Finance Committee;
- ❖ The Research Committee;
- ❖ The School Board;
- ❖ The Board of Studies;
- ❖ The Building Committee.



THE FINANCIAL PROFILE (2014-2015)

The Accounts of the University are maintained in four parts: Part I deals with Non-Plan Maintenance Grants, Part II deals with Plan Grants, Part III deals with Earmarked Special Funds and Part IV deals with Debts and Deposits Accounts. The Accounts of the financial year 2014-15 has been prepared in the New Accounting Format for Educational Institutions as prescribed by the MHRD, Govt. of India.

The opening balance at the beginning of the year 2014-15 was Rs. 2441.13 lakh. During the year, the University received Rs 9334.34 lakh as grants under various schemes, namely Non-Plan, Plan and for Projects. Thus, the total fund available during the year was Rs. 11775.47 lakh. Out of the available funds, the University incurred an expenditure of Rs 10455.05 lakh during the financial year, leaving an unspent balance of Rs 3182.38 lakh.

A) THE FOLLOWING STATEMENT PRESENTS THE RECEIPT AND EXPENDITURE AT A GLANCE

Statement of Receipt & Expenditure 2014-15

(Rs. in lakh)

RECEIPTS			EXPENDITURE		
Particulars	Amount	Total Amount	Particulars	Amount	Total Amount
A) Opening Balances			E) Expenditure		
1. Non-Plan			Part- I (Non –Plan)	5051.10	
Cash in hand	0.23		Part- II (Plan)	3318.71	
Bank balances	279.92		Part -III (Earmarked)	2175.24	10545.05
Advances	37.96		& Special Fund		
Investment	0.00		F) Closing Balance		
2. Plan			1. Non-Plan		
Cash in hand	0.00		Cash in hand	0.00	
Bank balances	169.55		Bank balances	403.70	
Advances	100.58		Advances	41.60	
Investment	250.00		Investments	0.00	
3. Earmarked Spl. Fund			2. Plan		
Cash in hand	-		Cash in hand	-	
Bank balances	1097.00		Bank balances	298.83	
Investments	494.43		Advances	53.31	
Advances	11.46	2441.13	Investments	225.00	
B) Grant Receipts			3. Earmarked Spl.Fund		
Part -I (Non –Plan)	3737.24		Cash in hand	-	
Part- II (Plan)	2169.48		Bank balances	2010.32	
Part- III (Earmarked)	3427.62	9334.34	Investments	138.17	
(Earmarked & Special Fund)			Advances	11.45	3182.38
C) Internal Receipts		1230.16			
D) Current Liabilities		721.80			
Grand Total		14847.67	Grand Total		13727.43

B) XII PLAN GRANT

During 2014-15, the UGC sanctioned and released Rs 1400.00 lakh as the XII Plan General Development Grant. Besides the Plan Grants, the UGC also released Rs 444.00 lakh for finalization of the OBC Grant.

The Plan Grants were utilized for creation of new infrastructure as mentioned below:

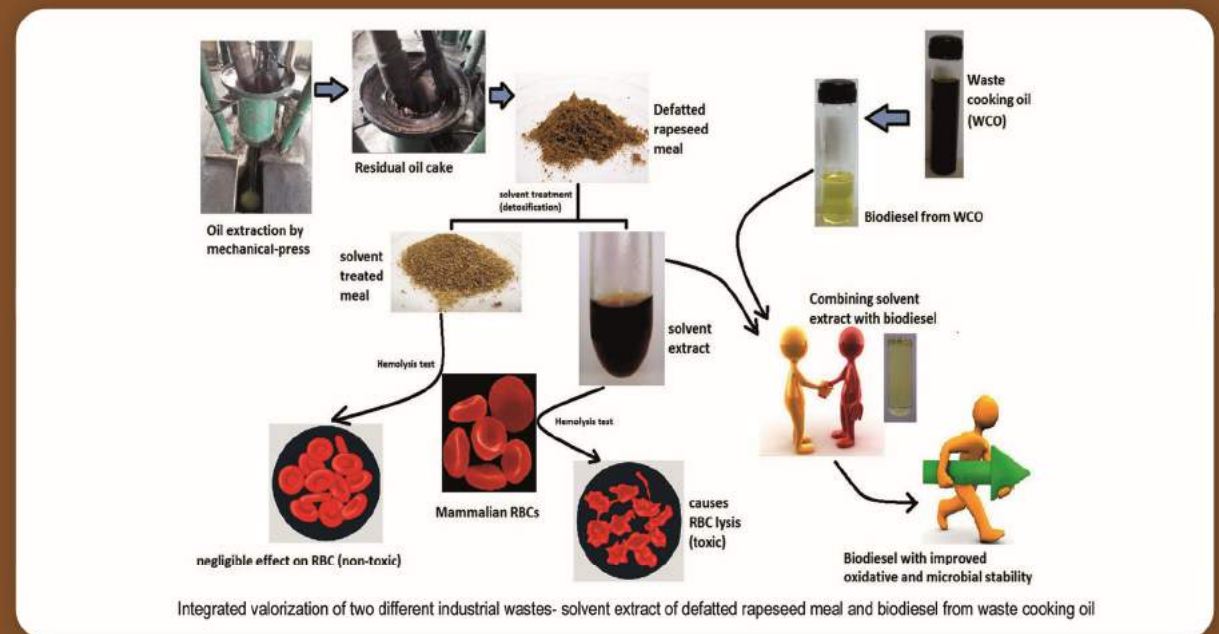
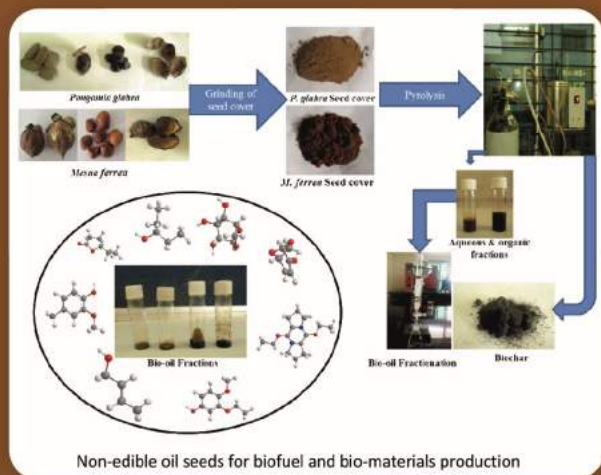
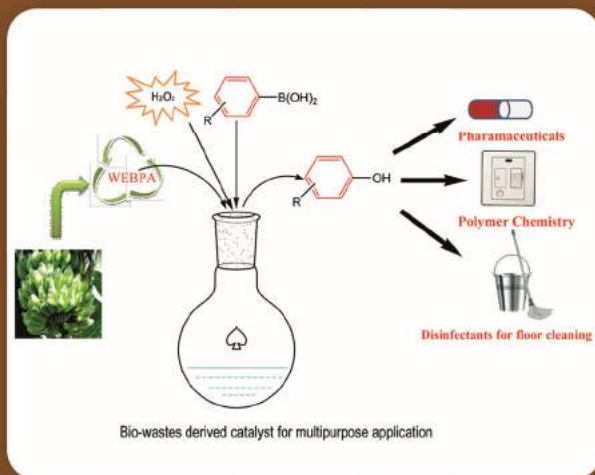
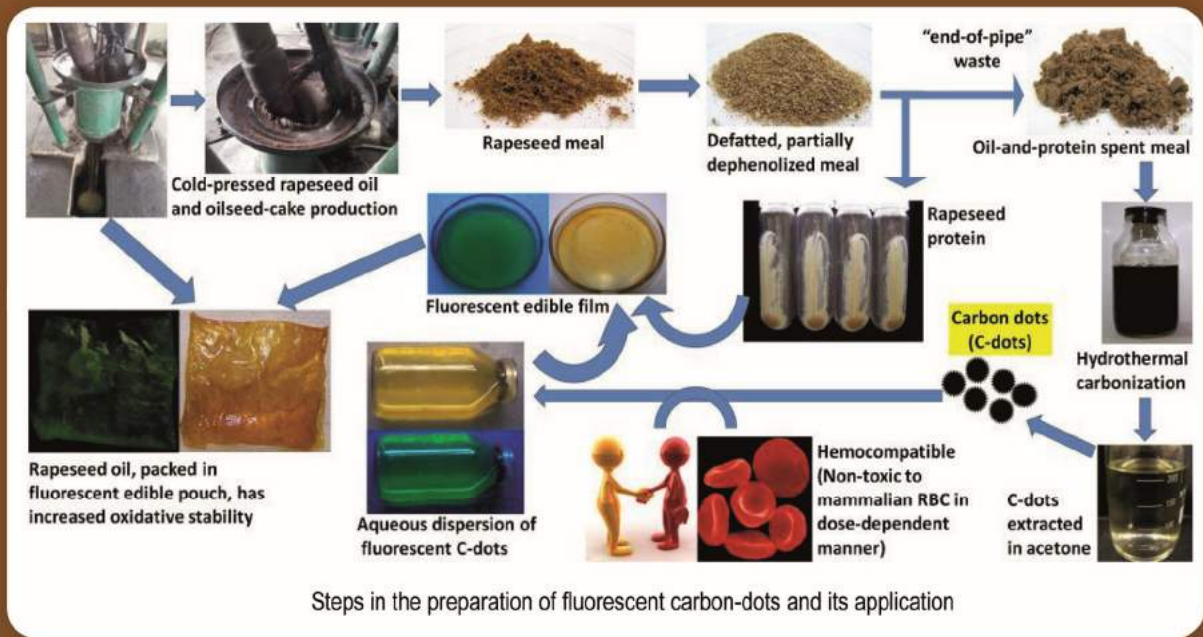
(Rs. in lakh)

Sl. No.	Infrastructure Created and Other Expenses	Amount	Amount
A	Building against XII Plan		
	1) Const of R.C.C.-3 storied Type –B Residential Building	303.13	
	2) Const of R.C.C.-3 storied Type-C Residential Building	291.66	
	3) Const of R.C.C.-3 storied Type-D Residential Building	90.19	
	4) Const of 447-capacity Single Bedded Boys Hostel No-8	254.74	
	5) Const. of 316-capacity Single Bedded Girls Hostel No-6	305.84	
	6) Const. of School Building for KV	400.44	
	7) Const of Academic Building for Civil Engineering	42.76	
	9) Const of R.C.C.-2 storied Library Building	88.17	1776.93
	Total Expenditure under Building Head		1776.93
B	Library Books		
	1) XII Plan Dev Grant	65.00	
	2) School of Education	2.77	67.77
C	Laboratory Equipment		
	1) School of Education	2.22	
	2) XII Plan Dev Grant	137.23	139.45
D	Furniture (School of Education)		8.43
E	Campus Development		111.86
F	Vehicle		0.47
G	Salary & Other Expenditure		1213.80
	Total		3318.71

C) EARMARKED SPECIAL FUND

During 2014-15, the Faculty members earned a total of Rs. 3427.62 lakh against 264 Projects & Programmes (including the DBT sponsored grants for development/upgradation of infrastructure in the Medical colleges in the NE states). This amount was released to the concerned Principal Project Investigators as and when requisitioned.

Internal receipts generated by the University during 2014-15 amounts to Rs. 1230.16 lakh.



REPORT FROM THE DEAN, RESEARCH & DEVELOPMENT

A brief report of the activities performed by the Office of the Dean, R&D during 2014-2015 is presented below.

1. The Office of the Dean R&D is entrusted with the task of facilitating the implementation of research projects and research grants received by the faculty. The research projects that were implemented by this office, both ongoing and new were funded by the various funding agencies like UGC, DST, DBT, DOI, AICTE, DAE, DRDO, DRL, ICMR, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ICSSR, DeitY, MSME and others for their completion within the stipulated duration. The Office took care of the advertisement and appointment of project staff; allowed conduct of field trips/visits as required by the project staff and PIs and Co-PIs; gave permission to attend workshops/seminars/symposiums/ conferences; and allowed visit to different research laboratories. It also facilitated the visits of faculty and Research Scholars to work in laboratories outside the country in their international collaborative projects. UGC-SAP funds and UGC startup grants were also implemented and facilitated besides 2 DBT funded schemes-'Establishment of Institutional Level Biotech Hub', and 'Strengthening of Biotechnology Teaching, Training and Research in Universities and Colleges in Northeast'. Dean R&D conducted the meetings of Tezpur University Ethical Committee, Tezpur University Ethical Committee and Bioinformatics Infrastructure Facility where activities were reviewed for progress and compliance of stipulated norms and new projects if found suitable were approved. The office coordinated the implementation of projects approved by ONGC-CPBT.

The office has forwarded 80 research proposals to the funding agencies for consideration of approval during the last financial year with a total fund request for ₹ 3593.72 lakh. A total of 144 research projects are currently ongoing with a financial outlay of ₹ 4583.03 lakh. Ongoing projects also include 9 international collaborative projects of which 3 projects are under UKIERI scheme, 1 with multiple institutions of EU (SAHYOG), 1 with CEFIPRA (France), 1 with multiple institutions of UK (RHEES), 1 with University of Nottingham, 1 with Japan and 1 with Russia. The maximum grant received in a single project is ₹ 332.77 lakh. During 2014-2015, 38 new projects were sanctioned with financial outlay of ₹ 1148.30 lakh. Six departments, namely Departments of Chemical Sciences, Cultural Studies, Business Administration, Physics, Mathematical Sciences, Electronics and Communication Engineering are being funded under UGC-SAP-DRS1. Departments of Molecular Biology and Biotechnology, Computer Science and Engineering and English and Foreign Languages were accorded UGC-SAP-DRS II. The research works conducted in these projects/schemes have led to publication of papers in high impact factor journals. Further, these projects have augmented the research skills of the project staff.

2. The office also facilitates consultancy projects of faculty as per guidelines. Separate guidelines are followed for faculty to take up consultancy on individual level and for Department as a whole to take up consultancy wherein the expertise of the whole department including technical staff is required. Two faculty members took up 6 numbers of individual consultancy works earning a total consultancy fee of ₹ 2,16,352/-. The Department of Civil Engineering earned ₹ 4,07,159/- on completion of 20 consultancy works.

3. The office is also entrusted with the collection/ deposition and maintenance of records of analytical service charge for sophisticated instruments housed at Sophisticated Analytical Instruments Facility and various departments. During the year of report, ₹ 7,74,228/- was collected as analytical service charge from applicants within the University as well as other Universities, research institutes and industries.

4. This office is also entrusted with the work of facilitating payment of fellowships to Research Scholars for Ph.D. studies other than institutional fellowships and submission of all documents to the funding agency. During the year under report, 4 Research Scholars received CSIR-SRF, 1 Research Scholar received CSIR JRF. A good number of Research Scholars received UGC-NET JRF/SRF, UGCMANF, and MNRF SRF fellowships.

Dean, Research and Development

Professor Charu Lata Mahanta, PhD (CFTRI, Mysore)

E-mail: charu@tezu.ernet.in

THE STAFF OF THE OFFICE OF THE DEAN

Section Officers : P S Baruah, MA (Gauhati), E-mail: partha@tezu.ernet.in

H Das, BCom (Dibrugarh), E-mail: himdas@tezu.ernet.in



REPORT FROM THE DEAN, STUDENTS' WELFARE

Office of the Dean Student's Welfare (DSW) facilitates the all-round development of personality and leadership qualities of students with the help elected members of Students Council, faculty and administration. This year Tezpur University got laurels in both National and International events for various student activities. A distinct improvement in both participation and performance has been observed, particularly in cultural activities. As per the UGC regulation the University conducted election among the students to form the 18th Tezpur University Student's Council. The election was successful and the newly elected members of the TUSC are working proactively and contributing for the student welfare.

THE TUSC 2015-16 ELECTED MEMBERS ARE AS FOLLOWS:

- | | | |
|--------------------------------------|---|--------------------|
| 1. Vice President | : | Arindam Khaund |
| 2. General Secretary | : | Shivam Mahate |
| 3. Asstt. General Secretary | : | Jitesh Kumar |
| 4. Indoor Games Sports Secretary | : | Mukul Anand |
| 5. Outdoor Games Sports Secretary | : | Saurabh Anand |
| 6. Cultural Secretary | : | Dibyani Baruah |
| 7. Magazine Secretary | : | Prithvi Raj Saikia |
| 8. Hobby Club Secretary | : | Pallab Kr. Das |
| 9. Executive Member, MA in Sociology | : | Tania Sen |
| 10. Executive Member, MA in MCJ | : | Abhishek Das |
| 11. Executive Member, BTech, ME | : | Kedar Chetry |

The DSW office performs diverse functions related to student's welfare including accommodation, academic, sports and cultural activities of the students. Maintaining discipline among the University students is another responsibility of the office. To curb and prevent ragging in the University, Tezpur University follows the recommendation of Raghavan Committee and other Government rules related to ragging. The students are required to fill online Anti Ragging Affidavit in accordance to UGC regulation. The Anti Ragging Committee, Anti Ragging Squads and Anti Ragging cells in the Departments and Hostel keep constant vigil to keep the University ragging free, thus making the Tezpur University campus a ragging free zone.

The Office encourages and promotes different cultural and sports activities along development of infrastructure for the purpose. Some of the activities as well as the awards won by the participants of Tezpur University are worth reporting as follows:

CULTURAL AND LITERARY SECTION

Cultural Section of the University is quite enriched and well equipped with different facilities. The students from Tezpur University have shown exemplary talent in various cultural domains which brought accolades for the University in the National and International level competitions. Tezpur University provides every possible avenue to nourish the talent of the students of the University and have been providing platform to show case their talent.

FACILITIES

University has provided certain facilities to the students who are interested in cultural activities. For performance and rehearsals the University has provided buildings and complexes like the Student's Activity Centre, Kalaguru Brishnu Prasad Rabha Auditorium, Community Hall, Chandraprabha Saikiani Bhawan, etc. where student can practice and perform regularly. More than 40 different sophisticated musical instruments are procured by the University for such activities. These instruments are accessible for all the interested students.



ZONAL & NATIONAL ACCOLADES ACHIEVED BY THE STUDENTS OF TEZPUR UNIVERSITY IN THE YEAR 2014-15

Inter University East Zone Youth Festival, 2015

A team of 33 students participated in various cultural competitions in the 30th Inter University East Zone Youth Festival, 2015 during 5-9 January 2015, organized by the Association of Indian Universities, Sponsored by the Ministry of Youth Affairs and Sports, Govt. of India in association with Ranchi University, Ranchi. In addition to grabbing the Best Literary Team award, the other highlighted achievements of the team in the competitions are as follows:

- Debate : 1st Prize
- Western Vocal : 1st Prize
- One Act Play : 2nd Prize
- Folk Orchestra : 3rd Prize
- Elocution : 3rd Prize
- Spot Photography : 3rd Prize
- Quiz : 3rd Prize
- Folk Dance : 3rd Prize

Inter University East Zone Youth Festival, 2015

A team of 14 students from Tezpur University participated in the cultural and literary competitions in the 30th All India Inter University Youth Festival organized by the Association of Indian Universities, Sponsored by Ministry of Youth Affairs and Sports, Govt. of India, in association with Devi AhilyaViswavidyalaya, Indore, MP during 12-16 February, 2015. The achievements of Tezpur University in the competitions are as follows:

- One Act Play : 2nd Prize
- Western Vocal : 4th Prize



INTERNATIONAL FESTIVAL, 2015

A 12 members Folk Orchestra team of Tezpur University, Assam participated in the 8th South Asian Universities International Youth Festival, 2015 organized by the Association of Indian Universities, New Delhi and sponsored by the Ministry of Youth Affairs and Sports, Government of India held at Mohanlal Sukhadia University, Rajasthan during 7–11 March, 2015. Tezpur University Team also receives The Best Regional & Folk Team Award in the 8th South Asian Universities International Youth Festival, 2015.

ACHIEVEMENTS IN QUIZ

The Tezpur University team comprising of Ashutosh Das (MTech, ME), Anubhav Joshi (BTech, ME) and Subhasish Dutta (BTech, ECE) won the Sweden India Nobel Memorial Quiz held in New Delhi in November, 2014.

ACHIEVEMENTS IN DEBATE

- Parag Das Memorial All Assam
Debate Competition 2014, 2015 (State Level) : Best Debater and Best Team
- Manash Baruah North-East Level
Debate Competition 2014 : Best Debater
- Golap Sharma Memorial
North East College/ University Debate 2014 : Second Best team and Second Best Debater
- Manik Chandra Baruah
National Level Debate Competition 2014 : Second Best Team
- Best Debater : Jyotisha Saikia

STATE LEVEL CULTURAL COMPETITIONS

- Tezpur University Bihu Team won the 1st Prize in All Assam Level Bihu Competition organized by Assam Engineering College, Guwahati during March 2015.
- Tezpur University Bihu Team won the 1st Prize in All Assam Inter Institutional Bihu Competition organized by Tezpur University, on 2 May, 2015.

SPORTS SECTION

- University gives adequate importance on sports activities for overall development of the students. Round the year various sport activities are organised. Interested students are trained for different indoor and outdoor games under guidance of nationally renowned trainers.

SPORTS INFRASTRUCTURE

- One Football Ground with night playing facility
- One 400 meter Track cum Cricket field with night playing facility
- Two Volleyball Courts with night playing facility
- Two Basketball Courts with night playing facility
- One Football Ground with night playing facility
- One Indoor Stadium (Badminton with YY Yonex Synthetic mat)
- Table Tennis board in each Hostel
- One Gymnasium with World Class Weider product, USA and Afton Product.



SPORTS ACTIVITY

Champion of North East Forum for Technical Institutions (NEFTi) Cricket Tournament

Tezpur University Cricket team had participated in the 3rd NEFTi T20 Cricket Tournament held on 31st March 2014, organized by North East Forum for Technical Institutions (NEFTi) at NITS Mirza. Tezpur University won the game after defeating 10 other institutes.

The Invited Inter-University (of Assam) Badminton Tournament

The Invited Inter-university (of Assam) Badminton Tournament organized by Tezpur University at Tezpur University indoor stadium came to a successful end on 4 May 2014. This Tournament had begun on 2 May, 2014. Apart from Tezpur University 5 other universities viz. Assam Agricultural University, Assam University, Cotton College State University, Dibrugarh University and Gauhati University were invited to the Tournament out of which Cotton College State University, Dibrugarh University and Guwahati University turned up as invited universities to participate in the Tournament.

After two days of league matches the final match took place on 4 May 2014 between the host Tezpur University and Cotton College State University. In the high voltage match at the packed stadium it was a nail biting ending in the decider 7th game and the host put their best to overcome all the challenges and became the champion by a margin of 4-3.

XVIII ANNUAL MEET 2014-15

Category	Winners
BEST ATHLETE (Men)	Biswajeet Mahato (ECE)
BEST ATHLETE (Women)	Nijora Konch (Mathematical Science)
BEST COMMANDER (Men)	Pritam Bopra (MBBT)
BEST COMMANDER (Women)	Anindita Dutta (MBBT)
BEST LIFTER (Men)	Dhrubjyoti Gogoi (Physics)
STRONG MAN	Dhrubjyoti Gogoi (Physics)
BEST FOOTBALLER (Men)	Haiheube Jeme (CSE)
BEST VOLLEYBALL PLAYER (Women)	Sandhyarani Gogoi (Chemical Science)
BEST VOLLEYBALL PLAYER (Men)	Tridip Mili (ME)
BEST BASKETBALL PLAYER (Men)	Rajan (CSE)
BEST BASKETBALL PLAYER (Women)	Jahnabi Saikia (MBBT)
BEST ARCHER (Men)	Arkid Konwar (Commerce)
BEST ARCHER (Women)	Suparna Biswas (Mathematical Science)
CHAMPION OF CHAMPIONS (ARM WRESTLING: Men)	Arindam Khound (ME)
CHAMPION OF CHAMPIONS (ARM WRESTLING: Women)	Sanjuri Rajkumari (Physics)
BEST CRICKETER (Men)	Yasir Arafat (FET)

WINNERS OF THE TEAM EVENTS

Category	Winner Team	Runner-up Team
FOOTBALL (Men)	PMH	SCVRMH
VOLLEYBALL (Women)	PMCWH	SWH
VOLLEYBALL (Men)	SCVRMH	PMH
BASKETBALL (Men)	PMH	CMH
BASKETBALL (Women)	DWH	KWH
CRICKET (Men)	SCVRMH	KMH
MARCH PAST (Women)	PWD	KWH
MARCH PAST (Men)	KMH	NMH

Dean, Students' Welfare

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Associate Deans, Students' Welfare

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Dr M Mandal
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**THE STAFF OF THE OFFICE OF THE DEAN
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Cultural Officer

Bhupali Kashyap
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Assistant

P Chouhan
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MTS

GB Chetry
E Upadhay
D Tamuli







THE STATUTORY BODIES

- The Board of Management ■
- The Planning Board ■
- The Academic Council ■
- The Finance Committee ■
- The Building Committee ■



THE BOARD OF MANAGEMENT

(01/04/2014 - 31/03/2015)

Vice-Chancellor	Chairman
Pro Vice-Chancellor	Member
Dr Devi Singh Director, Indian Institute of Management Lucknow 226 013	Member
Prof Iftekhar Ahmed Dean, Film and Television Institute of India Pune 411 004	Member
Prof Partha S Ghosh B-10/7334, VASANT KUNJ New Delhi 110 070	Member
Prof Birendranath Datta 104 Gopinath Bordoloi Road Guwahati 781 003	Member
Dr Lakshmi Goswami (Mrs) Goswami Nursing Home Tezpur 784001	Member
Prof N D Baruah Dean, School of Sciences	Member (w.e.f. 01.01.2014 to 29.04.2014)
Prof S K Dolui Department of Chemical Sciences	Member (w.e.f. 17.05.2013)
Dr P Anbarasan Department of Mass Communication and Journalism	Member (w.e.f. 30.04.2014)
Mr S Mahapatra Department of Energy	Member
Finance Officer Controller of Examinations	Special Invitee Special Invitee
Student Representative Anjan Barman, Research Scholar, Dept of MBBT Anup Sarma, MA, Dept of EFL Kalyani Koushik, BTech, Dept of Mechanical Engineering	Special Invitee Special Invitee Special Invitee
Registrar	Secretary

THE PLANNING BOARD

(01/04/2014 – 31/03/2015)

Vice Chancellor	Ex- Officio Chairman
Pro- Vice Chancellor	Member
Prof P J Mahanta Dean, School of Humanities & Social Sciences	Ex-officio Member
Prof N D Baruah Dean, School of Sciences	Ex- Officio Member (till 29.04.2014)
Prof A Kumar Dean, School of Sciences	Ex- Officio Member (w.e.f. 30.04.2014)
Prof S S Sarkar Dean, School of Management Sciences	Ex- Officio Member
Prof D K Bhattacharyya Dean, School of Engineering	Ex- Officio Member
Prof D C Baruah Dean, Students' Welfare	Ex- Officio Member (w.e.f. 01.11.2014)
Prof Charu Lata Mahanta Dean, Research and Development	Ex- Officio Member
Dr U K Das Associate Dean, Planning and Development	Ex- Officio Member
<i>Six Teachers nominated by the Academic Council</i>	
Prof P K Das Department of English & Foreign Languages	Member
Prof S M Hazarika Department of Computer Science & Engineering	Member
Prof Nilakshi Das Department of Physics	Member
Dr B P Sarmah Department of Mathematical Sciences	Member (w.e.f. 27.11.2013)
Dr S Deka Department of Civil Engineering	Member
Dr Juri Gogoi Konwar Department of Cultural Studies	Member



<i>ONE REPRESENTATIVE OF MHRD</i> Joint Secretary (Central Universities) Ministry of Human Resource Development Department of Higher Education ShastriBhawan, New Delhi – 110115	Member
<i>ONE REPRESENTATIVE OF UGC</i> Prof Varun Sahni CIPOD, School of International Studies Jawaharlal Nehru University, New Delhi	Member
<i>ONE REPRESENTATIVE OF NEC</i> Director (HRD & E) NEC, Nongrim Hill Shillong- 793003	Member
<i>ONE REPRESENTATIVE OF GOVT OF ASSAM</i> The Commissioner & Secretary Department of Higher Education Govt of Assam, Guwahati 781006	Member
<i>TWO NOMINEES BY THE BOARD OF MANAGEMENT</i> Prof Ranjan Chakraborty Vice Chancellor, Vidya Sagar University West Bengal, Midnapur 721102	Member
Mr R K Dutta Former Chairman cum Managing Director Oil India Limited (OIL), Kolkata 700071	Member
Controller of Examinations	Permanent Invitee
Finance Officer	Permanent Invitee
Librarian	Permanent Invitee
Registrar	Ex- Officio Secretary

THE ACADEMIC COUNCIL

(01/04/2014 - 31/03/2015)

Vice Chancellor	Ex- officio Chairman
Pro- Vice Chancellor	Ex-officio Member
DEANS OF THE UNIVERSITY	
Prof S S Sarkar Dean, School of Management Sciences	Ex-officio Member
Prof P J Mahanta Dean, School of Humanities & Social Sciences	Ex-officio Member (w.e.f. 01.01.2014)
Prof D K Bhattacharyya Dean, School of Engineering	Ex-officio Member
Prof N D Baruah Dean, School of Sciences	EX-officio Member (till 29.04.2014)
Prof A Kumar Dean, Students' Welfare	EX-officio Member (w.e.f. 30.04.2014)
Prof D C Baruah Dean, Students' Welfare	Ex-officio Member
Prof Charu Lata Mahanta Dean, Research & Development	EX-officio Member
<i>TWO PROFESSORS NOMINATED BY THE VICE CHANCELLOR</i>	
Prof K K Baruah Department of Environmental Science	Member
Prof M Borah Department of Mathematical Sciences	Member
<i>HEADS OF DEPARTMENTS/CENTRES</i>	
Prof P K Das Head of English and Foreign Languages	Ex-officio Member
Dr D P Nath Head of Cultural Studies	Ex-officio Member
Prof D Das Head of Business Administration	Ex-officio Member



Prof D Hazarika HoD, Dept of Mathematical Sciences	Ex-officio Member
Prof S K Dutta HoD, Dept of Mass Communication and Journalism	Ex-officio Member
Dr K Kikhi HoD, Dept of Sociology	Ex-officio Member
Prof S M Hazarika HoD, Dept of Computer Science and Engineering	Ex-officio Member
Prof J C Dutta HoD, Dept of Electronics and Communication Engineering	Ex-officio Member
Prof Shashi Baruah HoD, Dept of MBBT	EX-officio Member
Dr S K Ray HoD, Dept of MBBT	EX-officio Member (w.e.f. 05.04.2014)
Prof Nidhi Saxena Bhattacharyya HoD, Dept of Physics	EX-officio Member (till 12.11.2014)
Dr G A Ahmed HoD, Dept of Physics	EX-officio Member (w.e.f. 13.11.2014)
Dr R R Hoque HoD, Dept of Environmental Science	EX-officio member (till 16.09.2014)
Dr A K Das HoD, Dept of Environmental Science	Ex-officio Member (w.e.f. 17.09.2014)
Dr M K Hazarika HoD, Dept of Food Engineering & Technology	Ex-officio Member
Prof D Deka HoD, Dept of Energy	Ex-officio Member
Prof R C Deka HoD, Dept of Chemical Sciences	Ex-officio Member
Dr D Datta Head of Mechanical Engineering	Ex-officio Member
Dr U K Das HoD, Dept of Civil Engineering	Ex-officio Member
Dr S K Tripathy HoD, Dept of Hindi	Ex-officio Member
Prof N Sarma Head, Computer Centre	EX-officio Member
Dr D Nath Head In-charge, Centre for Disaster Management	Ex-officio Member
Dr Madhurima Goswami Head, Women Studies Centre	Ex-officio Member

TWO ASSOCIATE PROFESSORS OF THE UNIVERSITY AS NOMINATED BY THE VICE CHANCELLOR

Mr P Anbarasan Member
Department of Mass Communication and Journalism

Dr C Goswami Member
Department of Business Administration

TWO ASSISTANT PROFESSORS NOMINATED BY THE VICE CHANCELLOR

Mr S I Singh Member
Department of Computer Science and Engineering

Dr Heera Borpuzary Member
Department of Business Administration

THREE NOMINEES OF THE BOARD OF MANAGEMENT

Prof B N Goswami Member
Director, Indian Institute of Tropical Meteorology
Pune 411008

Prof Maitrayee Chaudhuri Member
Jawaharlal Nehru University
New Delhi 110067

Prof K Bhattacharyya Member
Director and Senior Professor (till 20.04.2014)
Indian Association for the Cultivation of Science
Kolkata 700032

Prof G Biswas Member
Director, IIT Guwahati (w.e.f. 21.04.2014)
Guwahati, Assam

ONE REPRESENTATIVE OF UGC

Prof S S Mantha Member
Chairman, AICTE (till 08.12.2014)
New Delhi- 110 001

ONE REPRESENTATIVE OF THE MHRD

Mr V V R Mantha Member
Former Chairman and Managing Director
Bharat Electronic Ltd. Bangalore, Karnataka

ONE REPRESENTATIVE OF THE NEC

Director (HRD & E) Ex-officio Member
North Eastern Council (NEC)
Shillong 793003

ONE REPRESENTATIVE OF STATE GOVT OF ASSAM

Commissioner & Secretary/Principal Secretary In-Charge Ex-officio Member
of Higher Education
Govt of Assam, Guwahati 781006

Controller of Examinations Ex-officio Member

Librarian Ex-officio Member

Registrar Ex-officio Secretary



THE FINANCE COMMITTEE

(01/04/2014 – 31/03/2015)

Vice Chancellor	Chairman
Pro Vice-Chancellor	Member
Joint Secretary and Financial Advisor, MHRD or his/her nominee from Finance Bureau of MHRD not below the rank of Deputy Secretary	Member
Joint Secretary (CU&L) of MHRD, or His/her nominee not below the rank of Joint Secretary to the Govt. of India	Member
Joint Secretary (CU), UGC or any other Joint Secretary level Officer nominated by the Chairman, UGC	Member
Dr B K Das Managing Director Bharat Oman Refineries Ltd. Bhopal-462 023	Member (till 13.11.2014)
Miss Rup Sikha Bora Director, Finance, Oil India Ltd. Noida, Uttar Pradesh	Member
Mr A G West Kharkongor Director (Finance) NEEPCO Ltd, Shillong – 793 003	Member
Prof S S Sarkar Dean, School of Management Sciences Tezpur University	Member
Finance Officer	Secretary

THE BUILDING COMMITTEE

(01/04/2014 - 31/03/2015)

Vice-Chancellor	Chairman
Pro Vice-Chancellor	Member
Mr B K Das Chief Engineer, Public Works Department (Roads) Govt. of Assam, Guwahati-781003	Member
Prof A Dutta Dept. of Civil Engineering IIT Guwahati, Guwahati – 781039	Member
Superintending Engineer, PWD (Building) Tezpur Building Circle Tezpur – 784001	Member
Mr D Saikia Dy. Architect, PWD Govt. of Assam, Guwahati – 781003	Member
Dr Lakshmi Goswami Goswami Nursing Home Tezpur – 784001	Member
Executive Engineer	Member
Finance Officer	Member
Registrar	Secretary





Academic Departments and Centres

- School of Engineering ■
- School of Humanities and Social Sciences ■
- School of Management Sciences ■
- School of Sciences ■
- Centre for Open and Distance Learning ■





School of Engineering

- Dept of Civil Engineering
- Dept of Computer Science and Engineering
- Dept of Electronics and Communication Engineering
- Dept of Energy
- Dept of Food Engineering and Technology
- Dept of Mechanical Engineering



SCHOOL OF ENGINEERING

The School of Engineering (SoE) of Tezpur University was established in the year 2006 with the introduction of BTech programmes in three disciplines, viz., Computer Science and Engineering, Electronics and Communication Engineering and Mechanical Engineering. The PG programmes under this school already existed from as early as 1994. The Department of Energy was included as part of this School in 2011. This school strives to produce skilled professionals at UG, PG as well as doctoral levels and also to conduct research towards developing innovative technologies.

Since its inception, the School has been proactive in strengthening itself to improve its output in terms of both knowledge and employability of its graduates. Through the implementation of AICTE approved Institutional Development Plan (IDP), the School is focused on developing and enhancing facilities so that the overall learning process attains a higher level and keeps pace with the changing global scenario of technical education.

During the period, several significant events have been organized in the School including the following prominent activities:

- The Institutional Development Plan (IDP) for the School of Engineering (SoE) submitted to the AICTE under the NEQIP programme, was approved with the sanction of Rs.681.47 Lakh for the period 2014-2017.

The first installment of Rs.170.3675 Lakh was received in June 2014. The beneficiary AICTE approved courses are:

M Tech in Bio electronics; Electronics Design and Technology; Energy Technology; Information Technology; Food Engineering and Technology; Mechanical Engineering and B Tech in Electronics and Communication Engineering; Computer Science and Engineering; Civil Engineering; Mechanical Engineering

- Meeting with AICTE nominated NEQIP Mentor

A meeting with the AICTE nominated NEQIP Mentor, Professor B Bandopadhyay from IIT Mumbai was organized on 20 August, 2014 to discuss on effective implementation of AICTE NEQIP project.

- Visit of AICTE NEQIP Performance Auditor

Professor HS Guru Prasad from BMSCE, Performance Auditor of AICTE NEQIP visited Tezpur University on 24 February 2015. Professor Guru Prasad also interacted with faculty and officials of the University at various levels.

- Formation of GB for School of Engineering

The Governing Body of the technical programs for effective implementation of AICTE NEQIP Programme has been constituted. The First meeting of the GB is scheduled to be held in August 20, 2015. The members of the Governing Body include eminent scholars and industrialists such as Professor S Dasgupta, Vice Chancellor, Assam University, Silchar, Professor S Majhi, IITG, Professor Prabin K Bora, IITG, Professor Sajal K Deb, IITG, and Mr. Abhijit Barooah, MD, Premier Cryogenics Ltd, Guwahati, Assam.

- Establishment of State-of-the-art High Performance Computing Infrastructure for Scientific Computing

A high performance computing infrastructure for scientific computing has been established in association with C-DAC, Pune to facilitate the high end computing support to the research community of the University as well as to other neighboring regions. A Super Computer (with one high-end Master and 06 Compute nodes), equipped with a massive storage (50 TB) capacity will be installed within October, 2015. Two scientists from C-DAC, Pune will join the University for 2 years to improve awareness regarding utilization of the computing infrastructure.



- Orientation Programme

A faculty development programme (FDP) was organized from December 15-27, 2014 under FDP of AICTE NEQIP scheme. Total 69 faculty members participated in the programme. The programme also included a three day pedagogy training programme conducted by experts from IIT Kharagpur.

- Financial Support for Faculty Development Programme

As part of Faculty and Staff Development Scheme of AICTE NEQIP, 35 faculty members availed the facility to attend conferences and workshops within India with travel, accommodation and registration support.

- AICTE GATE link Scholarship

Disbursement of AICTE GATE linked Scholarship to a total 126 MTech 1st year and 2nd year students of Rs. 90,72,000/- (Ninety Lac Seventy Two Thousand Only) has been done from August, 2014 to April, 2015.

- Introduction of BVoc Programme

Two BVoc programmes of 3-year duration in (i) Food Processing and (ii) Renewable Energy and Management have been started from the academic session 2015-16.

Dean, School of Engineering

Professor D K Bhattacharyya, PhD (Tezpur)

E-mail: dkb@tezu.ernet.in

THE STAFF OF THE OFFICE OF THE DEAN

Sr. Technical Assistant

J C Das, Diploma (SCTE, Assam)

E-mail: djibon@tezu.ernet.in

UDC

U Roy, PG Diploma (Tezpur)

E-mail: uttamroy@tezu.ernet.in

MTS

B Bora

D Mahanta

DEPARTMENT OF CIVIL ENGINEERING

THE DEPARTMENT

The Civil Engineering Department was opened in 2009 with a BTech programme. The PhD programme was initiated in August 2010. The Department aims at providing quality education and guidance to students and researchers. In addition to academic and research activities, the Department has also been extending its expertise to various sectors through consultancy.

ACADEMIC PROGRAMMES

- BTech in Civil Engineering
- PhD

STUDENT INTAKE

Programme	Student Intake
BTech in Civil Engineering	60
PhD	Intake variable, 01

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

Structural laboratory	:	<ul style="list-style-type: none"> • UTM • CTM
Geotechnical Engg. laboratory	:	<ul style="list-style-type: none"> • Advanced Triaxial • Direct Shear
Transportation laboratory	:	<ul style="list-style-type: none"> • CBR • Marshall Apparatus
Environmental laboratory	:	<ul style="list-style-type: none"> • Bod Incubator • Cod Reactor
Surveying laboratory	:	<ul style="list-style-type: none"> • Total Station
Structural and NDT laboratory	:	<ul style="list-style-type: none"> • Ultra Sonic Pulse Velocity Tester • Rebound Hammer

PUBLICATIONS

In International and National Journals

Saikia, A. and Das, U. K. Analysis and design of open trench barriers in screening steady-state surface vibrations, *Earthquake Engineering and Engineering Vibration*, 13(3), 2014.

Saikia, A. Numerical study on screening of surface waves using a pair of softer backfilled trenches, *Soil Dynamics and Earthquake Engineering*, 65, 2014.



Conference proceedings

Saikia, A., Dutta, A. K., and Das, U. K. Finite element study on vibration isolation using dual open trench barriers, In Proceedings of International Conference on Innovations in Civil Engineering, SCMS School of Engineering and Technology, Kerala, India, 8-9 May, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof S K Bhattacharyya, Director, Central Building Research Institute, Roorkee.

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Arindam Khan, a student of the department, was selected through a nation-wide competition and participated in the final round of the international competition Defi Bouygues Construction held in France during November 2014. The theme of the competition was Builders, design the district of tomorrow.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

Consultancy services to various industries

Consultancy in areas like characterization of building material and structural design; preliminary soil investigation; characterization of pavement materials; Water quality tests are offered by the Department.

Organizations that took consultancy on various projects from the Department include, N F Railways, Power Grid Corporation, Gammon India Limited, MES and others.

NUMBER OF STUDENTS WHO PASSED NET-JRF / GATE [2014 - 2015]

GATE – 7

NOTABLE PLACEMENT [2014 - 2015]

Power Grid – 01

IBM – 01

CCD – 01

THE FACULTY OF THE DEPARTMENT

Associate Professor

U K Das, PhD (Gauhati)

Head of the Department

Specialization: Geotechnical Engineering , Areas of Interest: Slope Stability, Unsaturated Soil Mechanics

E-mail: ukrdas@tezu.ernet.in

Assistant Professors

A Saikia, MTech (IIT Kharagpur)

Specialization: Geotechnical Engineering, Areas of Interest: Soil Dynamics

E-mail: asaikia@tezu.ernet.in

K U Ahamad, PhD (IIT Guwahati)

Specialization: Environmental Engineering, Areas of Interest: Low-cost treatment of drinking water

E-mail: kahamad@tezu.ernet.in

B S Sil, PhD (NIT Silchar)

(On lien to NIT Silchar)

Specialization / Areas of Interest: Water Resources Engineering

E-mail: brititu@tezu.ernet.in

D B Sonowal, MTech (IIT Roorkee)

Specialization / Areas of Interest: Structural Engineering, Bridge Engineering

E-mail: bailung@tezu.ernet.in

B K Narzary, MTech (IIT Guwahati)

Specialization / Areas of Interest: Transportation Engineering, Pavement Design

E-mail: binanda@tezu.ernet.in

S Deka, PhD (IIT Guwahati)
 Specialization/Areas of Interest: Geotechnical Engineering, Soil Improvement
 E-mail: deka.s@tezu.ernet.in

J D Bharali, MTech (IIT Guwahati)
 Specialization/Areas of Interest: Transportation Engineering
 E-mail: jdb@tezu.ernet.in

A Das, ME (IISc Bangalore)
 Specialization/Areas of Interest: Structural Engineering, Sustainable Technology
 E-mail: adas@tezu.ernet.in

R Buragohain, MTech (IIT Guwahati)
 Specialization/Areas of Interest: Water Resources Engineering, Urban Flood Management
 E-mail: rgn@tezu.ernet.in

A Chakraborty, ME (Gauhati)
 Specialization/Areas of Interest: Geotechnical Engineering, Slope stability
 E-mail: aru243@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

Technical staff

C Doley, MTech (IIT Guwahati)
 Technical Officer
 E-mail: chirajd@tezu.ernet.in

Iseng Thawmung, Diploma
 Technical Assistant
 E-mail: iseng@tezu.ernet.in

P Kalita, Diploma
 Technical Assistant
 E-mail: pj@tezu.ernet.in

J Baruah, Diploma
 Technical Assistant
 E-mail: jahnu@tezu.ernet.in

Office Staff

B Pangging, MA (Gauhati)
 UDC
 E-mail: barun@tezu.ernet.in

C Mohammad
 MTS
 E-mail: chandmd@tezu.ernet.in





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

THE DEPARTMENT

The Department of Computer Science and Engineering, which was started as the Department of Computer Science in 1994, aims at promoting specialized knowledge in the field of computer science and computer application and establishing itself as a dedicated center of learning and research and creating competent professionals capable of taking leading roles in industry, academia and application areas of the field.

The Department is selected for setting up a MHRD's Center of Excellence based on Machine Learning and Big Data Analysis (2014-2017). The Department is also selected for UGC SAP DRS-II in the area of Big Data Analytics-Bioinformatics, Network Security and Robotics for the period 2014-2019.

The thrust areas of research for the Department have been the following:

- Data Mining
- Bioinformatics
- Biomimetic and Cognitive Robotics
- Computer and Network Security
- Image Processing and Pattern Recognition
- Knowledge Representation and Reasoning
- Natural Language Processing
- Networks
- Optimization Techniques
- Workflow Analysis

ACADEMIC PROGRAMMES

- BTech in Computer Science & Engineering
- Master in Computer Application
- MTech in Information Technology
- PhD

STUDENT INTAKE

Programme	Student Intake
BTech in Computer Science & Engineering	52
Master in Computer Application	45
MTech in Information Technology	30
PhD	Intake variable, 11

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Embedded System Trainer Lab (8085 & Arm) Processor Based (2 Nos)
- Logic Analyzer
- Mixed Mode Oscilloscope
- Bench Mark Lan Trainer/I-Security
- Matrox Image System
- Ibm X3550 M3 Server
- Hp Elite 8300mt (15) Pcs
- Hp Workstation 8600/6600
- Cisco 2821 Router



- Cisco 4948 L3 Switch
- Cisco 3560 L3 Switch
- Sun Ultra 27 Ws
- Hp DL 380 Server

MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
D K Bhattacharyya	<p>Developed a robust Biclustering Algorithm for identification of Shifting-and-scaled patterns of gene expression data. (Published in IEE/ACM Transactions on Computational Biology and Bioinformatics, 2014)</p> <p>Developed an efficient feature selection Method and Tool. (Published in Journal of Expert System with Application Elsevier)</p> <p>Developed an effective method for Gene Co-expression Network Construction. (Published in BMC Bioinformatics)</p>
D Boro	Development of a supervised ensemble method for classification of data.
N Sarma	Development of a MAC protocol for Cognitive Radio Networks.
S Deka	Development of power-allocation technique for underlay Cognitive Radio Network. (Published in NWCDMA 2014, Jadavpur University)
S M Hazarika	Developed a Firewall verification and validation tool.
S Patra	Development of novel active learning technique for the classification of remote sensing images.
U Sharma	<p>Developed a 20 Hrs Assamese speech corpus with phonetic transcription, and pitch and break marking, and syllabification of nearly 3 hrs.</p> <p>Identified some dialectal features in Assamese speech.</p> <p>Developed some effective methods for web application security.</p>

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
Center of Excellence on Machine Learning and Big Data Analysis	MHRD	400.00 Lakh	2014-2017	D K Bhattacharyya S M Hazarika U Sharma N Sarma
Big Data Analytics- Bioinformatics, Network Security and Robotics	UGC SAP (DRS-II)	77.00 Lakh	2014-2019	D K Bhattacharyya
MAC Protocols Design for Cognitive Radio Networks	DeitY	72.84 Lakh	2013-2015	N Sarma
Advanced Techniques for LAND-COVER change detection in multi temporal remote sensing images.	UGC	6.00 Lakh	2014-2016	S Patra
Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages.	DietY	30.01 Lakh	2011-2015	U Sharma
BCI Integrated Collaborative Control of a Cognitively Enhanced Smart Wheelchair.	UKIERI-DST	27255 GBP	2015-2016	S M Hazarika

PUBLICATIONS

In International and National Journals

- Ahmed, H. A., Mahanta, P., Bhattacharyya D. K., and Kalita, J. K., Shifting-and-scaling Correlation based Biclustering Algorithm, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 11-6, 1239-1251, 2014.
- Baruah, R., and Hazarika, S. M. Qualitative Directions in Egocentric and Allocentric Spatial Reference Frames. *International Journal of Computer Information Systems and Industrial Management Applications*, 6, 2014.
- Bhuyan, M. H., Bhattacharyya, D. K., and Kalita, J. K., An empirical evaluation of information metrics for low-rate and high-rate DDoS attack detection, *Pattern Recognition Letters*, 51, 1-7, 2015.
- Bhuyan, M. H., Bhattacharyya, D. K., and Kalita, J. K., Towards an unsupervised method for network anomaly detection in large datasets. *Computing and Informatics*, 33(1), 1-34, 2014.
- Chutia, D. and Bhattacharyya, D. K., An Effective Ensemble Classification Framework using Random Forests and Correlation Based Feature Selection Technique, *Remote Sensing Letters*, 2014.
- Das, D., and Saharia, S., Human Gait Analysis and Recognition using support vector Machines, *International Journal of Computer Science & Information Technology*, 6(5), 2014.
- Das, M., and Borah, B., Biclustering of Gene Expression Data using a Two-Phase Method, *International Journal of Computer Applications (0975 – 8887)*, 103(13), 6-10, 2014.
- Das, P., Das, D., and Saharia, S., Gait Analysis and Recognition for Human Identification, *International Journal of Electronics and Applied Research*, 1, 45-54, 2014.
- Dash, D., Bishnu, A., Gupta, A. and Nandy, S. C., Line coverage measures in wireless sensor networks, *Journal of Parallel and Distributed Computing*, 74(7), 2596–2614, 2014.
- Goyal, A., Ahmed, H. A., and Bhattacharyya, D. K., An Effective Measure Corresponding to Biological Significance, in the Network Modeling Analysis in Health Informatics and Bioinformatics, *Network Modeling Analysis in Health Informatics and Bioinformatics*, 3(1), 2014.
- Hoque, N., Bhattacharyya, D. K., and Kalita, J. K., MIFS-ND: A Mutual Information-based Feature Selection Method, *International Journal of Expert Systems With Applications (ESWA)*, 41, 6371-6385, 2014.
- Hoque, N., Bhuyan, M. H., Baishya, R. C., Bhattacharyya, D. K., and Kalita, J. K., Network attacks: Taxonomy, tools and systems. *Journal of Network and Computer Applications*, 40, 307-324, 2014.
- Kakoty Nayan M., Hazarika Shyamanta M.. Development of an Electromyographic Controlled Biomimetic Prosthetic Hand. *International Journal of Computational Vision and Robotics*, 4(1), 2014.
- Kakoty, N. M., and Hazarika, S. M., Towards Electromyogram based Grasps Classification. *International Journal of Biomechatronics and Biomedical Robotics*, 3(2), 2014.
- Kakoty, N. M., Saikia, A., and Hazarika, S. M. Exploring a Family of Wavelet Transforms for EMG based Grasp Recognition. *Journal of Signal Image and Video Processing*, 9(3), 2015.
- Mahanta, P., Ahmed, H. A., Bhattacharyya, D. K. and Ghosh, A. FUMET: A fuzzy network module extraction technique for gene expression data, *Journal of Bioscience*, 39-3, 351-364, 2014.
- Patra, S., Gautam, R. and Singla, A. A novel context sensitive multilevel thresholding for image segmentation, *Applied Soft Computing*, 23, 122-127, 2014.
- Ray, S. K., Baruah, V. J., Satapathy, S. S. and Banarjee, R. Co-translational protein folding is revealing the selective use of synonymous codons along the Coding sequence of a low expression gene, *Journal of Genetics*, 2014.
- Roy, S., Bhattacharyya, D. K., and Kalita, J. K. Reconstruction of gene co-expression network from microarray data using local expression patterns, *BMC Bioinformatics*, 15, 1-14, 2014.
- Saharia, N., Sharma, U. and Kalita, J. K. Stemming resource-poor Indian languages. *ACM Transactions of Asian Language Information Processing (TALIP)*, 13(3), 2014.
- Sarmah, A. K., Sinha, S. K. and Hazarika S. M. A new pattern - based flexible approach for maintaining a constrained workflow. *International Journal of Software Engineering and Knowledge Engineering*, 24-1,139-161, 2014.



Satapathy, S. S., Powdel, B. R., Dutta, M., Buragohain, A. K. and Ray, S. K.. Selection on GGU and CGU codons in the high expression genes in bacteria, *J. Mol. Evol.*, 78, 13–23, 2014.

Satapathy, S. S., Powdel, B. R. Dutta, M., Buragohain, A. K., and Ray S. K. Constraint on di-nucleotides by codon usage bias in bacterial genomes, *Gene*, 536, 18-28, 2014.

Sharma, A., Sinha, S. K. and Hazarika, S. M. A New Pattern-Based Flexible Approach for Maintaining a Constrained Workflow. *International Journal of Software Engineering and Knowledge Engineering*, 24(1), 2014.

Conference proceedings

Ahmed, H. A., Hoque, N. and Bhattacharyya, D. K. Handling Mixed-type Data in Nearest Neighbour Computation. In *Proceedings of the CCSN'14*, December, 2014.

Baishya, R. C., Sarmah, R. D., Bhattacharyya, D. K., and Dutta, M.A Similarity Measure for Clustering Gene Expression Data. In *Proceedings of the ICAA 2014*.

Bhuyan, M. H., Bhattacharyya, D. K. and Kalita, J. K. Information Metrics for Low-rate DDoS Attack Detection: A Comparative Evaluation. In *Proceedings of the 7th International Conference on Contemporary Computing*, IEEE, Noida, India, 7-9 August, 2014.

Boro, D. and Bhattacharyya, D. K. Improving KNN performance for ensemble classification using Particle Swarm Optimization. In *Proceedings of the 3rd International Conference on Computing, Communication and Sensor Network*, Puri, Odisha, India, 12-14 December, 2014.

Boruah, A. and Hazarika, S. M. An MEBN framework as a dynamic firewall's knowledge flow architecture. In *Proceedings of the IEEE International Conference on Signal Processing and Integrated Networks SPIN 2014*.

Chettri, S. K. and Borah, B. Extending Microaggregation Technique Towards Protection of Vertically Partitioned Data. In *Proceedings of the International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA-2014)*, Bangalore, 2014.

Das, D., and Saharia, S. Human Gait Analysis and Recognition using Support Vector Machines, In *Proceedings of the International Conference on Computer Science, Engineering and Application 2014*.

Deka, S. K., Chauhan, P. and Sarma, N., Constraint based Cooperative Spectrum Sensing for Cognitive Radio Networks. In *Proceedings of The 13th International Conference on Information Technology 2014 (ICIT 2014)*, 22-24 December, 2014, Bhubaneswar, India. (Awarded with Amiya K. Pujari Best Paper Award for ICIT 2014).

Hoque, N., Bhattacharyya, D. K. and Kalita, J. K. DDoS attack detection using MCA. In *Proceedings of the 3rd International Conference on Computing, Communication and Sensor Network*, Puri, Odisha, India, 12-14 December, 2014.

Hussain, I., Ahmed, Z. I., Saikia, D. K. and Sarma, N. A Tightly Synchronized TDMA MAC Protocol for Multi-hop WiFi-based Long Distance Networks. In *Proceedings of the Sixth International Conference on Ubiquitous and Future Networks 2014 (ICUFN 2014)*, Shanghai, China, 8-11 July, 2014.

Kotoky, N. and Hazarika, S. M. Bispectrum analysis of EEG for motor imagery classification. In *Proceedings of the IEEE International Conference on Signal Processing and Integrated Networks SPIN 2014*, 2014.

Masuk, H., Hazarika, H., Gaurav, G. P., Bhuyan, P., Karmakar, A. and Hazarika, S. M. Mapping rectilinear environments using a single camera. In *Proceedings of the National Workshop and Conference on Discrete Mathematics and its Applications (NWCDMA 2014)*, Jadavpur University, Kolkata, India, 10-14 March, 2014.

Sharma, P., Sharma, U., Kalita, J. Named Entity Recognition in Assamese using CRFs and Rules. In *Proceedings of the International Conference on Asian Language Processing (IALP) 2014*, 20-22 October, Kuching, Sarawak, Malaysia.

Sultan, N. H. and Sarma, N. PAPAR: Pairing based Authentication Protocol with Anonymous Roaming for Wireless Mesh Networks. accepted for publication in the *proc. of The 13th International Conference on Information Technology 2014 (ICIT 2014)*, 22-24 December, 2014, Bhubaneswar, India.

Books and Book Chapters

Dutta, D., Karmakar, A. and Saika, D. K. 2014. Determining Duty Cycle and Beacon Interval with Energy Efficiency and QoS for Low Traffic IEEE 802.15.4/ZigBee Wireless Sensor Networks. In Kundu, M.K., Mahapatra, D. P., Konar, A., and Chakraborty, A. (eds). Advanced Computing, Networking, and Informatics- Volume 2, Smart Innovation, Systems and Technologies 28, Switzerland: Springer.

SEMINARS / CONFERENCES / WORKSHOPS / SYMPOSIA ATTENDED

International and National

B Nath, attended a workshop, Introduction to Design of algorithms, IIT Kharagpur, 16-21 March 2015.

D Boro, attended FDP, Current approaches in Teaching and Research in Science and Technology, under AICTE-NEQIP scheme, Tezpur University, 15-17 December 2014.

D Boro, attended ISTE workshop conducted by IIT Kharagpur, Introduction to Design of algorithms, Tezpur University, 25-30 May 2015.

S I Singh, attended FDP, Current approaches in Teaching and Research in Science and Technology, under AICTE-NEQIP scheme, Tezpur University, 15-17 December 2014.

S K Deka, attended FDP, Current approaches in Teaching and Research in Science and Technology, under AICTE-NEQIP scheme, Tezpur University, 15-17 December 2014.

S K Deka, attended ISTE workshop conducted by IIT Kharagpur, Introduction to Design of algorithms, Tezpur University, 25-30 May 2015.

S Saharia, attended FDP, Current approaches in Teaching and Research in Science and Technology, under AICTE-NEQIP scheme, Tezpur University, 15-17 December 2014.

S Saharia, attended, Regional training cum workshop on Shodh Ganga and Anti Plagiarism software, Tezpur University, 28 November 2014.

Sanghamitra Nath, attended FDP, Current approaches in Teaching and Research in Science and Technology, under AICTE-NEQIP scheme, Tezpur University, 15-17 December 2014.

Sanghamitra Nath, attended ISTE workshop conducted by IIT Kharagpur, Introduction to Design of algorithms, Tezpur University, 25-30 May 2015.

Shobhanjana Kalita, attended ISTE workshop conducted by IIT Kharagpur, Introduction to Design of algorithms, Tezpur University, 25-30 May 2015.

Z Bhuyan, attended ISTE workshop conducted by IIT Kharagpur, Introduction to Design of algorithms, Tezpur University, 25-30 May 2015.

TALKS BY THE FACULTY ABROAD AND IN INDIA

D K Bhattacharyya delivered a talk at Kaziranga University, Jorhat, January 2015.

U Sharma delivered a lecture, Fundamental method and concept of CBCS and its implementation in Universities and Colleges, Bodoland University, 23 March 2015.

SEMINAR / WORKSHOP / SYMPOSIA / INVITED LECTURES ORGANISED BY THE DEPARTMENT

12 days training program on CCNA Security conducted by ACES ACM IIT – Delhi and I-Medita Learning Solutions (P) Limited, 19 – 31 December, 2014.

ISTE workshop, Introduction to Design of algorithms, conducted by IIT Kharagpur, 25 – 30 May, 2015.



DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof. Kamal Lodaya, Institute of Mathematical Sciences, Chennai

Prof. Paritosh Pandya, Tata Institute of Fundamental Research, Mumbai

Prof. R. Ramanujam, Institute of Mathematical Sciences, Chennai

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

Faculty

D K Bhattacharyya acted as TPC member of International Conferences: CSNT 2015, ICACCI 2015, ICNSC 2014, ICACCI 2014, ACB 2014.

N Sarma and S K Deka received Amiya K. Pujari Best Paper Award in 13th IEEE International Conference on Information Technology (ICIT 2014) ICIT for the paper, Constraint based Cooperative Spectrum Sensing for Cognitive Radio Networks, co-authored by P Chauhan, S K Deka and N Sarma.

S S Satapathy was selected as Visiting Lecturer at University of Bath, UK for One year (Sept 2014- Sept 2015).

Student

Mr N Agrawala, a student of BTech (CSE) 6th semester – won the Best Paper Award (2nd) in the SCIT 2015, held at Pune, February, 2015 for the paper, Non-exclusive Clustering: A Partitioning Approach, co-authored by H A Ahmed and D K Bhattacharyya.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

- Department of Computer Science and Engineering is selected for setting up MHRD's Center of Excellence based on Machine Learning and Big Data Analysis for the period 2014-2017.
- A High Performance Computing Centre (HPCC) is being established at Department of CSE, Tezpur University, in June 2015 to provide high end computing facility to the scientific researchers of North-East region. Shri Ashish Ranjan of CDAC, Pune and D K Bhattacharyya of Tezpur University will act as the Chief Investigators of the project.
- Department of Computer Science and Engineering is selected for UGC SAP DRS-II in the area of Big Data Analytics- Bioinformatics, Network Security and Robotics.
- S M Hazarika has been awarded DST-UKIERI Project 2014-2015. The project entitled 'BCI as an Intelligent Sensor: BCI Integrated Collaborative Control of a Cognitively Enhanced Smart Wheelchair' is in collaboration with Prof John Q Gan, University of Essex, United Kingdom.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]:

GATE – 19

NOTABLE PLACEMENT [2014-2015]:

IBM – 05

TCS – 24

Wipro – 07

Tech Mahindra – 03

L&T Infotech – 01



THE FACULTY OF THE DEPARTMENT**Professors**

D K Saikia, PhD (IIT Kharagpur)
 (On lien as Director, NIT, Meghalaya)
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

THE DEPARTMENT

The Department of Electronics and Communication Engineering, which was established in 1997, is one of the oldest Departments in the University. After the initial MTech programme in Electronics Design and Technology, the Department subsequently introduced an MTech programme in Bioelectronics under the 'Teaching and Research in Interdisciplinary and Emerging Areas' scheme of the University Grants Commission. The Department expanded its academic activities by introducing undergraduate programmes, first a BTech programme in Electronics and Communication Engineering in 2006 and then a BTech programme in Electrical Engineering in 2014. The Department has also an ongoing three-year diploma programme in Advanced Diploma in Healthcare Informatics and Management under the career oriented scheme of the University Grants Commission. In addition, the Department offers PhD programmes in different areas including Signal & Image Processing, Bioelectronics, Biosensors, Microwave Engineering, Communication Engineering and Microelectronics. At present the Department has a student strength of about 400, which is likely to increase to 600 in the next four years.

ACADEMIC PROGRAMMES

- BTech in Electronics and Communication Engineering
- BTech in Electrical Engineering
- MTech in Electronics Design and Technology
- MTech in Bioelectronics
- Advanced Diploma in Healthcare Informatics and Management
- PhD

STUDENT INTAKE

Programme	Student Intake
BTech in Electronics and Communication Engineering	60
BTech in Electrical Engineering	30
MTech in Electronics Design and Technology	28
MTech in Bioelectronics	15
Advanced Diploma in Healthcare Informatics and Management	30
PhD	Intake variable, 07

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

Micro Fabrication Laboratory: Supported by DST- FIST and UGC-SAP. Equipped with SUSS Photolithography with thin film and E gun deposition set up, spin coating instrument, oxidation furnace etc.

MAJOR RESEARCH FINDINGS / RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
A C Baishya	Design of Ultra Low Power FHSS transceiver for wireless Communication Applications, <ul style="list-style-type: none"> • Design and fabrication of a high performance ultra-low power FHSS transceiver RFIC in 180nm CMOS technology within 2-4GHz bandwidth.

Principal Investigator	Salient Research Findings
B Deka	<p>Design and Development of Compressed Sensing based Image Reconstruction Prototype Hardware Architecture for Medical Imaging Applications</p> <ul style="list-style-type: none"> • Development of an iterative pipelined CORDIC architecture for fast Fourier transform • Development of an efficient hardware architecture for the OMP algorithm <p>Design and Development of Compressed Sensing based Image Reconstruction Techniques for Medical Imaging</p> <ul style="list-style-type: none"> • Study of the above state-of-the-art CS-MRI algorithms leads us to explore new algorithms that could establish trade-off between faster convergence and computational complexity (in flops) • Development of a High Throughput Reconstruction Technique for CS based MRI • Enhancing the sparsity of the MR image by adaptively reweighting • Development of practical sampling pattern for CS MRI
M Bhuyan (Mentor)	<p>Intelligent techniques for Detection of Peripheral Neuropathy</p> <ul style="list-style-type: none"> • The system is suitable for remote locations where big hospitals are not available • The system can give a preliminary indication of having Neuropathy or normal <p>Portable and Hand-held Tea tasting instrument</p> <ul style="list-style-type: none"> • Portable and stand alone type of prototype developed • For the grading the inbuilt ANN was trained • The system has minimum user functions • The system can be manufactured at low cost <p>Automated flushing of Public Toilets</p> <ul style="list-style-type: none"> • The system can automatically flush the toilet if the user does not or properly flush it • The system does not consume power when not in use
R K Baruah	<p>To study the impact and compensation of process-induced variations in Junctionless transistors for improved reliability</p> <ul style="list-style-type: none"> • The effects of variations in process parameters on the electrical characteristics and temperature of a junctionless symmetric double-gate transistor (DGJLT) were investigated
S Bhattacharyya	<p>Microwave Technology based Tea Processing Systems for NE States</p> <p>Microwave based tea processing system is energy efficient in terms of higher thermal efficiency, without additional thermal loss</p> <p>The system is safe, clean, hygienic and protects environment</p>

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
Setting up of Microfabrication facility	DST-FIST	1.4 Crore	2011-2015	Head of the Department
Microfabrication Laboratory	UGC-SAP	0.69 Crore	2012-2015	Head of the Department of
Setting up of Fabrication facility for MEMS Systems and Devices	DeitY	3.26 Crore	2013-2015	Head of the Department
Hardware based Field Type E-Nose for flavor Detection of Tea using MOS gas Sensors	DST	33.30 Lakh	2012-2015	M Bhuyan
Automated Flushing of Public Toilets	ASTEC	1.78 Lakh	2014-2015	M Bhuyan

PUBLICATIONS

International and National Journals

- Ahmed, T. and Dutta, J. C. A GUI (Graphical User Interface) framework to Introduce H-H Model in Comparison with Kv3.3 Model, *American Journal of Biomedical Sciences*, 6(1), 2014.
- Barik, Md A. and Dutta, J. C. Fabrication and characterization of junctionless carbon nanotube field effect transistor for cholesterol detection, *Applied Physics Letters*, 105(5), 2014.
- Barik, Md A., Sarma, M. K., Sarkar, C. R. and Dutta, J. C. Highly Sensitive Potassium-Doped Polypyrrole/ Carbon Nanotube-Based Enzyme Field Effect Transistor (ENFET) for Cholesterol Detection, *Applied Biochemistry and Biotechnology*, 174 (3), 2014.
- Barthakur, M., Hazarika, A. and Bhuyan, M. Classification of Peripheral Neuropathy by using ANN based Nerve conduction Study (NCS) Protocol, *ACEEE International Journal on communication*, 5(1), 2014.
- Baruah, R. K., and Roy, P. P. A Dual-Material Gate Junctionless Transistor using high-k spacer for Enhanced Analog Performance, *IEEE Transactions on Electron Devices*, 61(1), 2014.
- Baruah, R. K., and Roy, P. P. The Effect of High-k Gate Dielectrics on Device and Circuit Performances of a Junctionless Transistor, *Journal of Computational Electronics*,14(2), 2015.
- Bhattacharjee, S., and Saharia, B. J. A comparative study on converter topologies for maximum power point tracking application in photovoltaic generation, *Journal of Renewable and Sustainable Energy*, 6(5), 2014.
- Bonjyotsna, A., and Bhuyan, M. Performance Comparison of Neural Networks and GMM for Vocal/Nonvocal segmentation for Singer Identification, *International Journal of Engineering and Technology*, 6(2), 2014.
- Bonjyotsna, A., and Bhuyan, M. Performance Comparison of Neural Networks and GMM for Vocal/Nonvocal segmentation for Singer Identification, *International Journal of Engineering and Technology*, 6(2), 2014.
- Bonjyotsna, A., and Roy, S. Correlation of Drowsiness with Electrocardiogram: A Review, *Int. Jr. of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, 3(5), 2014.
- Bordoloi, A. K., Borah, P., Bhattacharyya, S., and Bhattacharyya, N. S. Planar patch antenna with 100 μ m Slit for Size Reduction and Dual Band Applications, *Microwave and Optical Technology Letters*, 56(7), 2014.
- Chutia, R., and Bhuyan, M. Best Frequency for Temperature Modulation of Tin Oxide Gas Sensor for Chemical Vapour Identification, *International Journal of Engineering & Technology*, 6(2), 2014.
- Chutia, R., and Bhuyan, M. Best Frequency for Temperature Modulation of Tin Oxide Gas Sensor for Chemical Vapor identification, *International Journal of Engineering & Technology*, 6(2), 2014.
- Deka, J., and Sharma, S. A novel approach for modeling the threshold voltage and sub threshold swing of a Nano Cylindrical MOSFET, *International Journal of Electronics and Applied Research*, 1(1), 2014.
- Deka, K., and Roy, S. Glycine gated spiking inhibitory postsynaptic membrane at the synaptic cleft, *Annals of Neurosciences*, 21(4), 2014.
- Deka, K., and Roy, Soumik. Biologically Inspired Circuit Model for Simulation of Glutamate Gated Ion Channels of the Postsynaptic Membrane at Synaptic Cleft, *Annals of Neurosciences*, 20(4), 2013.
- Deka, K. and Roy, Soumik. Glutamate Gated Spiking Neuron Model, *Annals of Neurosciences*, 21(1), 2014.
- Dutta, N., and Bhuyan, M. Stability Analysis of Metal Oxide Gas Sensors Using System Identification, *International Journal of Engineering Sciences & Research Technology*, 3 (3), 2014.
- Gogoi, J. P., Bhattacharyya, N. S., and Bhattacharyya, S. Single layer microwave absorber based on expanded graphite–novolac phenolic resin composite for X-band applications, *Composites Part B: Engineering*, 58(B), 2015.
- Hazarika, C. and Sharma, S. A mathematical model describing drift in SiO₂ gate pH ISFET's due to hydrogen ion diffusion, *International Journal of Applied Engineering Research*, 9(23), 2014.
- Kakoty, N. M. and Hazarika, S. M. Development of an Electromyographic Controlled Biomimetic Prosthetic Hand, *International Journal of Computational Vision and Robotics*, 4(1), 2014.
- Kakoty, N. M. and Hazarika, S. M. Towards Electromyogram based Grasps Classification, *International Journal of Biomechatronics and Biomedical Robotics*, 3(2), 2014.

Mondal, B., Basumatary, B., Das, J., Roychaudhury, C., Saha, H. and Mukherjee, N. ZnO-SnO₂ based composite type gas sensor for selective hydrogen sensing, *Sensors and Actuators*, 194(B), 2014.

Mondal, B., Dutta, L., Roychaudhury, C., Mohanta, D., Mukherjee, N., and Saha, H. Effect of Annealing Temperature on the Morphology and Sensitivity of the Zinc Oxide Nanorods-Based Methane Sensor, *Acta Metallurgica Sinica (English Letters)*, 27(4), 2014.

Nath, V K., Hazarika, D. and Mahanta, A. Lapped transform based image denoising with the generalised Gaussian prior, *International Journal of Computational Vision and Robotics*, 4(1/2), 2014.

Saharia, B. J. and Talukdar, B. K. Theoretical Assessment of PV Energy Potential At Assam Engineering College using PV Indices, *International Journal of Engineering Research & Technology*, 3(8), 2014.

Sarma, K. C. D. and Sharma, S. An Approach for Complete 2-D Analytical Potential Modelling of Fully Depleted Symmetric Double Gate Junction Less Transistor, *Journal of Computational Electronics*, 14(2), 2015.

Sarma, K. C. D. and Sharma, S. Scale Length Determination of Gate All Around (Regular Hexagonal Cross Section) Junctionless Transistor, *International Journal of Applied Engineering Research*, 10(2), 2015.

Zaheeruddin and Manas, M. Stochastic modeling and optimization in a microgrid, *IJARSE*, 3(5), 2014.

Conference proceedings

Aggarwal, S., Borah, C. and Sharma, S. Design and Fabrication of Power Circuit for a Hybrid Electric Vehicle and Optimization of Gate Drive Circuit. In *Proceedings of the IEEE International Conference: Electrical, Electronics, Signals, Communication and Optimization*. Andhra Pradesh, 2015.

Barik, Md A. and Dutta, J. C. Traditional and junctionless field effect transistor for cholesterol detection. In *Proceedings of the IEEE International Conference on Electronic Design, Computer Networks and Automated Verification*. Meghalaya, 2015.

Barik, Md. A., Sharma, M. and Dutta, J. C. Traditional graphene based and junctionless carbon nanotube based field effect transistor for cholesterol sensor. In *Proceedings of the 2nd IEEE International Conference on Emerging Electronics*. Bangalore, 2014.

Barthakur, M., Hazarika, A. and Bhuyan, M. Rule based fuzzy approach for Peripheral Motor Neuropathy (PMN) diagnosis based on NCS Data. In *Proceedings of the IEEE Conference on Recent Advances and Innovations in Engineering (ICRAIE)*, Jaipur, 2014.

Boruah, K. and Dutta, J. C. DNA Computing Models for Boolean Circuits and Logic Gates. In *Proceedings of the IEEE International Conference on Computational Intelligence and Communication Technology*. Ghaziabad, 2015.

Boruah, K. and Dutta, J. C. DNA Computing: From Complex Combinatorial Problems to the Boolean Circuits. In *Proceedings of the IEEE International Conference on Electronic Design, Computer Networks and Automated Verification*. Meghalaya, 2015.

Deka, B. and Datta, S. High Throughput MR Image Reconstruction using Compressive Sensing. In *Proceedings of the ICVGIP*. Bangalore, 2014.

Deka, B., and Datta, S. High Throughput MR Image Reconstruction using Compressive Sensing, In *Proceedings of the ICVGIP*, Bangalore, 2014.

Deka, J. and Sharma, S. Modeling a Nano Cylindrical MOSFET Considering Parabolic Potential Well Approximation. In *Proceedings of the National Workshop on Advances in Communication and Computing*. Guwahati, 2014.

Deka, R. and Dutta, J. C. Modeling and Simulation of a NEUROBIOFET for Application in Neurology. I In *Proceedings of the IEEE International Conference on Electronic Design, Computer Networks and Automated Verification*. Meghalaya, 2015.

Deka, R. and Dutta, J. C. Parameter Extraction for Neuron Model Simulation of Action Potential in Earthworm giant nerve fiber. In *Proceedings of the IEEE International Conference on Computational Intelligence And Communication Technology*, Ghaziabad, 2015.

Gohainbaruah, H. and Sharma, S. Modeling and simulation of electric potential profile of a Square Ion Sensitive Field Effect Transistor in the diffused layer. In *Proceedings of the IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization*. Andhra Pradesh, 2015.

Hazarika, C. and Sharma, S. A novel approach for modeling threshold voltage of MOSFET using CV characteristics. In Proceedings of the IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization. Andhra Pradesh, 2015.

Hazarika, D., Nath, V. K. and Bhuyan, M. Lapped transform domain SAR image despeckling using neighboring coefficients. In Proceedings of the International Conference on Electrical, Electronics, Signals, Communication and Optimization. Visakhapatnam, Andhra Pradesh, 2015.

Kakoty, N. M., Hazarika, S. M., Koul, M. H. and Saha, S. K. Model Predictive Control for Finger Joint Trajectory of TU Biomimetic Hand. In Proceedings of the IEEE/ International Conference on Mechatronics and Automation. China, 2014.

Kakoty, N. M., Sarma, J., Sinha, A., Konwar, D., Kumar, S. B., Mishra, S. K. and Hazarika, S. M. Jaipur Foot Gait Control through a Predictive Controller. In Proceedings of the ACM/International Conference on Advances in Robotics. Goa, 2015.

Kakoty, P. and Bhuyan, M. SnO₂ based gas sensors: Why it is so popular? In Proceedings of the IEEE ICECCT, Coimbatore, 2015.

Konwar, S., Singha, T. B., Roy, S. and Vanlalchaka, R. H. Adiabatic Logic Based Low Power Multiplexer and Demultiplexer. In Proceedings of the IEEE International Conference on Computer Communication and Informatics (ICCCI). Coimbatore, 2014.

Roy, B., Sharma, S., Medhi, T. and Sharma, D. Modeling the transient and steady state behaviour of a Glucose Oxidase Based Enzyme Field Effect Transistor. In Proceedings of the IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization. Andhra Pradesh, 2015.

Saharia, B. J. and Talukdar, B. K. Theoretical Study on Performance Constraints of a DC-DC Boost Converter. In Proceedings of the International Conference on Innovations in Electrical and Electronics Engineering. Andhra Pradesh, 2014.

Saikia, A. and Sharma, S. Suppression of Gate-Induced Drain Leakage in Bulk MOSFETs using a Non-Uniform Gate Oxide Thickness. In Proceedings of the International Conference on Emerging Trends in Electrical, Electronics, Instrumentation and Computer Engineering, Raipur, 2014.

Sarma, K. C. D. and Sharma, S. A Method for Determination of Depletion Width of Single and Double Gate Junction Less Transistor. In Proceedings of the IEEE International Conference on Electronic Design, Computer Networks and Automated Verification. Meghalaya, 2015.

Sarma, K. C. D. and Sharma, S. Scale Length Determination of a Fully Depleted Surrounding Gate (Rectangular Cross Section) Junction Less Transistor. In Proceedings of the IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization, Andhra Pradesh, 2015.

Sarma, K. C. D. and Sharma, S. Scale Length Determination of Gate All Around (Octagonal Cross Section) Junctionless Transistor. In Proceedings of the IEEE International Conference on Electronic Design, Computer Networks and Automated Verification. Meghalaya, 2015.

Sharma, D. K. and Sharma, S. Scale Length Determination of Gate All Around (Regular Pentagonal Cross Section) Fully Depleted Junction Less Transistor. In Proceedings of the IEEE International Conference on Advances in Engineering and Technology Research, Kokrajhar, 2014.

Sharma, S., Barman, P. and Pegu, R. Electronic Differential for Electric Vehicle with Single Wheel Reference. In Proceedings of the IEEE International Conference of power, dielectric and energy management. Arunachal Pradesh, 2015.

Sharma, S., Sarma, P., Bardaloi, S. and Barman, P. Estimation of Coulombic Efficiency of Lead Acid Battery for Range Determination of Electric Vehicle. In Proceedings of the IEEE International Conference of power, dielectric and energy management. Arunachal Pradesh, 2015.

Singha, T. B., Konwar, S. and Roy, S. Low Power Design and Analysis of Fundamental Logics Using Adiabatic Array Logic. In Proceedings of the IEEE International Conference on Signal Propagation and Computer Technology (ICSPCT). New Delhi, 2014.

Singha, T. B., Konwar, S. and Roy, S. Power Efficient Code Converters Using Adiabatic Array Logic. In Proceedings of the IEEE International Conference of Emerging Applications of Information Technology (EAIT). Kolkata, 2014.

Singha, T. B., Konwar, S., Roy, S. and Vanlalchaka, R. H. Power Efficient Priority Encoder and Decoder. In Proceedings of the IEEE International Conference on Computer Communication and Informatics (ICCCI). Tamilnadu, 2014.

Books and Book Chapters

Das, K. and Kakoty, P. 2014. Design, Simulation and Performance Evaluation of a High Temperature and Low Power Consumption Microheater Structure for MOS Gas Sensor. In Bora, P.K., Prasanna, S. R. M., Sarma, K. K., and Saikia, N. (eds). Advances in Communication and Computing, India: Springer.

Deka, B. and Datta, S. 2014. A practical under-sampling pattern for compressed sensing MRI. In Bora, P.K., Prasanna, S. R. M., Sarma, K. K., and Saikia, N. (eds). Advances in Communication and Computing, India: Springer.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

International and National

A Sharma attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

B Deka attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

B Deka attended a ISTE Workshop on Fluid Mechanics under the National Mission on Education through ICT (MHRD, Govt. of India), IIT Kharagpur, India, 20-30 May, 2014.

B Deka attended the 4th National Workshop on Advances in Communication and Computing organized by AEC, Guwahati, 26-27 September, 2014.

Deepika Hazarika attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

Deepika Hazarika attended a Two Week ISTE workshop on Computer programming conducted by IIT Bombay, 20 May – 21 June, 2014.

N M Kakoty attended an International Workshop on Autonomous Vehicles and Mobile Robotics, organized by IIT Delhi, INDIA, 6-8 July, 2014.

Priyanka Kakoty attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

Priyanka Kakoty attended a Hands-on training on nanofabrication, Bangalore by INUP at IISc, Bangalore, 24 June-3 July, 2014.

Priyanka Kakoty attended a Scilab training with spoken tutorial project, IIT Bombay funded by NMEICT, MHRD at Tezpur University on 26 December, 2014.

Priyanka Kakoty attended a Two week NMEICT workshop on Computer Programming at Tezpur University, organized by IIT Bombay, 20 May-21 June, 2014.

Priyanka Kakoty attended a two week-NMEICT workshop on Fluid Mechanics (online workshop), IIT Kharagpur at Tezpur University, 20-30 May, 2014.

Priyanka Kakoty attended an academic workshop on Instrumentation and Control, organized jointly by Petroleum Federation of India with IOCL, Digboi, February 19-20, 2015.

R K Baruah attended a 2-Day Familiarization Workshop on Nanofabrication Technologies by IIT Bombay & Tezpur University, 25-26 April, 2015.

R K Baruah attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

R K Baruah attended a IEEE International Conference on Emerging Electronics (ICEE), IISc, Bangalore 3-6 December, 2014.

R K Baruah attended a QIP Sponsored STC on RF and Photonics: Fundamentals & Advances, IIT Guwahati, 23 -27 February, 2015.

R K Baruah attended a Two week ISTE workshops on Fluid Mechanics by IIT Kharagpur, 20–30 May, 2014.

S Roy attended a Faculty Development Programme on Current Approaches in Teaching and Research in Science and Technology organized by School of Engineering, Tezpur University under FDP of AICTE – NEQIP Scheme, 15-27 December, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

P P Sahu delivered a talk, Surface Plasmonic Optical Waveguide, at International Conference, Optics and Photonics, University of Calcutta, February 2015.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

- Hands on Training for Microfabrication, DeitY, December, 2014.
- 2 Day Familiarization Workshop on Nanofabrication Technologies, DeitY, 25-26 April, 2015.
- ISTE STTP, Computer Programming, 16- 21 June 2014, IIT Bombay under NME ICT.
- ISTE STTP, Fluid Mechanics, 20 – 30 May 2014, IIT Kharagpur under NME ICT.
- ISTE STTP, Computer Networking, 30 Jun - 05 Jul 2014, IIT Bombay under NME ICT.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr K P Ray, Head, RF and Microwave System (RFMS) Division, SAMEER, Mumbai

Prof Swapna Banerjee, Indian Institute of Technology, Kharagpur

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

S Konwar, T B Singh and S Roy received the Special Mention Award at International Conference on Information Technology IEEE 2014, ISI Kolkata, 2014.

A research paper by A Saikia, K Baruah, and S Sharma received the Best Paper award in the International Conference on Emerging Trends in Electrical, Electronics, Instrumentation & Computer Engineering (ETEICE), 27 March, 2014.

A research paper by R Deka and J C Dutta won the Best paper award in the IEEE International Conference on Computational Intelligence and Communication Technology, 2015.

J C Dutta was awarded the LOKMAT National Education Leadership Award for the Best Teacher in Electronics & Communication Engineering.

A research paper, Fabrication and characterization of junctionless carbon nanotube field effect transistor for cholesterol detection, by A Barik, and J C Dutta, has been indexed by Nature 2014.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Workshop on Hands on Training (Level-1) Programme, Basic MEMS Fabrication Techniques, 29 May-30 June, 2015

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]

SLET – 01

GATE – 42

THE FACULTY OF THE DEPARTMENT

Professors

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N Ali
MTS





DEPARTMENT OF ENERGY

THE DEPARTMENT

The Department of Energy was established in 1996 with an aim to produce manpower pools in the field of Energy; develop new and efficient energy technologies; and to carry out research and extension activities in diverse areas of Energy. The thrust areas of teaching, research and extension activities of the Department have been new and renewable energy technologies and systems, relevant to regional/national needs and current international trends. Energy planning, management and conservation including the climate change issues have been the special thrust areas for the Department.

Academic programmes

- MTech in Energy Technology
- PhD

STUDENT INTAKE

Programme	Student Intake
MTech in Energy Technology	21
PhD	Intake variable, 03

Major facilities and equipment available:

- PG Stat Auto Lab, Model: 302N
- Gas Chromatograph, Model: HP 4890
- Biomass Gasifier with Wood Cutter, Make: Ankur Scientific
- TOC Analyzer, Make/Model:LiquiTOCII, Elementar
- UV-VIS Spectrophotometer, Make: Shimadzu, Model: 1700
- Research Radiometer, Make: International Light
- Single Cylinder 4-Stroke Petrol Engine Test Rig with Electrical Dynamometer, Make: Apex Innovation
- Computerized Diesel Engine Test Rig, Make: Apex Innovation
- Laboratory Scale Pyrolyser with Temperature Control System
- Air Quality Monitor and Dust Track Aerosol Monitor (Nephelometer), Model: Q Trak CEE-717
- Auto-bomb Calorimeter, Make: Changsha Kaiyuan Instruments Co Ltd. Model: AC-5E
- Oxidation Stability Apparatus, Model: Rancimat-743
- Duel Fuel Engine, Make: Apex Innovation, Model: P228
- Micro Hydro-Power Generating Equipment (Demonstration Unit)
- Fuel Cell Kit Stack, Make:H-Tech,Model: XX2 3002
- Integrated Biodiesel Production Plant, Make: Malnad Industries, Model
- Biomethanation Plant



MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
D C Baruah	<ul style="list-style-type: none"> • Identification and ranking of potential waste streams (municipal/industrial/farm based) and by-products of anaerobic digestion for phosphorus recovery • Investigation of available phosphorus enhancement method (acidification/ microwave digestion/chelating agent addition) to increase potential for phosphorus recovery. • Assessment and field application of different anaerobic digestion and gasification by-products in different phases (soild/liquid/whole/ash phase) to understand their prospects as crop production input. • Comprehensive assessment and identification of the most potential biomass in the selected nonelectrified study area for biogas generation and gasification • Comprehensive assessment of Energy demand at Jhawani (existing as well as additional amount to bridge the developmental gap – both thermal and electricity) • Design of high performance Solar Hot Air Generator (SHAG) • Successful field testing (test trial) of fabricated ISHAG in a typical tea processing unit • Design and fabrication of improved cooking stove • Successful lab scale testing of designed stove with range of biomass fuel
D Deka	<ul style="list-style-type: none"> • A number of locally available tree-borne oil seeds was found to be potential source for biodiesel production • Development of renewable heterogeneous catalyst from biowastes • Sulfonated carbon catalyst derived from oil-cake waste was employed in esterification, trans-esterification to produce biodiesel from acid oil and cellulose saccharification. • Microemulsion based hybrid Biofuel (MBHB) using locally available vegetable oil was prepared from crude vegetable oils of five locally available plant species which can substantially reduce the production cost of vegetable oilbased biofuels.
R Kataki	<ul style="list-style-type: none"> • Inventorization of biomass production and bio-waste resources in India and Europe and roadmaps are elaborated through consultation with all stakeholders for a concerted planning of future research initiatives in the area of biomass production and bio-waste conversion. • Mapping of research and development activities in both India and Europe • Biochar produced from various biowastes are found to be good soil amendments • Application of biochar at various rates is found to enhance crop productivity and enhance soil qualities. Besides, GHG emission is also found to be reduced. • Various biowastes can be suitably converted through thermochemical conversion to biooil and biochar. • Biooil after upgradation can replace petro-fuel and biochar has shown properties as anti-microbial agent and potential adsorbents of heavy metal. • Non-edible tree borne oil seeds can be suitably utilised in a biorefinery mode for production of various types of bio-fuels and materials.



Research projects, ongoing and new

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
Optimizing phosphate recovery from community bio-energy system: low cost sustainable fertilizer production for rural community	UGC-UKIERI	15.72 lakh	2013-2015	D C Baruah
Rural Hybrid Energy Enterprise Systems	DST-UKRC	198.00 lakh	2013-2016	D C Baruah
Instrumented solar hot air generator (ISHAG) for optimum thermal load in tea processing	DST	28.54 lakh	2012-2016	D C Baruah
Development of a fuel efficient all-purpose biomass cook stove	ASTEC	1.75 lakh	2014-2016	D C Baruah
Development of a test setup for solar thermal collector with air as working fluid and design a microcontroller-based mechanism for controlling the collector output	ASTEC	1.25 lakh	2014-2016	P K Choudhury
Production of biochar from various biowastes and its soil application for sustainable soil management and mitigation of GHG emission	UGC	12.95 lakh	2013-2016	R Katakai
Strengthening Networking on Biomass Research and Bio-waste conversion - Biotechnology for Europe India Integration (SAHYOG)	Indo-EU	44.79 lakh	2012-2015	R Katakai

PUBLICATIONS**In International and National Journals**

Baig, H., Sarmah N., Chemisana, D., Rosell J., Mallick, T. K. Enhancing Performance of a Linear Dielectric Based Concentrating Photovoltaic System, *Energy*, 73, 2014.

Baruah, D. and Baruah, D.C. Modeling of biomass gasification: A review, *Renewable and Sustainable Energy Reviews*, 39, 2014.

Bora, P., Konwar, L.J., Boro, J., Phukan, M. M. , Deka, D. and Konwar, B.K. Hybrid biofuels from non-edible oils: A comparative standpoint with corresponding biodiesel, *Applied Energy*, 135, 2014.

Borah, P., Singh, M.K. and Mahapatra, S. Estimation of degree-days for different climatic zones of North-east India, *Sustainable Cities and Society*, 14, 2015.

Borah, R.R., Palit, D. and Mahapatra, S. Comparative Analysis of Solar Photovoltaic Lighting Systems in India, *Energy Procedia*, 54, 2014.

Bordoloi, N., Narzary, R., Chutia, R.S., Bhaskar, T., and Katakai, R. Pyrolysis of *Mesua ferrea* and *Pongamia glabra* seed cover: Characterization of bio-oil and its sub-fractions, *Bioresource Technology*, 178, 2015.

Boro, B., Basumatary, S., Choudhury, P. K. and Gogoi, B. Feedstocks, production, properties and blending effect of biodiesel: a review, *International Journal of Recent Development in Engineering and Technology*, 3(1), 2014.

Boro, J., Konwar, L. J. and Deka, D. Transesterification of non-edible feedstock with lithium incorporated egg shell derived CaO for biodiesel production, *Fuel Processing Technology*, 122, 2014.

Boro, J., Konwar, L.J., Thakur, A.J. and Deka, D. Ba doped CaO derived from waste shells of *T striatula* (TS-CaO) as heterogeneous catalyst for biodiesel production, *Fuel*, 129, 2014.

Choudhury, N. D., Chutia, R. S., Bhaskar, T., and Katakai, R. Pyrolysis of jute dust: effect of reaction parameters and analysis of products, *Journal of Material Cycles and Waste Management*, 16, 2014.



Choudhury, P. K., Baruah, D. C. Development of an empirical model for assessment of solar air heater performance, *Distributed Generation and Alternative Energy*, 29 (3), 2014.

Choudhury, P.K. and Baruah DC. Development of an Empirical Model For Assessment of Solar Air Heater Performance, *Distributed Generation and Alternative Energy Journal*, 29 (3), 2014.

Chutia, R.S., Katakai, R. and Bhaskar, T. Characterisation of liquid and solid products from pyrolysis of *Pongamia glabra* deoiled cake, *Bioresource Technology*, 165, 2014.

Das, S., Thakur, A.J. and Deka, D. Two-Stage Conversion of High Free Fatty Acid *Jatropha curcas* Oil to Biodiesel using Brønsted Acidic Ionic Liquid and KOH as Catalysts, *The Scientific World Journal*, Volume 2014, Article ID 180983, <http://dx.doi.org/10.1155/2014/180983>, 2014.

Deka, D., Sedai, P. and Chutia, R.S. Investigating woods and barks of some indigenous tree species in North East, *Energy Sources, Part A*, 36, 2014.

Dutta, P.P. and Baruah, D.C. Possibility of biomass gasification in tea manufacturing industries in Assam, India, *International Journal of Renewable Energy Technology*, 5 (4), 2014.

Dutta, P.P. and Baruah, D.C. Gasification of tea (*Camellia sinensis* (L.) O. Kuntze) shrubs for black tea manufacturing process heat generation in Assam, India, *Biomass and Bio-energy*, 66, 2014.

Dutta, P.P., Pandey, V., Das, A.R., Sen, S. and Baruah, D.C. Down Draft Gasification Modelling and Experimentation of Some Indigenous Biomass for Thermal Applications, *Energy Procedia*, 54, 2014.

Dutta, P.P., and Baruah, D.C. Drying modelling and experimentation of Assam black tea (*Camellia sinensis*) with producer gas as a fuel, *Applied Thermal Engineering*, 63(2), 2014.

Hiloidhari, M. and Baruah D.C. GIS mapping of rice straw residue for bioenergy purpose in a rural area of Assam, India, *Biomass and Bioenergy*, 71, 2014.

Hiloidhari, M., Das, D. and Baruah, D.C. Bio-energy potential from crop residue biomass in India. *Renewable and Sustainable Energy Reviews*, 32, 2014.

Kakati BK, and Kucernak ARJ. Gas phase recovery of hydrogen sulfide contaminated polymer electrolyte membrane fuel cells, *Journal of Power Sources*, 252, 2014.

Kalita P., Mahanta P., and Saha U. K. Study of bed-to-wall heat transfer with twisted tape at the upper splash region of a pressurized circulating fluidized bed unit, *International Journal of Heat and Mass Transfer*, 78, 2014.

Konwar, L. J., Boro, J. and Deka, D. Review on latest developments in biodiesel production using carbon-based catalysts. *Renewable and Sustainable Energy Reviews*, 29, 2014.

Konwar, L. J., Das, R., Thakur, A. J., Salminen, E., Mäki-Arvela, P., Kumar, N., Mikkola, J-P and Deka, D. Biodiesel production from acid oils using sulfonated carbon catalyst derived from oil-cake waste, *Journal of Molecular Catalysis A: Chemical*, 2014. (In press)

Konwar, L.J., Mäki-Arvela, P., Salminen. E., Kumar, N., Thakur, A.J., Mikkola, J-P and Deka, D. Towards carbon efficient biorefining: Multifunctional mesoporous solid acids obtained from biodiesel production wastes for biomass conversion, *Applied Catalysis B: Environmental*, 176, 2015.

Lopes T, Ho M, Kakati BK, Kucernak ARJ. Assessing the performance of reactant transport layers and flow fields towards oxygen transport: A new imaging method based on chemiluminescence, *Journal of Power Sources*, 274, 2015.

Mahapatra, S. and Dasappa, S. Experiments and analysis of propagation front under gasification regimes in a packed bed, *Fuel Processing Technology*, 121, 2014.

Mahapatra, S. and Dasappa, S. Influence of surface area to volume ratio of fuel particles on gasification process in a fixed bed, *Energy for Sustainable Development*, 19, 2014.

Micheli, L., Sarmah, N., Luo, X., Reddy, K. S., Mallick, T. K. Design of 16-Cell Densely-Packed 500× Concentrating Photovoltaic Receiver, *Energy Procedia*, 54, 2014.

Muhammad-Sukki, F., Abu-Bakar, S. H., Munir, A. B., Yasin, S. H. M., Ramirez-Iniguez, R., McMeekin, S. G., Stewart, B. G., Sarmah, N., Mallick, T. K. and Rahim, R. A. Feed-in Tariff for Solar Photovoltaic: The rise of Japan, *Renewable Energy*, 67, 2014.

Saikia, P., Gupta, U. N., Barman, R. S., Kataki, R., Chutia, R. S., and Baruah, B. P. Production and characterization of bio-oil produced from *Ipomoea carnea* bio-weed, *BioEnergy Research*. [In Press].

Saikia, R., Chutia, R. S., Kataki, R., and Pant, K.K. Perennial grass (*Arundo donax* L.) as a feedstock for thermo-chemical conversion to energy and materials, *Bioresource Technology*, 188, 2015.

Sarmah, N., Mallick, T. K. Design, fabrication and outdoor performance analysis of a low concentrating photovoltaic system, *Solar Energy*, 112, 2015.

Sarmah, N., Richards B. S., Mallick T. K. Design and indoor performance analysis of a low concentrating dielectric photovoltaic module, *Solar Energy*, 103, 2014.

Singh, M.K., Mahapatra, S. and Teller, J. Development of thermal comfort models for various climatic zones of North-East India, *Sustainable Cities and Society*, 14, 2015.

Singh, M.K., Mahapatra, S. and Teller, J. Relation between indoor thermal environment and renovation in Liege residential buildings, *Thermal Science*, 18(3), 2014.

Upadhyaya, K., Watham, T., and Kataki, R. Tree fodder utilization in humid tropical highland: a case of Tanhril village in Aizawl district of Mizoram, India, *International Journal of Current Discoveries and Innovations*

Conference proceedings

Baruah, P., Singh, M. K. and Mahapatra, S. Thermal Comfort in Naturally Ventilated Classrooms. In proceedings of the 30th International Conference on Passive and Low Energy Architecture (PLEA 2014), Ahmedabad, India, 16-18 December, 2014.

Brahma, D.K., Sut, D. and Kataki, R. Kayea assamica oil biodiesel: an alternate fuel for CI engine. In Proceedings of an International symposium on Aspects of Mechanical Engineering and Technology for Industry, NERIST, Itanagar, 6-8 December, 2014.

Deka, K. Mahapatra, S., Bordoloi P.K. and Medhi, B. Design and Testing of a Control System for Supply Side Electrical Load Management. In proceedings of the First International Conference on Non-conventional Energy (ICONCE 2014), Kalyani, India, 16-17 January, 2014.

Dhar, P., Borah, P., Singh M. K. and Mahapatra, S. Thermal Characteristics of a Vernacular Building Envelope. In proceedings of the 30th International Conference on Passive and Low Energy Architecture (PLEA 2014), Ahmedabad, India, 16-18 December, 2014.

Fahy K, Kakati BK, Naranammalpuram-Sundaram VN and Kucernak ARJ. New palladium phosphide catalysts for fuel cells based on a simple conversion process. In proceedings of the Hydrogen and Fuel Cell SUPERGEN Researcher conference, University of Birmingham, Birmingham, UK, 15-17 December, 2014.

Fernández, E. F., Almonacid, F., Sarmah, N., Mallick, T. K., Sanchez, I., Cuadra, J. M., Rodrigo, P. and Pérez- Higuera, P. Performance analysis of the linear model for estimating the maximum power of a HCPV module indifferent climatic conditions. In Proceedings of the CPV-10 Conference, USA, 2014.

Kalita, P. and Banik, R. K. Investigation of hydrodynamic parameters for design of a novel fluidized bed paddy dryer. In proceedings of a National seminar cum workshop on Innovative prospects in food processing: integration of engineering and biological sciences, organized by Department of Food Engineering and Technology, Tezpur University, Assam, 27 – 28 March, 2015.

Kalita, P., Gogoi R., Saikia R. and Mahanta P. Effect of distributor plate on bed hydrodynamics and heat transfer in a pressurized cold circulating fluidized bed unit. In Proceedings of an International Symposium on Aspects of Mechanical Engineering and technology for Industry. NERIST, Itanagar, Arunachal Pradesh, 6-8 December, 2014.

Mahapatro A., Kalita P., Mahanta P., Saha U.K., Mallick S. S. Numerical simulation of gas-solid flow in a pressurized circulating fluidized bed riser, In proceedings of the 11th International conference on Fluidized Bed Technology (CFB-11), Beijing, China, 14-17 May, 2014.



Micheli, L., Sarmah, N., Luo, X., Fernández, E. F., Reddy, K. S. and Mallick, T. K. Technical Issues and Challenges in the Fabrication of a 144-Cell 500× Concentrating Photovoltaic Receiver. In Proceedings of the IEEE PVSC Conference, USA, 2014.

Micheli, L., Sarmah, N., Luo, X., Reddy, K. S. and Mallick, T. K. Design and Production of a 2.5 kWe Insulated Metal Substrate-based Densely Packed CPV Assembly. In Proceedings of the CPV-10 Conference, USA, 2014.

Naman, G. Z., Ivaturi, A., Senthilarasu, S., Prabhakara, B., Sellami, N., Sarmah, N., Mallick, T. K. and Upadhyaya, H. M. Development of a concentrated photovoltaic thermal hybrid system for heat and power generation in Nigeria. In Proceeding of the PVSAT-10, Loughborough, UK, 2014.

Naman, G. Z., Ivaturi, A., Senthilarasu, S., Prabhakara, B., Sellami, N., Sarmah, N., Mallick, T. K., and Upadhyaya, H. M. Compound Parabolic Concentrators' Designs for Equatorial Africa. In Proceedings of the 1st Africa-PVSEC Conference, Durban, 2014.

Narzary, A., Phukan, S. J. and Deka, D. Electricity generation from Bio-waste based Microbial Fuel Cells. In Proceedings of the 12th International Congress on Renewable Energy (ICORE-2014) on Renewables for Development of Rural Areas, New Delhi, 8-9 December, 2014.

Saikia, R., Kataki, R. and Pant, K.K. Perennial grass as a feedstock for thermo-chemical conversion to energy and materials. In Proceedings of an International Conference on Emerging Trends in Biotechnology, JNU, New Delhi, 6-9 November, 2014.

Shanks, K., Sarmah, N., Reddy, K. S. and Mallick T. K. The design of a parabolic reflector system with high tracking tolerance for high solar concentration. In Proceedings of the CPV-10 Conference, USA, 2014.

Singh, M.K., Mahapatra, S. and Teller, J. Design optimisation of vernacular building in warm and humid climate of North-East India. In proceedings of the 30th International Conference on Passive and Low Energy Architecture (PLEA 2014), Ahmedabad, India, 16-18 December, 2014.

Tasmin, W., Choudhury, P. K. Designing of a temperature control mechanism for solar water heating system. In Proceedings of an International Conference on Green Energy and Smart Materials Through Science, Technology and Management (GESM – 2014), Gauhati University, Assam, 2014.

Books and Book Chapters

Brahma, D. K., Sut, D. and Kataki, R. 2014. Kayea assamica oil biodiesel: an alternate fuel for CI engine. In Lingfa, P. and Gautam, S.S. (eds). Aspects of Mechanical Engineering and Technology for Industry, New Delhi: Excell India Publishers.

Das, S., Thakur, A. J. and Deka, D. 2014. Influence of free fatty acids content in catalytic activities of [BSMIM] Cl ionic liquid for biodiesel production from non-edible acidic oils. In Kumar S., Sarma, A. K., Tyagi, S.K. and Yadav Y.K. (eds). Recent Advances in Bioenergy Research, Vol. III. Punjab: Sardar Swaran Singh National Institute of Renewable Energy.

Kalita, P., Mahanta, P. and Saha, U. K. 2014. Pressurized Circulating Fluidized bed Technology: A review towards a novel design approach. In Energy Science and Technology, USA: Studium Press.

Kataki, R. Chutia, R. S., Mishra, M., Bordoloi, N., Saikia, R. and Bhaskar, T. 2015. Feedstock suitability for thermochemical processes. In Pandey, A., Bhaskar, T. and Stocker, M. (eds). Advances in thermochemical conversion of biomass. Elsevier.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

D C Baruah attended India-UK Scientific seminar on Sustainable energy recovery from waste biomass (SERB), Jadavpur University, Kolkata, 12-14 February, 2015.

D C Baruah attended National conference on Emerging Technology Trends in Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Arunachal Pradesh, 7-9 November, 2014

D Deka participated as stakeholder, Renewable Energy education from North-Eastern States of India, Workshop on Developing strategy for education and vocational training for the renewable energy sector in India organized by IIT Roorkee, 22 August, 2014.

N Sarmah attended International Workshop on Integrated Renewables for Autonomous Power Supply, University of Exeter, UK, July, 2014.

N Sarmah attended workshop for Faculty Development Programme, Current Approaches in Teaching and Research in Science and Technology, Tezpur University, India, December, 2014.

P K Choudhury attended two Week AICTE-NEQIP sponsored Faculty Development Programme (FDP) on current approaches in teaching and research in science and technology, School of Engineering, Tezpur University, 15 - 27 December, 2014.

P K Choudhury attended two week ISTE Workshop on Computer Programming conducted by IIT, Bombay at Tezpur University, 20 May- 21 June, 2014.

P Kalita attended AICTE-NEQIP sponsored faculty development programme on current approaches in teaching and research in science and technology under AICTE-NEQIP SCHEME organized by the School of Engineering, Tezpur University, 15–27 December, 2014.

P Kalita attended two week ISTE workshop on Fluid Mechanics during, National Mission of Education through ICT (MHRD) at Tezpur University organized by IIT Kharagpur, 20 – 30 May 2014.

R Kataki attended the project completion workshop of SAHYOG project, ENEA-EU Liaison Office, Brussels, Belgium, 18-19 November, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

B K Kakati delivered a keynote lecture, Fuel cell and Hydrogen Production, at Non-Conventional Energy Sources-Trends and Future, OIL, Duliajan, 06 December, 2014.

D C Baruah delivered a talk, Energy saving technologies for Agriculture: Needs and Issues, National conference on Emerging Technology Trends in Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Arunachal Pradesh, 7-9 November, 2014.

D C Baruah delivered a talk, GIS based bioenergy resource assessment, in a research meeting under the joint British council INSPIRE: round for project “Renewable energy from animal waste: Benefits to agriculture and society, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Dhaka, Bangladesh, 15-22 April, 2014.

D C Baruah delivered a talk, Need of Energy Innovation for sustainable food processing, National seminar on Innovative prospects in food processing: Integration of engineering & biological sciences, Tezpur University, March 27, 2015.

D C Baruah delivered a talk, Technological, spatial and life cycle assessment of surplus agro-residues as potential sources of bioenergy, India-UK Scientific seminar on Sustainable energy recovery from waste biomass (SERB), Jadavpur University, Kolkata, 12-14 February, 2015.

D C Baruah delivered an invited talk, Application of remote sensing & GIS in biomass assessment, II SAHYOG Summer School, Tezpur University, 20-26 July, 2014.

D Deka chaired a technical session (Theme- Energy and Electric Drives) in the First Conference on Power, Dielectric and Energy Management at North Eastern Regional Institute of Science and Technology (NERIST), jointly organized by the Department of Electrical Engineering and IEEE, January 10-11, 2015.

D Deka delivered a talk, Recent advances in Bioenergy Research- A route to conversion of biomass to fuel and chemicals, Faculty Development Program (FDP), Current Approaches in Teaching and Research in Science and Technology, School of Engineering under AICTE-NEQIP project, Tezpur University, 15-27 December, 2014.

D Deka delivered an Invited talk, Prospects of Alternate and Renewable Energy in North-East India, 7th Seminar on Hydrocarbon industry growth –prospect and challenges in North-east India, jointly organized by PETROTECH and Numaligarh Refinery Ltd., Numaligarh Refinery, 5-6 February, 2015.



N Sarmah delivered a talk, concentrating photovoltaics: scopes and recent development, at KIC-TEQIP short term course, Solar Energy Harvesting, IITG, Guwahati, 20 February, 2015.

P Kalita delivered an invited lecture, Industrial waste and human health, in the Quality Improvement Programme Short Term Course (QIP-STC), Advances in Environmental Health, organized by Centre for the Environment, IIT Guwahati, 9-13 February, 2015.

R Katakati delivered an invited lecture, Biomass conversion for rural development and livelihood options, in the short term course, Appropriate Technology for Rural Development, organized by North Eastern Regional Institute of Science & Technology, Itanagar, 25-29 August, 2014.

R Katakati delivered an invited lecture, Biomass for future bio-based economy, II SAHYOG Summer School, Tezpur University, 20-26 July, 2014.

R Katakati delivered two invited lectures, Contemporary issues in Biomass & Bioenergy Research and Vision for Future, and Inventorization of Biomass & Biowastes Potential in Europe and India & Bio-waste valorization through Pyrolysis, in the National Training Programme, Advances in New and Renewable Energy Materials and Technology (ANREMT-2015), organized by Indian School of Mines (ISM), Dhanbad, 23-27 March, 2015.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

II SAHYOG Summer School organized under the Indo-European Union Collaborative Research project, SAHYOG, 20-26 July, 2014.

Capacity building workshop under the DST-UKRC sponsored project, Rural Hybrid Energy Enterprise System, 12 October, 2014.

Workshop on Capacity Building for Mitigation of Climate Change using Precision Agriculture, funded by Asia-Pacific Network for Global Change Research (APN), 20-22 March, 2015



DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof Ashok Pandey, Head, Centre for Biofuels, CSIR-NIIST, Trivandrum
 Dr Ashwani Kumar, Ex-Director, ICAR-Indian Institute of Water Management
 Prof D P Kothari, Former Director, IIT Delhi
 Dr G C Bora, North Dakota State University, USA
 Dr Helen West, School of Biosciences, University of Nottingham
 Prof H N Chanakya, IISc. Bangalore
 Dr Kees Kwant, Netherlands Enterprise Agency, Ministry of Economic Affairs, Govt. of the Netherlands
 Prof M Clarke, School of Geography, University of Nottingham, UK
 Dr S Dasappa, IISc Bangalore
 Prof S N Upadhyay, Dept of Chemical Engineering, IIT BHU, Banaras
 Dr T Ramachandran, IISc. Bangalore
 Dr Y K Yadav, Director, SSS-NIRE, Kapurthala, Punjab

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

D C Baruah, was awarded the Eminent Engineering Personality by The Institution of Engineers.

NUMBER OF STUDENTS WHO PASSED NET-JRF/ GATE [2014-2015]

GATE – 13

NOTABLE PLACEMENT [2014-2015]

Asstt. Professor, NIT Silchar – 01
 BR Ambedkar University, Lucknow – 01
 Doctoral student at IITs – 03

THE FACULTY OF THE DEPARTMENT**Professors**

D C Baruah, PhD (PAU)
 Dean, Students' Welfare
 Specialization/Areas of Interest: Renewable Energy Planning, Biomass resource Assessment, Energy modeling
 E-mail: baruahd@tezu.ernet.in

D Deka, PhD (Tezpur)
 Head of the Department
 Specialization/Areas of Interest: Bio-energy, Energy-Environment interactions
 E-mail: dhanapati@tezu.ernet.in

Associate Professors

R Katak, PhD (Tezpur)
 Specialization/Areas of Interest: Biomass and Biofuels, Bioenergy & Environment Interface.
 E-mail: rupam@tezu.ernet.in

Assistant Professors

S Mahapatra, MTech (Jadavpur)
 Specialization/Areas of Interest: Biomass Gasification, Climate responsive buildings, Decentralized Energy Options
 E-mail: sadhan@tezu.ernet.in

P K Choudhury, MTech (Tezpur)
 Specialization/Areas of Interest: Hybrid Energy System, Energy Conservation & Management, Instrumentation & Control
 E-mail: pkc@tezu.ernet.in



P Kalita, PhD (IIT Guwahati)

Specialization/Areas of Interest: Fluid Mechanics, Heat transfer, Circulation fluidized bed combustion and gasification

E-mail: pankajkalita@tezu.ernet.in

B K Kakati, PhD (IIT Guwahati)

Specialization/Areas of Interest: Fuel Cell, Hydrogen Technology, Redox Flow Batteries, Graphene nanotechnology

E-mail: bkakati@tezu.ernet.in

N Sarmah, PhD (Heriot-Watt, Edinburgh)

Specialization/Areas of Interest: Solar energy, Photovoltaic, Energy systems

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Bibha Boro, MTech (Tezpur)

Specialization/Areas of Interest: Solar cell, Dye sensitized solar cell, Energy management, Solar thermal

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THE STAFF OF THE DEPARTMENT

Technical staff

B Gogoi, MTech (Tezpur)

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Technical Assistant

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T Lahon, BSc (Dibrugarh)

Laboratory Assistant

E-mail: tlahon@tezu.ernet.in

Office Staff

C R Gogoi, MCJ (Gauhati)

UDC

E-mail: ranjan7@tezu.ernet.in

A Ali

MTS



DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY

THE DEPARTMENT

The Department of Food Engineering and Technology is one of the six constituent departments under the School of Engineering. The main objective of the Department is to create trained and skilled human resources to cater to the needs of the rapidly growing food processing sector. The Department, which was opened as Department of Food Processing Technology in 2006 started with a two-year MSc programme in Food Processing Technology. The Department currently offers a BTech, an Integrated MTech, a MTech and PhD programmes.

The Department has been supported by the Ministry of Food Processing Industries (MoFPI), Government of India for running its academic programmes. The Department has also proposed a Food Testing Laboratory for the North Eastern States of India with support from MoFPI. The Department has several ongoing projects sponsored by various funding agencies like UGC, MoFPI, DST, DBT, and DRDO. The main objectives of the scientific research and development work being carried out by the Department have been to contribute to the national food industry, its engineering and technology development.

Academic programmes

- BTech in in Food Engineering & Technology
- MTech in Food Engineering & Technology
- Integrated MTech in Food Engineering & Technology
- PhD

STUDENT INTAKE

Programme	Student Intake
BTech in in Food Engineering & Technology	38
MTech in Food Engineering & Technology	18
Integrated MTech in Food Engineering & Technology	18
PhD	Intake variable, 08

Major facilities and equipment available

- Milk Pasteuriser Unit
- Texture Analyser
- Freeze Dryer
- Automatic Solvent Extraction System
- HPLC
- Modified atmospheric packaging unit
- Hunter Color Spectrophotometer
- Rapid Viscosity Analyser
- Falling Number Apparatus
- FTIR
- Fermenter

MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
Charu Lata Mahanta	<ul style="list-style-type: none"> • Development of a wet cum dry grinder in collaboration with Central Food Technological Research Institute, Mysore. • Development of a Vacuum Frying System (200 g capacity) in collaboration with Central Food Technological Research Institute, Mysore.
S C Deka	<ul style="list-style-type: none"> • Identification of new strains of lactic acid bacteria, yeasts and moulds involved in the production of rice beer in Assam. • Process standardization for the production of rice beer. • Antioxidant activities of plants involved in the production of rice beer have been established.



Research projects, ongoing and new

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
Studies on development of cereal based functional breakfast food from the underutilized crops of North-East India	MOFPI	29.02 Lakh	2013-2015	A B Das
Pilotscale process technology for "BhimKol" (Musa balbisiana) slice, grits and powder using hybrid drying methods	DST-MoFPI	36.50 Lakh	2013-2015	B Srivastava
Development of continuous wet cum dry grinder for grinding waxy rice for use in the state of Assam	DST	15.12 Lakh	2013-2015	Charu Lata Mahanta
Design and development of Vacuum Frying System for the production of healthy snack products	DST	10.00 Lakh	2012-2014	Charu Lata Mahanta
Characterisation of technofunctional and biofunctional properties of napin protein hydrolysates of rapeseed meal	DRL	5.0 Lakh	2013-2015	Charu Lata Mahanta
Development of Ready to Reconstitute Misti Dahi Powder	MoFPI	15.97 Lakh	2012-2015	D K Seth
Osmotic dehydration and microwave vacuum drying of Kachkal Banana	MoFPI	20.8 Lakh	2012-2015	K K Dash
Design and development of single screw extruder for making sandesh	MSME	8.0 Lakh	2014-2015	K K Dash
Development of technology for quick cooking rice production through up gradation of a traditional method	AICTE	16.50 Lakh	2014-2016	M K Hazarika
Development and fabrication of small capacity paddy parboiling system with process completion indicator	MSME	5.50 Lakh	2014-2017	M K Hazarika
Encapsulation and controlled delivery of herbal extracts in dairy food matrix using cow milk protein against in vitro simulated inflammatory cell line models	SERB, DST	19.70 Lakh	2014-2017	R K Duary
Comparative metagenome of human gut of North and North-eastern region of India	DBT	64.70 Lakh	2014-2017	R K Duary
Studies on functional properties of the dominant microflora found in rice beer of Assam	MoFPI	46.02 Lakh	2013-2015	S C Deka
Generation of a standardized technology for production of rice wine from rice varieties of northeast India	ASTEC	3.5 Lakh	2013-2015	S C Deka
Quality improvement of a traditional probiotic beverage of North-East India as combat food	DRDO	18.3 Lakh	2013-2016	S C Deka
Development of value added food products from leaf protein concentrate of green leafy vegetables of Assam	DST	21.55 Lakh	2015-2017	S C Deka

PUBLICATIONS

In International and National Journals

- Badwaik, L. S., Borah, P. K. and Deka, S. C. Optimization of microwave assisted extraction of antioxidant extract from *Garcinia Pedunculata* Robx. *Separation Science and Technology*, 50(12), 1814-1822, 2015.
- Badwaik, L. S., Borah, P. K. and Deka, S. C. Production and purification of anti-bacterial biometabolite from wild-type *Lactobacillus*, isolated from fermented bamboo shoot: Future suggestions and a proposed System for Secondary Metabolite onsite recovery during continuous fermentation. *Applied Biochemistry and Biotechnology*, 175(4), 1915-1925, 2015.
- Badwaik, L. S., Borah, P. K., Borah, K., Das, A. J., Deka, S. C. and Sharma, H. K. Influence of fermentation on nutritional compositions, antioxidant activity, total phenolic and microbial load of bamboo shoot. *Food Science and Technology Research*, 20(2), 255-262, 2014.
- Barman, S., Sit, N., Badwaik, L. S. and Deka S. C. Pectinase production by *Aspergillus niger* using banana (*Musa balbisiana*) peel as substrate and its effect on clarification of banana juice. *Journal of Food Science and Technology*, 52(6), 3579-3589, 2015.
- Bezbaruah, B. J. and Hazarika, M. K. Generalization of temperature and thickness effects in kinetic studies of turmeric (*Curcuma longa*) slices drying, *International Food Research Journal*, 21(4), 1529-1532, 2014.
- Bhattacharjya, B., Dutta, H., Patwari, K. and Mahanta, C. L. Properties of annealed jackfruit (*Artocarpus heterophyllus lam.*) seed starch. *Acta Alimentaria- An International Journal of Food Science* (Accepted).
- Chauhan, R., Aparna, S. V., Panwar, H., Mallapa, R. H., Duary, R. K., Batish, V. K. and Grover, S. Amelioration of colitis in mouse model by exploring antioxidative potentials of an indigenous probiotic strain of *Lactobacillus fermentum* Lf1. *BioMed Research International*, 206732, 1– 12, 2014.
- Choudhury, M., Badwaik, L. S., Borah, P. K., Sit, N. and Deka, S. C. Influence of bamboo shoot powder fortification on physico-chemical, textural and organoleptic characteristics of biscuits. *Journal of Food Science and Technology*, DOI 10.1007/s13197-015-1709-3, 2015.
- Das, A. J., Das, G., Miyaji, T. and Deka, S. C. In vitro antioxidant activities of polyphenols purified from four plant species used in rice beer preparation in Assam, India. *International Journal of Food Properties*, DOI: 10.1080/10942912.2015.1038835, 2015. .
- Das, A. J., Khawas, P., Miyaji, T. and Deka, S. C. Effect of various microbial starters for amylolytic fermentation on some quality attributes of rice beer. *International Food Research Journal*, 21(6), 2443-2450, 2014.
- Das, A. J., Khawas, P., Miyaji, T. and Deka, S. C. HPLC and GC-MS analyses of organic acids, carbohydrates, amino acids and volatile aromatic compounds in some varieties of rice beer from Northeast India. *Journal of the Institute of Brewing*, 120 (3), 244–252, 2014.
- Das, A. J., Seth, D., Miyaji, T. and Deka, S. C. Fermentation optimization of probiotic rice beer and its application for cassava and plantain beer production. *Journal of the Institute of Brewing*, 121(2), 273–282, 2015.
- Das, P. M. and Mahanta, C. L. Statistically designed optimal process conditions for recuperation of protein from rapeseed meal. *Journal of Food Science and Technology*. DOI 10.1007/s13197-014-1299-5.
- Das, P. M., Barthakur A. and Mahanta C. L. Production of vegetable protein from rapeseed press-cake using response surface methodology, weighted multivariate index and desirability function: a way to handle correlated multiple responses. *International Journal of Food Properties*, 18:1248–1271, 2015.
- Das, P. M., Dutta, G., Barthakur, A. and Mahanta, C. L. Tackling correlated responses during process optimization of rapeseed meal protein extraction. *Food Chemistry*, 170: 62-73, 2015.



Das, P. M., Dutta, N., Kalita, D. and Mahanta, C. L. Exploratory Analysis for Characterization of Solvent-Treated Products (Meal and Extract) from Rapeseed Press-Cake: Preliminary Investigation Using Principal Component Analysis. *Waste Biomass Valorization*, 5(5):835-846, 2014.

Das, P. M., Gogoi, J., Kalita, D., Chattopadhyay, P., Nakhru, K. S., Goyary, D. and Mahanta, C. L. Physicochemical and functional properties of rapeseed protein isolate: influence of antinutrients removal with acidified organic solvents from rapeseed meal, *Journal of Agricultural and Food Chemistry*, 62: 7903-7914, 2014.

Das, P. M., Manhar, A. K., Das, V. K., Borah, A., Mandal, M., Thakur, A. J. and Mahanta, C. L. Antioxidative, Hemocompatible, Fluorescent Carbon Nanodots from an "End-of-Pipe" Agricultural Waste: Exploring Its New Horizon in the Food-Packaging Domain. *Journal of Agricultural and Food Chemistry*, 62: 4509-4520, 2014.

Das, P. M., Manhar, A. K., Mandal, M. and Mahanta, C. L. Industrial waste-derived nanoparticles and microspheres can be potent anti-microbial and functional ingredients. *Journal of Applied Chemistry*, 171427, 1-12, 2014.

Duary, R. K., Batish, V. K. and Grover, S. Immunomodulatory activity of two potential probiotic strains in LPS-stimulated HT-29 cells. *Genes & Nutrition*, 9(3):398, 2014.

Dutta, H. and Mahanta, C. L. Laboratory Process Development and Physicochemical Characterization of a Low Amylose and Hydrothermally Treated Ready-to-Eat Rice Product Requiring No Cooking. *Food and Bioprocess Technology*, 7(1), 212-223, 2014.

Dutta, H. and Mahanta, C. L. Traditional parboiled rice-based products revisited: Current status and future research challenged. *Rice Science*. 21(4), 187-200, 2014.

Dutta, H., Mahanta, C. L., Singh, V., Das, B. B. and Rahman, N. Physical, physicochemical and nutritional characteristics of Bhoja chaul, a traditional ready-to-eat dry heat parboiled rice product processed by an improvised laboratory soaking technique. *Food Chemistry*, 191(5), 152-162, 2016

Hazarika, M. K. and Datta, A. K. Estimation of Drying Rate Constant from Static Bed Moisture Profile by Neural Network Inversion, *Agricultural Engineering International: the CIGR Journal* 16(1), 253-264, 2014.

Kalita, D., Kaushik, N. and Mahanta, C. L. Physicochemical, morphological, thermal and IR spectral changes in the properties of waxy rice starch modified with vinyl acetate, *Journal of Food Science and Technology*, 51 (10), 2790-2796, 2014.

Khawas, P., Das, A. J., Dash, K. K. and Deka, S. C. Thin-layer drying characteristics of kachkal banana peel (*Musa ABB*) of Assam, India. *International Food Research Journal*, 21(3), 1011-1018, 2014.

Khawas, P., Das, A. J., Sit, N., Badwaik, L. S. and Deka, S. C. Nutritional Composition of Culinary *Musa ABB* at Different Stages of Development. *American Journal of Food Science and Technology*, 2(3), 80-87, 2014.

Khawas, P., Das, A. J., Sit, N., Badwaik, L. S. and Deka, S. C. Nutritional Composition of Culinary *Musa ABB* at Different Stages of Development. *American Journal of Food Science and Technology*, 2(3), 80-87, 2014.

Khawas, P., Dash, K. K., Das, A. J. and Deka, S. C. Modeling and optimization of the process parameters in vacuum drying of culinary banana (*Musa ABB*) slices by application of artificial neural network and genetic algorithm. *Drying Technology*, DOI : 10.1080/07373937.2015.1060605.

Mahnot, N. K., Kalita, D., Mahanta, C. L. and Chaudhri, M. K. Effect of additives on the quality of tender coconut water processed by nonthermal two stage microfiltration technique. *LWT-Food Science and Technology* 59:1191-1195, 2014.

Mishra, P. and Mahanta, C. L. Comparative analysis of functional and nutritive values of amla (*Emblica officinalis*) fruit, seed and seed coat powder. *American Journal of Food Technology*, 9, 151-161, 2014.

Mishra, P., Mishra, S. and Mahanta, C. L. Effect of maltodextrin concentration and inlet temperature during spray drying on physicochemical and antioxidant properties of amla (*Emblica officinalis*) juice powder. *Food and Bioprocess Processing*, 92, 252-258, 2014.

- Mishra, P., Mishra, S. and Mahanta, C. L. Effect of maltodextrin concentration and inlet temperature during spray drying on physicochemical and antioxidant properties of amla (*Embllica officinalis*) juice powder. *Food and Bioproducts Processing*, 92(3), 252–258, 2014.
- Mishra, P., Rai, G. K. and Mahanta, C. L. Process standardization for development of spray dried lemon juice powder and optimization of amla-lemon based RTS (ready to serve drink) using Response Surface Methodology. *Journal of Food Processing and Preservation*, 92(3), 252–258, 2014
- Mishra, P., Rai, G. K. and Mahanta, C. L. Process standardization for development of spray dried lemon juice powder and optimization of amla–lemon based RTS (ready to serve drink) using Response Surface Methodology, *Journal of Food Processing and Preservation*, DOI: 10.1111/jfpp.12338.
- Paul, S. K., Dutta, H., Mahanta, C. L. and Prasanna, G. V. Process standardization, characterization and storage study of a sweet potato (*Ipomoea batatas L.*) wine. *International Food Research Journal*, 21(3), 1113-1120, 2014.
- Rafiq, A., Chowdhary, J., Hazarika, M. K. and Makroo, H. A. Temperature dependence on hydration kinetic model parameters during rehydration of parboiled rice. *Journal of Food Science and Technology*, 52(9), 6090-6094, 2015.
- Saha, J., Biswal, A. K. and Deka, S. C. Chemical composition of some underutilized green leafy vegetables of Sonitpur district of Assam, India. *International Food Research Journal*, 22(4), 1466-1473, 2015.
- Saikia, D. and Sit, N. Effect of Using Sourdough and Frozen Dough for Preparation of Breads on Quality, Shelf Life and Staling. *American Journal of Food Technology*. 9 (4), 223-230, 2015.
- Saikia, D., Sit, N. and Deka, S. C. Effect of Using Sourdough and Frozen Dough for Preparation of Breads on Quality, Shelf Life and Staling, *American Journal of Food Technology*, 9 (4), 223-230, 2014.
- Saikia, S., Mahnot, N. K. and Mahanta, C. L. Effect of spray drying of four fruit juices on physicochemical, phytochemical and antioxidant properties. *Journal of Food Processing and Preservation*, doi:10.1111/jfpp.12395.
- Saikia, S., Mahnot, N. K. and Mahanta, C. L. Optimisation of phenolic extraction from *Averrhoa carambola* pomace by response surface methodology and its microencapsulation by spray and freeze drying. *Food Chemistry*, 171, 144-152, 2015.
- Samyot, D., Deka, S. C. and Das, A. B. Phytochemical and antioxidant profile of pigmented and nonpigmented rice cultivars of Arunachal Pradesh, India. *International Journal of Food Properties* (Accepted)
- Sit, N., Deka, S. C. and Misra S. Optimization of starch isolation from taro using combination of enzymes and comparison of properties of starches isolated by enzymatic and conventional methods. *Journal of Food Science and Technology*, 52(7), 4324-4332, 2015.
- Sit, N., Deka, S. C. and Misra, S. Optimization of starch isolation from taro using combination of enzymes and comparison of properties of starches isolated by enzymatic and conventional methods. *Journal of Food Science and Technology*, 52(7):4324-32, 2015.
- Sit, N., Misra, S. and Deka, S. C. Characterization of physicochemical, functional, textural and color properties of starches from two different varieties of taro and their comparison to potato and rice starches, *Food Science and Technology Research*, 20 (2), 357-365, 2014.
- Sit, N., Misra, S. and Deka, S. C. Combined effect of ultrasound and enzymatic pretreatment on yield and functional properties of taro (*Colocasia esculenta*) starch, *Starch/Starke*, 66, 959-967, 2014
- Sit, N., Misra, S., Baruah, D. Badwaik, L. S. and Deka, S. C. Physicochemical properties of taro and maize starch and their effect on texture, colour and sensory quality of tomato ketchup. *Starch/Starke*, 66, 294-302. 2014.
- Conference proceedings
- Begum, Y. A., Khawas, P. and Deka, S. C. Green synthesis of hydroxyapatite nanoparticles using *Musa ABB* bract pectin and their spectral characterization. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015



Das, A. J., Gitashri and Deka, S. C. In proceedings of the Vth Scientific workshop, Biotechnology Research in Northeast India Present and Future. DBT AAU Centre, Assam Agricultural University, Jorhat, 2014.

Deka, S. C. Encapsulation of bioactive compounds by cocrystallisation and its application in functional food formulation. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015

Deka, S. C. Novel Utilization of Poietron - A Variety of Black Rice from Manipur, India. In proceedings of a National Conference on Prospects & Challenges in Indigenous Foods and Drinking Sector. Central Agricultural University, Iroisemba, Imphal, 2015

Khawas, P., Das, A. J. and Deka, S. C. Encapsulation of natural antioxidant compounds from culinary Musa by co-crystallization. In proceedings of the Vth Scientific workshop, Biotechnology Research in Northeast India Present and Future. DBT AAU Centre, Assam Agricultural University, Jorhat, 2014.

Mangang, Kh. C. S., Das, A. J. and Deka S C. Storage studies of two types of rice beers prepared using a variety of black pigmented rice (*Oryza sativa* cv. Poiretron) from Manipur, India. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Miyaji, T.; Endo, A.; Nakagawa, J. and Deka, S. C. Microbial formation of nitrite ion in salted salmon roe (Sujiko) In proceedings of the 2nd AFSA Conference of Food Safety and Security. Dong Nai University of Technology (DNTU), Vietnam Dong Nai, Vietnam, 2015.

Saha, J. and Deka, S. C. Mineral contents of some underutilized green leafy vegetables of Assam, India. In proceedings of a National conference on Emerging Technology Trends in Agricultural Engineering. Department of Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Nirjuli, Itanagar, Arunachal Pradesh, 2014.

Samyor, D. and Deka, S. C. Pigmented rice- A potential source of bioactive compounds. In proceedings of a National conference on Emerging Technology Trends in Agricultural Engineering. Department of Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Nirjuli, Itanagar, Arunachal Pradesh, 2014.

Samyor, D., Deka, S. C. and Das, A. B. Effect of different pH and temperature on the stability of anthocyanidin content of red rice. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Seth, D., Mishra, H. N. and Deka, S. C. Influence of spray drying conditions on the physical properties of mistidahi powder. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Sharma, S. and Sit, N. Studies on the effects of various pre-treatments on degradation kinetics and drying kinetics of lycopene, polyphenols and ascorbic acid during convective drying of tomato processing waste. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Sit, N. and Deka, S. C. Effect of Various Enzymes and Their Combination on Yield of Starch from Taro Tubers. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Sit, N. and Deka, S. C. Effect of various enzymes and their combination on yield of starch from taro tubers. In proceedings of a National Seminar cum Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences. Department of Food Engineering & Technology, Tezpur University, Tezpur, Assam, India, 2015.

Books and Book Chapters

Badwaik, L. S., Borah, P. and Deka, S. C. 2014. Fermented bamboo shoot. In Joshi, V. K. (ed). Indigenous Fermented Foods of South Asia, CRC Press.

Das, A. J. and Deka, S. C. 2014. Rice beer preparation of North-East India: A myriad of starter cultures used. In Joshi, V. K. (ed). Indigenous Fermented Foods of South Asia, CRC Press.

Hazarika, M. K. 2014. Energy-Efficient Food Processing: In Sahu, J. K. (ed). Principles and Practices in Fundamentals of Advanced Food Process Engineering, CRC Press.

Mahanta, C. L. and Kalita, D. 2015. Processing and utilisation of jackfruit seeds. In Preedy, V. (ed). Processing and impact on active components in food, Academic Press (Elsevier).

PATENTS

The following patent was applied,

- A low cost machine for third Generation Snack - Filed as Indian patent to Govt. of India on 20.05.2014.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

International and National

B Srivastava attended Faculty Development Programme, Current approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under AICTE – NEQIP, December 15-27, 2014

B Srivastava attended Pedagogy for Effective Use of ICT in Engineering Education : Two week ISTE STTP, conducted by IIT Bombay, Under National Mission on Education through ICT (MHRD), January 05-31, 2015

L S Badwaik attended National Seminar cum Workshop on Innovative Prospects in Food Processing at Tezpur University, Napaam, Assam, 27-28, March, 2015.

L S Badwaik attended National Seminar on Recent Advances on Biotechnological Research in North East India: Challenges and Prospects at Tezpur University, Assam, November 27-29, 2014.

L S Badwaik attended Pedagogy for Effective Use of ICT in Engineering Education : Two week ISTE STTP, conducted by IIT Bombay, Under National Mission on Education through ICT (MHRD), January 05-31, 2015

L S Badwaik, attended Faculty Development Programme, Current approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under AICTE – NEQIP, December 15-27, 2014

M K Hazarika attended Faculty Development Programme, Current approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under AICTE – NEQIP, December 15-27, 2014

M K Hazarika attended Pedagogy for Effective Use of ICT in Engineering Education : Two week ISTE STTP, conducted by IIT Bombay, Under National Mission on Education through ICT (MHRD), January 05-31, 2015

M K Hazarika attended Two-phase training workshop on NBA assessment, organized by Nodal Centre of National Board of Accreditation (NBA), Guwahati during Phase I: (one day) 5 March, 2014 2. Phase II (3 Days) 21-23 March, 2014

N Sit attended 93rd Orientation Programme, Academic Staff College, University of Burdwan, January 04-31, 2014

N Sit attended Faculty Development Programme, Current approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under AICTE – NEQIP, December 15-27, 2014

Poonam Mishra attended Faculty Development Programme, Current approaches in Teaching and Research in Science and Technology, organized by School of Engineering, Tezpur University under AICTE – NEQIP, December 15-27, 2014.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Workshop on Innovative Prospects in Food Processing: Integration of Engineering and Biological Sciences (IPFP-2015), 27-28 March, 2015.



DISTINGUISHED VISITORS TO THE DEPARTMENT

- Prof H N Mishra, IIT Kharagpur
- Dr K S M S Raghavarao, CFTRI Mysore
- Dr Mihir K Purkait, IIT Guwahati
- Dr N K Rastogi, CFTRI, Mysore
- Dr P P Srivastav, IIT Kharagpur
- Dr P Siluvainathan, CFTRI Mysore

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Faculty

R K Duary awarded, Young Scientists Research Grant by Science & Engineering Research Board (SERB), DST, 2014.

Research Scholars

- Dipshikha Kalita qualified CSIR-SRF, 2015.
- Elizabeth Devi received Best poster award in Emerging Technology Trends in Agricultural Engineering, NERIST, 7-9 November, 2014.
- Hilal A Makroo received Maulana Azad Fellowship, 2014.
- Lopamudra Sharma received first prize in Poster presentation in the National Seminar cum Workshop on Innovative Prospects in Food Processing held at the Department Food Engineering and Technology, Tezpur University, 27-28 March, 2015.
- Nikhil Mahnot awarded Nehru-Fulbright Fellowship, 2014-15.
- Nikhil Mahnot received first prize in Poster presentation in the National Seminar cum Workshop on Innovative Prospects in Food Processing held at the Department Food Engineering and Technology, Tezpur University, 27-28 March, 2015.

Students

- Anupama Bora, Sangeeta Gope, Yesminara Begum, Juhi Saxena received prizes in Poster presentation in the National Seminar cum Workshop on Innovative Prospects in Food Processing held at the Department Food Engineering and Technology, Tezpur University, 27-28 March, 2015.
- Chayanika Saha qualified ICAR-PG Examination, 2015.
- Ria Bhadra received fellowship of GE foundation 2015-17 under Scholars Leader Programme
- Shantanu Kotoky won 2nd prize (folk) at 17th National UNIFEST, 1st prize (orchestra) in east zonal UNIFEST,
- Vegonia Marboh qualified ICAR-SRF examination, 2015.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

- Received DST – FIST with grant of Rs. 70.00 Lakhs, 2013-17
- Spoken Tutorial Workshop on Scilab (WC-16407) 26th December, 2014.
- Spoken Tutorial Workshop on Scilab (WC-15285) on 23rd January, 2015.
- Training on ISO 17025 (Laboratory management system) IN the department from 11 – 15th May, 2015.
- Training on ISO 22000 (Food safety management) in the department from 1-4th June, 2015.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

GATE – 05

NOTABLE PLACEMENT [2014-2015]

Bidyut Jyoti Hazarika, Production Executive, Rajnigandha, Guwahati, Assam.
 Himjyoti Dutta, Assistant Professor, Pub Kamrup College, Guwahati.
 Khagendra Dahal, Production Manager, CG Foods, Guwahati, Assam.
 Mansi Das Purkashtya, Assistant Professor, AAU, Jorhat, Assam.
 Naireeta Biswas System Engineer, IBM, Bangalore (through Campus placement)
 Om Prakash, Quality Manager Britannia, Patna, Bihar.
 Prerna Bora, Microbiologist, Arohan Foods, Guwahati, Assam.
 Sourav Chakraborty, Assistant Professor, Tezpur University, Assam.

THE FACULTY OF THE DEPARTMENT**Professors**

Charu Lata Mahanta, PhD (CFTRI, Mysore)
 Dean, Research & Development
 Specialization/Areas of Interest: Rice Science and Technology, Product Development and Product Quality
 E-mail: charu@tezu.ernet.in

S C Deka, PhD (HAU, Hissar)
 Specialization/Areas of Interest: Food Biochemistry, Food Quality, Fermented Foods
 E-mail: sankar@tezu.ernet.in

Associate Professors

M K Hazarika, PhD (IIT-Kharagpur)
 Head of the Department
 Specialization/Areas of Interest: Dairy & Food Engineering, Transport Processes, Process Modeling
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B Srivastava, PhD (IIT-Kharagpur)
 Specialization/Areas of Interest: Process & Food Engineering, Fruits & Vegetable Processing and Machineries, Drying & Dehydration, Unit Operations in Food Engineering
 E-mail: brijesh@tezu.ernet.in

N Sit, PhD (Tezpur)
 Specialization/Areas of Interest: Food Engineering, Biochemical Engineering, Oils and Fats
 E-mail: nandan@tezu.ernet.in



Assistant Professors

Poonam Mishra, PhD (Tezpur)
Specialization/Areas of Interest: Food Technology
E-mail: Poonam@tezu.ernet.in

L S Badwaik, PhD (Tezpur)
Specialization/Areas of Interest: Food Engg. & Tech., Fermentation Technology, Food Packaging
E-mail: badwaik@tezu.ernet.in

D Seth, MTech (IIT-Kharagpur)
Specialization/Areas of Interest: Dairy & Food Engineering, Dairy Technology, Transport Processes
E-mail: dibya05@tezu.ernet.in

R K Duary, PhD (NDRI, Karnal)
Specialization/Areas of Interest: Dairy Technology, Dairy Microbiology, Molecular Biology
E-mail: duary@tezu.ernet.in

K K Dash, PhD (IIT- Kharagpur)
Specialization/Areas of Interest: Food process Modeling, Dairy and Food Engineering, Unit Operations in Food Engineering
E-mail: kshirod@tezu.ernet.in

A B Das, MS (IIT- Kharagpur)
Specialization/Areas of Interest: Food Processing, Food Engineering
E-mail: amittu@tezu.ernet.in

S Chakraborty, MTech (Tezpur)
Specialization/Areas of Interest: Food Engineering
E-mail: souravc@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

Technical staff

D Kalita, MSc (AAU, Jorhat)
Technical Officer
E-mail: dkalita@tezu.ernet.in

L Kalita, Diploma (SCTE, Assam)
Technician
E-mail: labadeep@tezu.ernet.in

A J Das, MSc (Rajasthan)
Laboratory Assistant
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Office Staff

S Baruah
UDC
E-mail: suren@tezu.ernet.in

A Keot
MTS

DEPARTMENT OF MECHANICAL ENGINEERING

THE DEPARTMENT

The Mechanical Engineering (ME) Department was established in 2006. The Department aims at producing skilled human resources with a strong foundation in ME for the heavy engineering and manufacturing industry. Another mission of the Department has been to train scholars in handling ME as well as interdisciplinary problems exploiting their domain knowledge and using latest technologies. There are 13 regular faculty members from various specializations and 11 technical staff members in the Department. Presently, the Department is offering a BTech, an MTech (Specialization: Applied Mechanics) and PhD programmes in Mechanical Engineering. The Department has various laboratories with state of the art facilities and one central workshop. The BTech and MTech programmes offered by the Department are AICTE approved.

Academic programmes

- BTech in Mechanical Engineering
- MTech in Mechanical Engineering (Specialization: Applied Mechanics)
- PhD

STUDENT INTAKE

Programme	Student Intake
BTech in Mechanical Engineering	52
MTech in Mechanical Engineering	18
PhD	Intake variable, 01

Major facilities and equipment available

Central Workshop under Mechanical Engineering department is equipped with following machines.

- All Geared Precision Lathe
- High Speed Precision Lathe
- CNC Lathe Machine
- Universal Tool & Cutter Grinder
- Horizontal Milling Machine
- Vertical Milling Machine
- CNC Milling Machine
- Universal Milling Machine

Besides the department has well equipped Fluid Mechanics Lab, Turbo-machinery Lab, Strength of Materials Lab, Theory of Machine lab, Vibration lab, Metrology lab, IC Engine and Automobile lab. Design and flow analysis software (Ansys) and proE are installed in CAD lab



- PPT (PowerPoint) is a software for creating slides to display on a computer screen or projector.
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MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
P P Dutta ¹	<ul style="list-style-type: none"> • Survey work regarding electrical energy consumption pattern in selected tea estates has been completed. No waste heat recovery technology is available in any of the tea estate factories visited. • A waste heat recovery compact corrugated plate heat exchanger has been designed and developed to couple with 10 kW_e purely producer gas engine generator. It is observed that addition of a hot gas blower increases the performance of the system. • Different species of woody biomass are being investigated evaluating the gasification efficiency and calorific value of producer gas through usage of gas chromatograph. • Maximum yield has been found in Dalbargia sissoo (Fixed carbon: 15.60%) and while the producer gas yield is minimum with Ficus lepidosa (Fixed carbon: 12.20%).
S Banerjee	<ul style="list-style-type: none"> • Processing and Mechanical Property Evaluation of Micro alloyed 2219 Al Alloys.
S Kashyap	<ul style="list-style-type: none"> • Fabrication and testing of different models of CaCO₃ based polymeric composites are being conducted in order to increase their functionality and viability
T K Gogoi	<ul style="list-style-type: none"> • Biodiesels from 9 different tree seeds are produced and characterized. • Fatty acid composition and oil content of the seeds are determined. • Additionally engine performance testing in a single cylinder 4 stroke diesel engine was done with few specific blending (10% and 20%) of the biodiesels produced and characterized.

Research projects, ongoing and new

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
Design development and testing of a green fuel power energy efficient vehicle.	MSME	6.25 Lakh	2015-2016	P P Dutta
Development of an Innovative Model of Combined Heat and Power from Purely Producer Gas Based Engine Alternator System for Partial Conventional Energy Substitution of Tea Processing Industries in North East India.	DST-SERB	18.45 Lakh	2012-2015	P P Dutta ¹
Characterization of producer gas generated from different locally available woody and non woody biomass through gasification by using Gas Chromatograph analysis and their potential application as renewable energy to supplement thermal energy requirement for tea processing industries in Assam.	UGC	14.90 Lakh	2012-2015	P P Dutta ¹
Processing and Mechanical Property Evaluation of Micro alloyed 2219 Al Alloys.	DST	18.38 Lakh	2013-2016	S Banerjee
Fabrication of Calcium Carbonate filled composites and Optimization of their manufacturing parameters using multi-objective Evolutionary Algorithms.	DST-SERB	24.30 Lakh	2013-2016	S Kashyap
Study of performance, combustion and emission characteristics of a turbocharged diesel engine fuelled with indigenous tree seed based biodiesel available in North-Eastern region of India.	DST	33.60 Lakh	2012-2014	T K Gogoi

PUBLICATIONS**In International and National Journals**

Bardalai, M. and Mahanta, D. K. A Review of Physical Properties of Biomass Pyrolysis Oil, *International Journal of Renewable Energy Research*, 5(1), 2015.

Chowdhury, B., Deb, S. K. and Das, P. C. Computer Aided Measurement System Analysis of Attribute Data: A Case of Liner Manufacturing, *Precision Technology*, 4(1), 2014.

Chowdhury, B., Deb, S. K. and Das, P. C. Managing And Analyzing Manufacturing Defects—A Case of Refrigerator Liner Manufacturing, *Current Engineering and Technology*, Special issue – 2, 2014.

Devi, M., Dutta, P. P. 1 and Mahanta, D. Analytical calculation of chain length of ferro fluid, *Bulletin of Material Science Research*, 38(1), 2015.

Dutta, P. P.,¹ Das, A., Pandey, V. and Devi, M. Fuel characteristics of some locally available biomass as a potential gasification feed stock for thermal application, *Industrial and Engineering Chemistry Research Journal*, 53 (51), 2014.

Dutta, P. P.1 and Baruah D. C. Gasification of up rooted Tea Shrubs for Process Heat generation in Tea Manufacturing, *Biomass and Bioenergy*, 66, 2014.

Dutta, P. P.1 and Baruah, D. C. Modelling and Experimental Studies of Black Tea Using Producer Gas as Fuel, *Applied Thermal Engineering*, 63, 2014.

Dutta, P. P.1 and Baruah, D. C. Possibility of Biomass gasification in Tea Manufacturing Industries *International Journal of Renewable Energy Technology*, 5(4), 2014.

Dutta, P. P.1, Pandey, V., Das, A. R., Sen, S. and Baruah, D. C. Downdraft Gasification Modeling and Experimentation of Indigenous Biomass for Thermal Application, *Energy Procedia*, 54, 2014.

Gogoi, T. K. A Combined Cycle Plant with air and fuel recuperator for Captive power application, Part 1: Performance analysis and comparison with non-recuperated and gas turbine cycle with air recuperator, *Energy Conversion and Management*; 79, 2014.

Gogoi, T. K. and Das, R. A Combined Cycle Plant with air and fuel recuperator for Captive power application, Part 2: Inverse analysis and parameter estimation, *Energy Conversion and Management*, 79, 2014.

Gogoi, T. K. and Talukdar, K. Thermodynamic analysis of a combined reheat regenerative thermal power plant and water- LiBr vapour absorption refrigeration system, *Energy Conversion and Management*, 78, 2014.

Gogoi, T. K., Pandey, M. and Das, R. Estimation of operating parameters of a reheat regenerative power cycle using simplex search and differential evolution based inverse methods, *Energy Conversion and Management*, 91, 2015.

Gogoi, T. K., Sarmah, P. and Deb Nath, D. Energy and exergy based performance analyses of a solid oxide fuel cell integrated combined cycle power plant, *Energy Conversion and Management*, 86, 2014.

Haloi, P. Comparison of Locally Available Biomass Characteristics as a Gasification Feedstock, *International Journal of Current Engineering and Technology*, 4(4), 2014.

Kalita, Z. and Datta, D. Solving the bi-objective corridor allocation problem using a permutation-based genetic algorithm, *Computers & Operations Research*, 52 (Part-A), 2014.

Nath, P. K. and Datta, D. Multi-objective hardware-software partitioning of embedded systems: a case study of JPEG encoder, *Applied Soft Computing*, 15, 2014.

Pathak, H., Das, S., Doley, R. and Kashyap, S. Optimization of Cutting Parameters for AISI H13 Tool steel by Taguchi method and Artificial Neural Network, *International Journal of Materials Forming and Machining Process*, 2 (2), 2015.

Paul, A., Bhandaru, N. K., Narasimhan, A. and Das, S. K. Subsurface tumor ablation with near infra-red radiation using intratumoral and intravenous injection of nanoparticles, *International Journal of Micro-Nano Scale Transport*, 5(2), 2014.



Paul, A., Narasimhan, A. and Das, S. K. Investigation of thermal damage of tissue mimics embedded with large blood vessels during PPTT, *International Journal of Numerical Methods for Heat and Fluid Flow* (Accepted, article in press).

Paul, A., Narasimhan, A., Kahlen, F. J. and Das, S. K. Temperature evolution in tissues embedded with large blood vessels during photo-thermal heating, *Journal of Thermal Biology*, 41, 2014.

Steiner, M. T. A., Datta, D., Neto, P. J. S., Scarpin, C. T. and Figueira, J. R. Multi-objective optimization in partitioning the healthcare system of Parana State in Brazil, *Omega - The International Journal of Management Science*, 52, 2015.

Conference proceedings

Banerjee, S., Bayan, G., Roy, A., Sarkar, S. and Gogoi, D. Influence of Rolling and Age-Hardening on the Hardness and Impact Properties of Microalloyed 2219 Al Alloys. In *Proceedings of the 5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014)*, IIT Guwahati, 2014.

Bardalai, M. and Mahanta, D. K. The pyrolysis oil production from bael (*Aegle marmelos*) shell dust using a fixed bed reactor. In *Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry*, NERIST, Arunachal Pradesh, 2014.

Bardalai, M., Shukla, S., Shukla, A. K., Saraj, R., Tripathy, G. and Kumar, S. Thermodynamic Performance Analysis Active and Passive Solar heater. In *Proceedings of an International Conference on Frontiers in Mathematics*, Gauhati University, Guwahati, Assam, 2015.

Baruah, S., Karmakar, N., Das, S. and Kalita, P. Effect of numerical diffusion for computation of strong and weak shocks. In *Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry*, NERIST, Arunachal Pradesh, 2014.

Bhadra, R., Biswas, P. and Ravi Sankar, M. Effect of process parameters on thermal history of laser welding of AISI-304 stainless steel. In *Proceedings of the 5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR)*, IIT Guwahati, 2014.

Bhadra, R., Biswas, P. and Ravi Sankar, M. A literature review on CO₂ laser welding. In *Proceedings of the 5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR)*, IIT Guwahati, 2014.

Chowdhury, B. and Deb, S. K. Comparative Analysis of Manufacturing System Using Cause – Effect Diagram and System Dynamics Model. In *Proceedings of the 5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR)*, IIT, Guwahati, 2014.

Chowdhury, B., Deb, S. K. and Das, P. C. System Dynamics Model in the Analysis of Manufacturing Defects and Process Improvements. In *Proceedings of the 5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR)*, IIT, Guwahati, 2014.

Dutta, P. P.¹ and Baruah, N. Fluid flow studies of a compact rotary flue gas air preheater. In *Proceedings of an International Conference on Frontiers in Mathematics 2015 (ICFM2015)*, Guwahati, Assam, India, 2015.

Dutta, P. P.¹ and Baruah, N. Food drying opportunity from waste heat recovery. In *Proceedings of a National Seminar cum workshop IPFP: IBES*, 2015, Tezpur University, Tezpur, 2015.

Dutta, P. P.¹, Das, D., Dutta, M. and Sukla, G. Studies on green design and manufacture of hybrid vehicle. In *Proceedings of the 5th International and 26th All India Manufacturing Technology Design and Research*, IITG, Guwahati, 2014.

Dutta, P. P.¹, Dutta, M., Das, D., Shukla, A. K., Konwar, A., Kumar, V., Sharma, S. and Bora, C. K. Design, FEA Analysis and Fabrication of a Hybrid All Terrain Trike. In *Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry*, NERIST, Arunachal Pradesh, 2014.

Dutta, P. P.¹, Keot, A., Gogoi, A. and Bhattacharjee, A. Fluid Flow and Thermal Performance Study of a Pin Fin Solar Air Heater. In *Proceedings of the 5th International and 41st National Conference on Fluid Mechanics and Fluid Power*, IIT Kanpur, 2014.

Dutta, P. P.¹, Kumar, B., Singh, D., Mishra, A. and Baruah, N. Design of compact heat exchanger. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Dutta, P. P.¹, Sarmah S., Mahanta, A., Choudhury, A., Gupta S., Gogoi, R. and Baruah, D. Development of an efficient hybrid tricycle. In Proceedings of the 5th International and 26th All India Manufacturing Technology Design and Research, IITG, Guwahati, 2014.

Dutta, P. P.², Borah, D. and Ali, B. Optimal design of a multi-stage impact crusher. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Gogoi, T. K. and Pandey, M. Performance analysis of a reheat regenerative thermal power plant with solid biomass fuels and coal of various compositions. In Proceedings of an International conference on advanced materials and Energy technology (ICAMET) IEST, Shibpur, Kolkata, 2014.

Gogoi, T. K. and Sarmah, P. Exergy analysis of a hybrid solid oxide fuel cell –gas turbine configuration. In Proceedings of an International Conference on Environment and Energy (ICEE), IJNTUH, Kukatpally, Hyderabad, 2014.

Halo, P., Basumatari, B. and Choudhury, D. Study of the Influence of Angular Elevation and Flue Gas of Biomass Feedstock on the Thermal Performance of a Thermosyphone Heat Exchanger. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Hoque, S. Z. and Gogoi, T. K. Thermodynamic analysis of a cascaded vapour compression refrigeration system through exergy. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Hoque, S. Z. and Kalita, P. Numerical simulation of supersonic viscous flow over a flat plate. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Kalita, P. and Dass, A. K. Effect of limiter on the computation of viscous supersonic flow over a flat plate. In Proceedings of an International Conference on Frontiers in Mathematics, Gauhati University, 2015.

Kalita, P. and Dass, A. K. Effect of numerical diffusion on the computation of hypersonic shock wave boundary layer interaction. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Kalita, P., Kumar, R. and Dass, A. K. Aspects of a diffusion-regulated scheme applied to hypersonic flow. In Proceedings of the 5th International and 41st National Conference on Fluid Mechanics and Fluid Power, at IIT, Kanpur, 2014.

Kalita, Z. A microparticle separation device using inertia combined dielectrophoresis technique for the separation of tumour cells from blood. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Kashyap, S. Comparative studies on the crystallization kinetics of bioactive glass 45S5 at different heating rates. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, at NERIST, Arunachal Pradesh, 2014.

Koushik, N., Bhuyan, S. and Gogoi, T. K. A model for diesel fuel droplet evaporation and parametric analysis of evaporation rate. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Sarmah, P. and Gogoi, T. K. Parametric analysis of a hybrid solid oxide fuel cell –gas turbine plant. In Proceedings of an International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.

Sarmah, P. and Gogoi, T. K., Parametric analysis of a hybrid solid oxide fuel cell –gas turbine plant. In Proceedings of the International Symposium on Aspects of Mechanical Engineering & Technology for Industry, NERIST, Arunachal Pradesh, 2014.



Books and Book Chapters

Bhadra, R., Biswas, P. and Ravi Sankar, M. A. Literature Review on CO₂ Laser Welding. In Dikshit, U. S. and Joshi, S. N. (eds). Lasers Based Manufacturing. Springer Proceedings in Mining, Metallurgy and Materials Engineering, India, 2015.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Barnali Choudhury attended a two-week ISTE Main Workshop on Fluid Mechanics conducted by IIT Kharagpur, 20-30 May, 2014.

Barnali Choudhury attended a Workshop on Enhancing Professionalism: Discover, Learn, Grow. Royal School of Engineering and Technology, Guwahati, 5-6 June, 2014.

Barnali Choudhury attended a one-week Short Term Course on Introduction to experimental, computational Mechanics at AEC, Guwahati, 9-13 December, 2014.

Barnali Choudhury attended the 5th International & 26th All India Manufacturing Technology, Design and Research at (AIMTDR) IIT Guwahati, 12-14 December, 2014.

Barnali Choudhury attended a Workshop Cum Training program on Six Sigma Green Belt Certification at Tezpur University, Tezpur, 26-29 March, 2015.

M Bardalai attended a two-week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur, 20-30 May, 2014.

M Bardalai attended a one-week Short term training programme on Fluid Power Systems at NITTTR, Kolkata, 24-28 November, 2014.

M Bardalai attended a two-week Short term training programme on Exposure on MATLAB at NITTTR Kolkata, 22 December, 2014 – 2 January, 2015.

M Bardalai attended an International Symposium on Aspects of Mechanical Engineering & Technology for Industry at NERIST, Arunachal Pradesh, 6-8 December, 2014.

P Haloi attended a two-week Main Workshop on Fluid Mechanics conducted by IIT Kharagpur, 20-30 May, 2014.

P Haloi attended a one-week Short Term Training programme on Fluid Power Systems conducted by NITTTR, Kolkata, 24 - 28 November, 2014.

P Haloi attended a one-week Short Term Course on Introduction to Numerical, Computational and Experimental Mechanics held at Dept. of ME, Assam Engineering College (Under NEQIP-AICTE), 9 -13 December, 2014.

P Haloi attended a two-week Faculty Development Program (FDP) on Current Approaches in Teaching and Research in Science and Technology at School of Engineering, Tezpur University, 15 -27 December, 2014.

P Haloi attended a one-week Short Term Training programme on Applications of MATLAB in Engineering, conducted by NITTTR, Kolkata, 23 -27 March, 2015.

P Kalita attended an International Symposium on Aspects of Mechanical Engineering & Technology for Industry at NERIST, Arunachal Pradesh, 6-8 December, 2014.

P Kalita attended the 5th International and 41st National Conference on Fluid Mechanics and Fluid Power at IIT Kanpur, December, 2014.

P Kalita attended an International Conference on Frontiers in Mathematics, 2015 at Gauhati University, March, 2015.

P Kalita attended a one-week Short Term Training Programme on Fluid Powered System conducted by NITTTR Kolkata, Guwahati Extension Centre, 24 -28 November, 2014.

P Kalita attended a one-week QIP Short Term Course on "Micromanufacturing" at IIT, Guwahati, 22-26 December, 2014.

P P Dutta' attended a two-week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur, 20-30 May, 2014.

P P Dutta' attended an International Symposium on Aspects of Mechanical Engineering and Technology for Industry at NERIST, Itanagar, Arunachal Pradesh, 6–8 December, 2014.

P P Dutta² attended a two-week ISTE workshop on Fluid Mechanics conducted by IIT Kharagpur, 20- 30 May, 2014.

P P Dutta² attended an ISTE workshop on, Computer Programming, IIT Bombay (One week work completed online from 20th May to 15th June and Physical participation at remote centre from 16-21 June, 2014).

P P Dutta² attended an International Symposium on Aspects of Mechanical Engineering and Technology for Industry, NERIST, Itanagar, Arunachal Pradesh, 6 –8 December, 2014.

P P Dutta² attended a two-week Faculty Development Program (FDP) on Current Approaches in Teaching and Research in Science and Technology at School of Engineering, Tezpur University, 15-27 December, 2014.

R Bhadra attended the 5th International and 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) at IIT Guwahati, 12-14 December, 2014.

R Bhadra attended a Faculty Development Programme, Advanced Machining and Finishing Processes at IIT Guwahati, 15-16 December, 2014.

R Bhadra attended an one-week Faculty Development Programme, Modern Scenario in Welding Technology, IIT Guwahati, 16-20 March, 2015.

S Banerjee attended an Academic Seminar, MATLAB Software, conducted by Elmax Projects and Services at Tezpur University, 10 September, 2014.

S Banerjee attended the 5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) at IIT Guwahati, 12 -14 December, 2014.

S Kashyap attended a two-week ISTE workshop on Fluid Mechanics conducted, IIT Kharagpur, 20-30 May, 2014.

S Kashyap attended a two-week Faculty Development programme, Current Approaches in Teaching and Research in Science and Technology, School of Engineering, Tezpur University, 15-27 December, 2014.

S Kirtania attended a two-week Faculty Development programme, Current Approaches in Teaching and Research in Science and Technology sponsored, School of Engineering, Tezpur University, 15–27 December, 2014.

S Kirtania attended an one-week Short-term course on Micro-manufacturing Technologies sponsored by AICTE, Department of Mechanical Engineering, IIT Guwahati, 23– 27 March, 2015.

Zahnupriya Kalita attended a two-week ISTE main workshop on Fluid Mechanics conducted by IIT Kharagpur, 20–30 May, 2014.

Zahnupriya Kalita attended a one-week Short Term Course on Introduction to Numerical, Computational and Experimental Mechanics (INCEM2014), Assam Engineering College, Guwahati, 9–13 December, 2014.

Zahnupriya Kalita attended a two-week Faculty development Programme, Current Approaches in Teaching and Research in Science and Technology, Tezpur University, 15-27 December, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

D Datta delivered a talk at Faculty Development Programme, Tezpur University, December, 2014.

D Datta delivered talks (3 Nos.) at a workshop, Genetic Algorithms for Engineering Optimization, IIT Guwahati, 29-31 December, 2014.

P P Dutta¹ delivered a talk, Prospect of Renewable Energy in Black tea Manufacturing, National seminar on Green Technology, Prince of Wales, Jorhat, Assam, 14 March, 2015.

S Banerjee delivered a talk at 12th Asian Forum for Material Testing, IIT Guwahati, 19-23 January, 2015.

T K Gogoi delivered talks (2 Nos.) at a short term course on Appropriate Technology for Rural Development, NERIST, Itanagar, 25-29 August, 2014.

SEMINAR/ WORKSHOP/ SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Invited lecture on Health Care Engineering for Medical Diagnostics, by Prof. Suman Chakraborty, IIT Kharagpur, 12 August, 2014.

Invited lectures on Captive power plant operations and maintenances, by Mr. Samir Kundu, Chief Manager, Power and Utility, NRL, Golaghat, 21 March, 2015.



DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof S Chakrabarty, IIT Kharagpur

Er S Kundu, NRL, Numaligarh

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Students

A Das and A Joshi won National Sweden India Nobel Memorial Quiz, November, 2014.

K Kaushik received 1st prize in British Council Debate, NE Division, October, 2014.

A Das and B Baruah won 1st prize (NE Region) in Mahindra Auto Quiz, NIT Silchar, 2014.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]

GATE – 32

NOTABLE PLACEMENT [2014-2015]

A Choudhury, D Bora, S Gupta at Oil India Limited

D Singh at Bharat Petroleum Corporation Limited

A K Mahato at National Thermal Power Corporation

THE FACULTY OF THE DEPARTMENT

Associate Professors

T K Gogoi, PhD (Tezpur)

Specialization/Areas of interest: Thermal Energy and Environment Engineering

E-mail: tapan_g@tezu.ernet.in

D Datta, PhD (IIT Kanpur)

Head of the Department

Specialization: Optimization/Design

E-Mail: ddatta@tezu.ernet.in

P P Dutta', PhD (Tezpur)

Specialization/Areas of interest: Energy Technology

E-mail: ppdutta@tezu.ernet.in



Assistant Professors

P Kalita, MTech (BHU)

Specialization/Areas of interest: Heat Power Engineering

E-mail: paragmk@tezu.ernet.in

P P Dutta², ME (BIT, Mesra)

Specialization/Areas of interest: CAD/CAM

E-mail: polashd@tezu.ernet.in

S Kirtania, MTech (IIT Guwahati)

Specialization/ Areas of interest: Machine Design

E-mail: sushen@tezu.ernet.in

P Haloi, ME (AEC, Guwahati)

Specialization/Areas of interest: Fluid and Thermal Engineering/Energy

E-mail: haloi_p@tezu.ernet.in

S K Singh, PhD (IIT Guwahati)

Specialization/Areas of interest: Machine Design

E-mail: sachin@tezu.ernet.in

S Banerjee, PhD (IIT Guwahati)

Specialization/Areas of interest: Materials and Manufacturing

E-mail: sanjibb@tezu.ernet.in

M Bardalai, ME (AEC)

Specialization/Areas of interest: Bioenergy

E-mail: monojb@tezu.ernet.in

S Kashyap, MSc (Alberta)

Specialization/Areas of interest: Material Science, Mechanical Metallurgy, Characterization Techniques, Bioceramics

E-mail: satadru@tezu.ernet.in

Zahnupriya Kalita, MEngg (AIT, Thailand)

Specialization/Areas of interest: Mechatronics

E-mail: zk@tezu.ernet.in

R Bhadra, ME (IEST, Shibpur)

Specialization/ Areas of interest: Manufacturing / Production Engineering

E-mail: r.bhadr@tezu.ernet.in

Barnali Choudhury, ME (AEC)

Specialization/ Areas of interest: Thermal Engineering

E-mail: barnali@tezu.ernet.in

A Paul, MTech (BPUT, Rourkela)

Specialization/ Areas of interest: Fluid and Thermal Engineering, Laser mediated hyperthermia treatment.

E-mail: apaul@tezu.ernet.in



THE STAFF OF THE DEPARTMENT

Technical Staff

P K Borah, BTech
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S K Nath, ITI
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E-Mail: uttam@tezu.ernet.in

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Draftsmen
E-Mail: bbaruah@tezu.ernet.in

Office Staff

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UDC
E-mail: bijoy@tezu.ernet.in

M Bania
MTS

¹Partha Pratim Dutta, ²Polash Pratim Dutta.



School of Humanities and Social Sciences

- Dean, School of Humanities and Social Sciences
- Dept of Cultural Studies
- Dept of English and Foreign Languages
- Dept of Hindi
- Dept of Mass Communication and Journalism
- Dept of Social Work
- Dept of Sociology
- Centre for Assamese Studies
- Chandraprabha Saikiani Centre For Women's Studies



SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

The Universities in India and elsewhere (and the institutions of higher education, for that matter) are facing tremendous challenges in keeping pace with increasingly changing social as well as educational scenario worldwide. On one hand they have to respond to the recent advancements in science, technology and humanities and social sciences in a globalised situation, and simultaneously they also have to be alive and address the national and regional imperatives. No University or such other institutions with whatever achievements in their record can remain complaisant looking alone at their past glory. All the disciplines in Humanities and Social Sciences in Indian Universities with societies around and beyond as their laboratories for experiment with thoughts and social impulses, are striving to rise up to the occasion. Like Science and Technology, Humanities and Social Sciences too, are under pressure to reorient themselves by redirecting their pedagogical programmes suiting more to the market needs of placement than limiting themselves to traditional mode of teaching, learning and knowledge centric-programmes, however without sacrificing the core philosophy of respective disciplines.

Situated in the far north-eastern region of the sub-continent amidst a tradition-ridden social and cultural environment, Tezpur University started its School of Humanities and Social Sciences in 1994 in spite of the University's primary objective and focus on the advancement in Science and Technology. Launched with two departments – Traditional Culture and Art Forms (now changed to Cultural Studies), English & Foreign Languages, the School of Humanities and Social Sciences has over the years grown to a large umbrella with seven independent Post – Graduate departments under it.

- i. Cultural Studies with MA and PhD programmes
- ii. English & Foreign Languages with MA in English Literature, MA in Linguistics and MA in Endangered languages, PhD and Undergraduate (Integrated BA/B.Ed. programmes and several other Diploma programmes in French, German and Chinese)
- iii. Mass Communication & Journalism with MA, PhD and one Diploma programme
- iv. Sociology with MA and PhD programmes
- v. Social Work with MA programme
- vi. Education with MA and Undergraduate (Integrated BA/BEEd programmes)
- vii. Hindi with MA, PhD, one Diploma in Hindi (Translation) and one Certificate course in Official Hindi programme

In addition to these academic departments, the School has two Centres under its jurisdiction:

- i. Chandraprabha Saikiani Centre for Women's Studies
- ii. Centre for Assamese Studies

Also, the Srimanta Sankaradeva Chair awarded to the University by UGC is attached to the Centre for Assamese Studies. Prof Ranjit Kumar Dev Goswami, an eminent scholar has recently joined the Chair.

It is worthwhile to mention that the University instituted an Endowment Programme entitled Srimanta Sankaradeva Lecture inscribed in the hallowed name of the great saint poet and fountainhead of the Bhakti Movement in Assam, and it is assigned to the School. The fifth lecture in the series was organized on 06 October, 2014 with Prof Dilip Kumar Barua, eminent scholar from Kolkata as the Guest Speaker. With its commitment to the society, culture and heritage of Assam, the University observes the death anniversaries of Jyotiprasad Agarwalla, Bishnu Prasad Rabha - the two icons of modern Assamese culture. The University has included the death anniversary of Rabindra Nath Tagore, the great poet and thinker as a calendar event in which



the Kaviguru's contributions to India is remembered. The University also installed three busts of LakshminathBezbaroa, JyotiprasadAgarwalla and PhaniSarma –three great cultural personalities of Assam inside the Campus.

As the reports of individual departments and centres under the School illustrate, numerous projects have been undertaken by each department which indicate their commitment to the larger society around, parallel to their routine teaching - learning programmes. In simultaneity, the projects of variegated nature, content and scope undertaken by various departments and centres under the school, organized large numbers of seminars, conferences and workshops – both national and international – on a series of subjects which are theoretically grounded as well as responsive to social discourse and have thus created an interface between academics and society in which a galaxy of academicians and distinguished social as well as cultural activists joined hands. Such events have contributed immensely towards the enrichmentof academic environment of the campus. It is also a matter of pride and satisfaction for the School that many of the faculty members belonging to the School were invited as experts, resource persons and guest speakers in a number of seminars and conferences in different institutions of repute inside and outside the country, some of whom even were invited speakers on memorable occasions. Such invitations, it needs no insisting, bring honour and dignity to the University.Without being complaisant, I also take the pleasure to put on record that faculties from different departments under the School have a continuity of good record of research publications which include authored books, contribution to edited volumes(critically edited and reviewed) and peer reviewed journals.

It is quite satisfying that two departments under the School – English and Foreign Languages and Cultural Studies have been brought under UGC's SAP- DRS. While the Department of Cultural Studies is in the first phase (DRS- I), the Department of English and Foreign Languages after successful completion of DRS-I has been awarded DRS-II. Both these departments are carrying forward these programmes on their respective thrust areas. The Department of English and Foreign Languages, to its credit, has been awarded with the Centre for Endangered Languages by University Grants Commissionwhich is also the lead cluster (Nodal Centre)of the North-East under which the department proposes to introduce MA in Linguistics and Endangered Languages(Moduar Programme) and Certificate Programme in Documentation and Revitalization of Endangered Languages from the next year. Several departments under the School are conducting research and extension activities in their respective domain collaborating with national and international institutions and organizations like Indian Council of Social Science Research (ICSSR), Indian Council of Philosophical Research(ICPR), Indian Council for Cultural Relations (ICCR), UNICEF etc. Several students from abroad with ICCR fellowship are studying in the University for MA and PhD programmes in different departments.

The list of activities and achievements of the departments under the School is thus quite exhaustive as shown by them which however, always leaves room for strengthening it further in terms of teaching – learning, research –extension and social commitment and striving harder for excellence so as to make themselves leaders in respective domains in the region and the country as well.

Dean, School of Humanities and Social Sciences

Professor P J Mahanta, PhD (Gauhati)

E-mail: pjm@tezu.ernet.in

The Staff of the office of the Dean

UDC

A Dutta, BCom (Gauhati)

E-mail: ashish@tezu.ernet.in



DEPARTMENT OF CULTURAL STUDIES

THE DEPARTMENT

The Department of Cultural Studies, Tezpur University, is one of the earliest Departments in the country devoted fully to the pursuit of Cultural Studies. Founded in 1995, the Department engages in the study of cultural products, practices and forms with a special focus on North East India. Students and faculty in the Department involve in interdisciplinary approaches to traditional fields of study where the aim is to explore emergent cultural and cross-cultural phenomena from different perspectives. Researchers and faculties, drawn from various disciplines like Anthropology, Performance Studies, Literature, Folklore, Media and Film Studies, Gender Studies are actively engaged in exploring subjects like cultural history, folklore and culture, local and national media, heritage, gender, cultural theory, comparative literature, translation and formation of nationalisms.

ACADEMIC PROGRAMMES

- MA in Cultural Studies
- PhD

STUDENT INTAKE

Programme	Student Intake
MA in Cultural Studies	46
PhD	Intake variable, 03

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Computer Laboratory
- Departmental Library
- Audio-Visual Class Room Cum Seminar Hall with Projector
- Departmental Museum
- Departmental Archive

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
The Vaishnava Music of Assam in the Performative Context	UGC-SAP	41.00 lakh	2011-2016	P J Mahanta (Co-ordinator)
Philosophy in Performance: A Study of Bhakti Expressive Forms in Assam	ICRP.	5.00 lakh	2011-2014	P J Mahanta
Emerging Media and the Public Sphere: A study with reference to Assam	UGC	1.00 lakh	2013-2014	J V Das

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Baruah, M. Discourse of Gendered Body in Folktales: A Study of the Assamese Folktales as an Expressive Genre, The North Eastern Research Bulletin, XXIV, 2014.

Borah, M. Semiotics in Material Culture, Contemporary Discourse, 5(1), 2014.

Bordoloi, M. A. discussion on Participation in Arts and its Effect, Anandam, 2, 2014.



Konwar, J. G. The Historical Road for Common Prosperity of South East Asia, *International Journal of Humanities and Social Sciences*, 9(1), 2014.

Konwar, J. G. Indigenous way of Preparation of Food as an Identity Marker: A Study in the Mishing Community of Assam, India, *International Journal of Business, Management & Social Sciences*, 4(1), 2014.

Nath, D. P. Assam's Tale of Witch-hunting and Indigeneity, *Economic and Political Weekly*, XLIX, (37), 2014.

CONFERENCE PROCEEDINGS

Baruah, M. and Baruah, D. No life stirs in her belly now. In the Proceedings of a National Seminar on North-Eastern Indian Writing in English: Modes and Concerns. ADP College, Nagaon, Assam, 2014.

Das, J. V. Alternative sites of resistance: Women's struggle to find a medium. In Proceedings of an International Conference on Media in Transformation: Exploring Role of ICT, Innovative Communications and New Media. GCRA- 2014, Colombo, Sri Lanka, 2014.

Goswami, M. Women of the North-East India: Status and challenges. In Proceedings of the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 2014.

Konwar, J. G. Indigenous way of preparation of food as an identity marker: A study in the Mishing community of Assam, India. In Proceedings of an International Conference on Commerce, Law and Social Sciences. Muslim Studies Centre, Institute of Asian Studies, Chulalongkorn University, Bangkok, Thailand, 2014.

BOOKS AND BOOK CHAPTERS

Baruah, M. 2014. Constructing Feminine Ideology: An approach through Assamese proverbs. In Das, N. (ed). *Metaphysics of Redemption: An Anthology of World Literature*. Delhi: Adhayaan Publishers.

Baruah, M. 2014. The Narrative Construction of Masculinity in Assamese Folktales with reference to LakshminathBezbaroa's BurhiAair Sadhu. In Pathak, G. (ed). *North-East India- The Paradigm of Historical, Socio-Economic and Cultural Interaction*. New Delhi: JnanandaPrakashan.

Das, J. V. 2014. Documentaries as protests: Voices of unrest from Manipur. In Pandey, G. P. (ed). *Media and Women: Emerging Perspectives*. New Delhi: Sunrise Publications.

Dutta, P. 2014. Bezbaroa as a Folklorist. In Sarma M. M. and Nath, D. P. (eds). *LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond*. Guwahati: Perfect Imagers.

Dutta, S. K. 2014. LakshminathBezbaroa's Poems and Lyrical Compositions. In Sarma M. M. and Nath, D.P. (eds). *LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond*. Guwahati: Perfect Imagers.

Mahanta, P. J. 2014. Bezbaroa's Writings on Sankardeva, Vaishnavite Religion and Philosophy. In Sarma M. M. and Nath, D.P. (eds). *LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond*. Guwahati: Perfect Imagers.

Sarma M. M. and Nath, D. P. (eds). 2014. *LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond*. Guwahati: Perfect Imagers.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

INTERNATIONAL AND NATIONAL

Hashik N. K. attended a National Seminar, Debating environmental History: Reading from regional discourses, Department of History, Assam University, Diphu Campus and Indian Council of Historical Research, New Delhi, 2014.

Hashik N. K. attended an International Seminar, Philosophy of Culture, Indian Council of Philosophical Research, New Delhi and Department of Cultural Studies, Tezpur University, 2014.

J V Das attended an International Conference, Media in Transformation: Exploring Role of ICT, Innovative Communications and New Media, GCRA- 2014, Colombo, Sri Lanka, 2014.

JuriGogoiKonwarattended an International Conference, Commerce, Law and Social Sciences, Muslim Studies Centre, Institute of Asian Studies, Chulalongkron University, Bangkok, Thailand, 2014

MadhurimaGoswami attended the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 2014.

MandakiniBaruah attended a National Seminar, LakshminathBezbarao's A Pioneer of Modern Assamese Literature and An Architect of Assamese Nationalism, Nowgong Girls' College, Nagaon, Assam, 2014.

MandakiniBaruah attended a National Seminar, Life and Works of Jyoti Prasad Agarwala. L.G.B. Girls College, Tezpur, Assam, 2014.

MandakiniBaruah attended a National Seminar, North-Eastern Indian Writing in English: Modes and Concerns. ADP College, Nagaon, Assam, 2014.

MandakiniBaruah attended a National Seminar, Using Natural Resources for Sustaining Modern Life-Style and Sustainable Development, Furkating College, Golaghat, Assam, 2014.

MandakiniBaruah attended an International Seminar, Performative Communication: Culture and Politics in South Asia, the Centre for Culture, Media &Governance(JMI) and Department of Sociology, South Asian University(SAU), New Delhi, 2015.

P J Mahanta attended a National Conference, the Ramayana, Epic Study Centre, Jorhat, 2014.

P J Mahanta attended a National Seminar, Dr MaheswarNeog: Life and Works, SahityaAkademi and the Department of Assamese, Gauhati University, Guwahati, 2014.

P J Mahanta attended an International Conference, The Tradition of Performing Arts and its Contemporary Relevance, Dibrugarh University, Dibrugarh, 2015.

P J Mahanta attended an International Seminar, Cultural Studies: Global and Local Perspectives, Maulana Abdul Kalam Azad Institute of Asian Studies, Kolkata and Department of Cultural Studies, Tezpur University, 2015.

Subhra Devi attended a workshop, Disaster recovery for wet collections: The first 24-48 hours, Tempe, Arizona Organised by Balboa Art Conservation Centre, California, USA, 22 October, 2014.

Subhra Devi attended a workshop, Focus on collection care: Policies, plans and procedures for small museums, Tempe, Arizona, Balboa Art Conservation Centre, California, USA, 23 October, 2014.

Subhra Devi attended a workshop, Sustainable preservation practices, image permanence institute, Rochester, American Museum of Natural History, New York, 28- 29 October, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

D P Nath delivered a lecture, Contextualizing witch hunting practices of Assam, at an International seminar, Black Magic, Witchcraft and Occult practices in North East India, the Department of History, Assam University, Silchar, 06-07 November, 2014.

D P Nath delivered a lecture, Doing Cultural Studies in India, Annual International Research Sessions of Peradaniya University, Sri Lanka, 2014.

D P Nath delivered a series of lectures, Ideology, discourse and identity, Cultural Studies in India, Food and Cultural Studies and Popular Culture, at the Refresher Course on Cultural Studies, the Department of English, Hyderabad University, Hyderabad, August, 2014

P J Mahanta delivered a lecture, AnkiyaBhaona, under the series Loka: The many voices, SahityaAkademi, Kolkata and Moran College, Moranhat, 15 June, 2014.



P J Mahanta delivered a lecture, LakshminathBezbaroa's study on Sankardeva, MahapurushaSrimantaSankardevaViswavidyalaya, Nagaon, 15 November, 2014.

P J Mahanta delivered a lecture, The Bhakti Movement of Assam and its abiding impact on Assamese life and culture, Cotton College State University, Guwahati, 26 March, 2015.

P J Mahanta delivered a talk, MaheswarNeog's studies on Sankardeva, at a National Seminar, Dr MaheswarNeog: Life and Works, SahityaAkademi and the Department of Assamese, Gauhati University, Guwahati, 2014.

P J Mahanta delivered Dr Moti Chandra Memorial Lecture, Cultural heritage of India: The North Eastern perspective, the Museum Association of India, Assam State Museum, Guwahati, 31 January, 2015.

P J Mahanta delivered Keynote address, Role of journals and little magazines in Assamese literature of early twentieth century, at a National Seminar, Pragjyotish College, Guwahati, 17 July, 2014

P J Mahanta delivered Keynote Address, Socio- Economic History of North East India in the Post- Independence era, at a National Seminar, Sipajhar College, Sipajhar, 15 May, 2014.

P J Mahanta delivered Mathura NathSahoo memorial lecture, LakshminathBezbaroa, the nationalist with a cultural vision, Moran College, Moranhat, Dibrugarh, 10 October, 2014.

P J Mahanta delivered Narendra Deva Shastri memorial lecture, LaksminathBezbaroa as a cultural thinker, TezpurSahitya Sabha, 14 December, 2014.

P J Mahanta delivered the Keynote address, Medieval Bhakti literature in eastern India, at National Seminar, Medieval Bhakti literature, SahityaAkademi, New Delhi, Bhubaneswar, 2-3 January, 2015.

P J Mahanta delivered the Keynote address, Traditional performing arts in Assam and the contemporary scenario, International Conference on Performing Arts, Dibrugarh University, 23-25 January, 2015.

P J Mahanta delivered the Presidential address, at the History session of 73rd session of Assam Sahitya Sabha, Kaliabor, 2 February, 2015.

Subhra Devi delivered a talk, Preventive conservation of museum objects, workshop on conservation of museum objects, International Institute of Tai Studies and Research in collaboration with IGNC, Moranhat, 28 March 2015.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

International Seminar, Philosophy of Culture, 31 March –1 April, 2014.

A lecture, Technology, Environment & Man's Worldly Craze: Crisis in Civilization, 6 August, 2014.

A series of lectures on Cultural Studies, 3-8 November, 2014.

International Seminar, Cultural Studies: Global and Local Perspectives, in collaboration with Maulana Abdul Kalam Azad Institute of Asian Studies, Kolkata, 7-9 February, 2015.

Special Lecture on Film Studies, 10 February, 2015.

Special Lecture on Film Appreciation, 11 February, 2015.

A workshop, Cultural Photography, 16-20 March, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof A Astolyavav, Russian State University

Prof A East, University of Otago, New Zealand

Dr B Ghosh, Economist from Indian Statistical Institute, Economics Research Unit

Prof B Snook, University of Auckland, New Zealand

Dr D K Barua, Eminent Scholar, Critic and Retd. Professor in the Department of English, Burdwan University

Shri D N V S Seetharamaiah, Sr. Photography Officer, Indira Gandhi National Centre for the Arts (IGNCA), New Delhi

Prof J Prodhani, Department of English, NEHU

Prof M R Bhattacharya, Founder Professor, Film Studies, Jadavpur University, Jadavpur

Prof M M Prasad, English and Foreign Languages University, Hyderabad

Prof P C Pattanaik, Head of MIL and LS, University of Delhi

Dr P Nayar, Department of English, University of Hyderabad

Prof S Bharali, Formerly Jawaharlal Nehru Professor of Gauhati University

Prof T Diwasa, noted litterateur, academic and former Cultural Secretary at the Nepalese Embassy, USA

Dr V Jayarajan, Director, Folkland, Kerala

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Subhra Devi received, Andrew W Mellon Fellowship for training on Object Conservation at Metropolitan Museum of Art, USA.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Department received UGC grant under SAP(DRS-I) and ICPR. Total grant received under DRS-I is Rs.46 lakhs.

The three publications of the Department under SAP-DRS-I are:

- 1) Cultural Studies: Perspectives from the North East edited by P J Mahanta and D P Nath
- 2) Jacques Lacan and the French Feminists: Theory and Praxis by DP Nath
- 3) The Vaishnavite Music of Assam: Institutionalization and Performance Context edited by PJ Mahanta (to be published)

The Department has also undertaken a series of programmes for documenting various cultural traditions belonging to Assam as mentioned below:

- A research and documentation programme was organized in and around Assam from 10-30 January, 2015 in collaboration with Kalpa (An NGO), Guwahati. Kalpa- a society for literature, art, culture and social harmony, Guwahati, initiated the programme in collaboration with INTACH (Indian National Trust for Art and Cultural Heritage) and the Department provided the technical expertise in the documentation programme. A team of faculty and researchers from the Department of Dance Studies and Physical Education, University of Otago and University of Auckland, New-Zealand also took part in the programme.
- Digitization of the collected materials and documents in possession of Professor Birendranath Dutta, eminent folklorist and founder Professor, Department of Cultural Studies(the then Department of Traditional Culture and Art Forms) covering a broad spectrum of subjects, is in progress.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]

NET – 6

NOTABLE PLACEMENT [2014-2015]

ArunimaGoswami, Assistant Professor, Assam Women's University, Jorhat.

IndraniKakati, Junior Research Fellow, TUIPR Cell, Tezpur University.

Parimita Hazarika, Assistant Professor, Assam Women's University, Jorhat.

SushmitaBaruahSaikia, Community facilitator in the Corbett Foundation, Bokakhat.

SwarnaliGogoi, Assistant Project Manager, North East Economic Development Society (NEEDS).



THE FACULTY OF THE DEPARTMENT

PROFESSORS

P J Mahanta, PhD (Gauhati)

Dean, School of Humanities and Social Sciences

Specialization/Areas of interest: Assamese Literature and Culture, Traditional Performances of Assam

E-mail: pjm@tezu.ernet.in

S K Dutta, PhD (ViswaBharati)

Specialization/Areas of interest: Folkloristics, Assamese Culture, Language, and Literature

E-mail: skd@tezu.ernet.in

D P Nath, PhD (RGU)

Head of the Department

Specialization/Areas of interest: Gender Studies, Comparative Literature, Cultural Theory, Translation

E-mail: dpnath@tezu.ernet.in

Assistant Professors

Madhurima Goswami, PhD (Tezpur)

(Director, Chandraprabha Saikiani Centre for Women Studies)

Specialization/Areas of interest: Sanskrit Poetics, Performing Arts

E-mail: mgs@tezu.ernet.in

P Dutta, PhD (Tezpur)

Specialization/Areas of interest: Heritage Studies

E-mail: paras@tezu.ernet.in

Juri Gogoi Konwar, PhD (Dibrugarh)

Specialization/Areas of interest: Medical Anthropology, Anthropology of Food and Culture

E-mail: jgkon@tezu.ernet.in

J V Das, MA (Tezpur)

Specialization/Areas of interest: Cultural Communication, Development Communication, Epistemology of Communication Studies

E-mail: jvdas@tezu.ernet.in

Mandakini Baruah, PhD (Tezpur)

Specialization/Areas of interest: Gender Studies, Folklore

E-mail: mb@tezu.ernet.in

Hashik N K, PhD (Hyderabad)

Specialization/Areas of interests: Performance Studies, Community Studies, Research Methodology

E-mail: hashikk@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

Technical Staff

Subhra Devi, PhD (National Museum Institute, Delhi)

Assistant Curator

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Kiran Mahalia, BA (Gauhati)

Assistant

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D Deka

MTS

DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES

THE DEPARTMENT

The Department, which was established in 1994, aims to give instruction and carry out research in English Literature, Women's Writing in English, American Literature, Indian Writing in English, English Language Teaching, Linguistics and Language Technology and Endangered languages.

ACADEMIC PROGRAMMES

- MA in English
- MA in Linguistics and Language Technology
- MA in Linguistics and Endangered Languages
- Integrated MA in English/Integrated BA BEd
- One-Year Certificate Course in Chinese
- PhD

STUDENT INTAKE

Programme	Student Intake
MA in English	50
MA in Linguistics and Language Technology	20
MA in Linguistics and Endangered Languages	20
Integrated MA in English	20
Integrated BA BEd	10
Certificate Course in Chinese	39
PhD	Intake variable, 04

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

The Department has a digital multimedia multi-purpose language laboratory with fifteen booths. Students can improve on their language skills, especially the skills of listening and speaking, in English, Chinese, and French by utilizing the relevant facilities available in the laboratory. The Department also has a computer laboratory for the use of the students and the research scholars.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

The Department is at present carrying out its major research work in the following areas:

- Travel writing and Migration narratives
- Life writing
- Translation Studies
- English Language Teaching
- Morphology and Syntax (of some of the indigenous languages of Assam and other NE states)
- American Literature
- African Literature
- Caribbean Literature
- Indian Writing
- Book History
- Critical Theory



RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount in INR	Duration	Principal Investigators
SAP- DRS-II	UGC	98.00 lakh	2015-2020	P K Das, Coordinator
Indian Languages Corpora Initiative (Phase-2)	Department of Electronics and Information Technology (DeitY)	61.53 lakh	2012- 2016	Madhumita Barbora
Digital Language Preservation	Department of Electronics and Information Technology (DeitY)	39.14 lakh	2013- 2016	Madhumita Barbora (PI) G K Borah (Co PI)
Language Contact and Convergence study of Bugun (Khowa) in West Kameng District of Arunachal Pradesh)	Indian Council of Social Science and Research (ICSSR)	5.21 lakh	2011- 2014	Madhumita Barbora

PUBLICATIONS

In International and National Journals

- Borah, G. K. The Fox or Mr Fox? (On Particularization of the Bare Noun), *Journal of Modern Languages*, 24(1), 2014.
- Daimari, Esther. Reading the 'Servant' in Elmo Jayawardena's Sam's story, *Subaltern Speak*, 3(2), 2015.
- Danta B. K. and Farheena Danta. The Ghost of the Author and the Afterlife of Translation, *Translation Today*, 8(2), 2015.
- Nath, A. K. CSM induced phonetic changes in Modern Assamese. *Indian Journal of Applied Linguistics*, 40(1-2), 2014.
- Sarkar, A. Nirbishes Bakyer Artho o Samajik Prekkhit (The Meaning and the Social Context of Generic Sentences). *Biksha*. (Journal of the Department of Bengali Studies, Delhi University), 2015.

Books

- Barbora M. 2015. *Bugun Nyo Thau: Bugun Reader*. Guwahati: Eastern Book House Publishers.
- Nath, Arup Kumar. 2014. *Impact of Code Switching- Mixing in Assamese*. Guwahati: Assam Publication Board Assam.
- Sarma M M and Debarshi P Nath (Eds). 2014. *Lakshminath Bezbarua: The Architect of Modern Assamese Literature. Issues of Nationalism and Beyond*. Guwahati: Perfect Imagers.
- Borah, G K and Sarma, M M. *Languages of Assam*. Guwahati: Bhabani Print and Publications (forthcoming).
- Borah, G K, and Barbora, M. *Aspects of Modern Assamese*. Guwahati: Bhabani Print and Publications (forthcoming).
- Borah, G K, and Sarma, M M. *Grandma's Tales* (English translation of Buhi Air Sadhu by Laxminath Bezbarua). Guwahati: Katha Publications (forthcoming).

Book Chapters

- Barbora, M. 2015. Language endangerment: A perspective in endangered cultures and languages in India. In G K Bera and K Jose SVD (eds) *Endangered cultures and languages in India*. Guwahati: Spectrum Publishers.
- Borah, G. K. Aspect in Modern Assamese. In D Das (ed). *Bhaxa-bikkhaa (Knowledge of Language)*. Forthcoming.
- Borah, G. K. 2014. Bezbarua's reflections on language. In M M Sarma and D P Nath (eds). *Lakshminath Bezbarua: The Architect of Modern Assamese Literature*. Guwahati: Perfect Imagers.

- Gogoi, Bashabi. 2015. Striving for Grace: A study of the novel and film adaptation of J. M. Coetzee's *Disgrace*. In Rai, Shri Krishan and Rai, Anugamani. (eds). *Adaptations: Some Journeys from Words to Visuals*. Newcastle: Cambridge Scholars Publishing, 2015.
- Medhi, Hemjyoti. 2015. Diversity and questions of alliance: A case study of the Assam Mahila Samiti, India and the Mahila Shanti Sena, Canada. In Malashri Lal, Chandra Mohan, Enakshi Sharma, Devika Narula and Amrit Basra (eds) *Gender and Diversity: India, Canada And Beyond*. Jaipur: Rawat Publishers.
- Medhi, Hemjyoti. 2014. Daring to Dream: Meena Baideo and her Samiti. In Nilakhi Barua (ed) *Saswati: A Commemorative Volume on Meena Agarwala (1924-2014)*. Tezpur: Tezpur Mahila Samiti.
- Medhi, Hemjyoti. 2014. The Aideo and her Others: Construction of Gender in Laxminath Bezbaroa's Select Writings. In M MSarma and D P Nath (eds). *Lakshminath Bezbaroa: The Architect of Modern Assamese Literature*. Guwahati: Perfect Imagers.
- Mohapatra D. 2014. Higher education: Global challenge and local responses. In T. Karunakaran (ed). *English Language Teaching in the Twenty First Century: Issues and Challenges*. Colombo: Kumaran Book House.
- Mohapatra D. 2015. Using Animated Videos for Developing Oral Communication Skills among School Children: An Experiment. In Hazarika, Nizara (ed) *English Language Teaching in India: Problems and Prospect*. Guwahati: Olympia Prakashan.
- Nath, A. K. 2014. Bezbaroa's language: A linguistic appraisal. In M MSarma and D P Nath (eds). *Lakshminath Bezbaroa: The Architect of Modern Assamese Literature*. Guwahati: Perfect Imagers.
- Patgiri, Bipasha. *Dhwanibigyan: Bikaxaru Awadharon (Phonology: Development and Concepts)*. In D. Das. (Ed). *Bhaxa-bikkhaa (Knowledge of Language)*. Forthcoming.
- Sahoo, S. 2014. Exposing the Nation: Reading Mahasweta Devi's Short Fiction. In *Indian Fiction in Translation: Issues and Explorations*.
- Sahoo, S & Kandali M. 2015. Imaging and Imagining Assam: Video Compact Disc Films. In *Eight Glorious Decades of Assamese Cinema*.
- Sahoo, S. 2014. Fictions of Money: Reading Lakshminath Bezbaroa's Short Fiction. In M MSarma and D P Nath (eds) *Lakshminath Bezbaroa: The Architect of Modern Assamese Literature*. Guwahati: Perfect Imagers.
- Sarkar, A. 2014. Speaking for the Mute: A Note on Translation and Endangerment. In S K Mishra and A K Mishra (eds). *Studies in Literature and Translation*. New Delhi: Lakshmi Publication.
- Sarma, M. M. 2014. Indian Oral Narrative in Postmodern Historiography: A Reading of *Midnight's Children*. In Joel Kuortti (ed) *Critical Insights. Midnight's Children*. New York: Salem Press.
- Sarma, M. M. 2014. Bilingualism and the Teaching of English as a Second Language. In S P Mili (ed.). *English Language Teaching: North East Perspectives*. Guwahati: Perfect Imagers.
- Sarma, M. M. 2014. Lakshminath Bezbaroa's Short Stories. In DJ Baruah (ed) *Lakshminath Bezbaroa: A Critical Spectrum*. Guwahati: Shri Ganesh Printers & Publication.
- Sarma, M. M. 2014. Humour and Satire in Bezbaroa's Writings. In M MSarma and D P Nath (Eds.). *Lakshminath Bezbaroa: The Architect of Modern Assamese Literature*. Guwahati: Perfect Imagers.
- Sarma M. M. 2014. Bezbaroa as a Fiction Writer. In A Bormudoi (ed.). *Bezbaroa: The Man and His Works*. Dibrugarh: Dibrugarh University.
- Sarma M. M. 2014. Reflections on the English Literature of the Northeast. In Mamoni Gogoi Borgohain (ed.). *Literature of North-East India*. Dibrugarh: Kaustubh Rakshan.
- Sarma M. M. 2014. Bezbaroa's Short Fiction. In SCDas and SALi Ahmed (Eds.). *Lakshminath Bezbaroa: The Man and the Mission*. B.H.College Prakashan Samiti.

Conference Proceedings

- Gogoi Bashabi. *Written Text into Visual Text: A Study of the Novel and Film Adaptation of Boris Pasternak's Doctor Zhivago*. In proceedings of International Conference on Language, Literature and Culture. Institute of Advanced Studies in English, Pune, 15-17 December, 2014.



Medhi, Hemjyoti. Karachi Congress Darshan: Chandraprabha Saikiani's Visit to the Karachi Congress and Questions of Travel and Ex/Inclusion. In proceedings of Annual Conference on Space, Place, Travel, Displacement, Exile, BITS Pilani, Goa Campus, Goa, 12-14 February, 2015.

Medhi, Hemjyoti. Khadi and its Myriad Weaves: Mahila Samitis' Sipini Bhoral (Weavers' Stores) in late Colonial Assam. In proceeding of International Workshop on Colonial Northeast India. Universities of Delhi, Melbourne and Toronto. December, 2014.

Mohapatra D. Negotiating the English Classroom as Social and Cultural Reality. In proceedings of Asian Conference on Education International, Intercultural, Interdisciplinary organised by the Asian Conference on Education (ACC-2014). Aichi, Osaka, Japan 28 October - 2 November, 2014.

NATIONAL CONFERENCE/REFRESHER COURSE/WORKSHOP ATTENDED

International and National

B K Danta presented a paper Localizing Bhakti and Bhagavata: Kainphulia Baba, Gandhi and Modernity in Boudh-Athamallik (Odisha) circa AD 1970, at National Seminar on Theory Today: Jati, Jan Jati and Jansampad. Department of Journalism and Mass Communication, EFL University, Shillong Campus, 07 - 10 August, 2014.

B K Danta presented a paper, Cartographies of Bhakti: Srimanta Sankardeva in Odisha at the National Conference Imagining the East: New Research, New Pathways. Department of English, University of Hyderabad, 23-25 February, 2015.

B K Danta presented paper, Is the 'Indi-' In Indianizing The 'Indi-' In Indigenizing? Or, Theory After Resistance, at the 17th International Conference on Re-Imagining Theory: Towards New Horizons in the Humanities and the Social Science, International Centre, Goa, 22 - 24 December, 2014.

Bipasha Patgiri attended a workshop on Research Methodology in Social Sciences, Department of Mass Communication and Journalism, Tezpur University, 24 November – 03 December, 2014.

D Mohapatra presented a paper, Meanings and Vision of Classrooms: Issues and Challenges at the International Conference on English Language and Literature – A Tool for Humanising at Lingaya's University, Faridabad, 23 - 24 February, 2015.

Madhumita Barbor attended the Workshop Interdisciplinary Research on Language and Speech in Northeast India. IIT Guwahati, February, 28 February - 01 March, 2015.

Madhumita Barbor presented a paper, Predicate Clauses in Bugun, at the 47th International Conference of Sino Tibetan Languages and Linguistics (47 ICSTLL) and the Sociolinguistics of Endangered Languages (Sole 3). Kunming, China, 17 - 22 October, 2014.

P Kumar attended the Workshop on Interdisciplinary Research on Language and Speech in Northeast India, IIT Guwahati, 28 February - 01 March, 2015.

Pallavi Jha presented a paper Influencing Everyday Life through Hagiography: Amar Chitra Katha and Nation Building at National Conference on Everyday Life in Contemporary India. University of Madras, 17 and 18 December, 2014.

Sravani Biswas presented a paper Beyond Identity: A Reflection on the Bangladeshi in the North East of India, at a National Seminar Imaging and Imagining the North East: Discourses on North Eastern Literature, Culture, Creativity and Criticism, Tripura University, 21 - 22 August, 2014.

TALKS BY FACULTY ABROAD AND IN INDIA

B K Danta attended as a Keynote Speaker in the National Conference on the Voice of the Subaltern: A North-East Perspective, Department of English, Assam University, Diphu Campus, 15 -16 May, 2014.

B K Danta attended as a distinguished scholar in the UGC sponsored National Seminar on the Indian Novel in the Post-Independence Period, Digboi Women's College, Digboi, 06 - 07 February, 2015.

D Mohapatra attended as a Plenary Speaker at the National Seminar, The English Classroom: Experiments and Experiences, North Lakhimpur College, Lakhimpur, 03 - 04 May, 2014.

M MSarma attended as a Keynote Speaker in the National Seminar on Literature of the North East India in the Present- day Context organised by the Department of English, Demow College, Sibsagar, 04 September, 2014.

MadhumitaBarbora attended as a Plenary Speaker at theNational Seminar, The English Classroom: Experiments and Experiences, North Lakhimpur College, Lakhimpur, 03 - 04 May, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr Anjali Daimari, Associate Professor, Gauhati University

DrArupjyotiSaikia, Associate Professor, Indian Institute of Technology Guwahati

ProfHimadriLahiri, University of Burdwan, West Bengal

Prof K Narayan Chandran, Department of English, University of Hyderabad, Hyderabad

DrKynpham S Nongkynrih, Associate Professor, North Eastern Hill University, Shillong

Prof P Madhavan, English and Foreign Language University, Hyderabad

ProfSailendra Kumar Singh, North Eastern Hill University, Shillong

DrShakuntalaMahanta, Associate Professor, Indian Institute of Technology Guwahati

NUMBER OF STUDENTS WHO PASSED NET/JRF/SLET

- NET –12
- JRF – 03
- SLET – 15

THE FACULTY OF THE DEPARTMENT

Professors

M M Sarma, PhD (Dibrugarh)

Specialization/Areas of interest: Literature in English, Critical Theory, Fiction, ELT (Syllabus Design and Materials Production) and Linguistics

E-mail: mms@tezu.ernet.in

B K Danta, PhD (Utkal)

Specialization/Areas of interest: American Literature, Critical Theory, Translation and Translation Politics

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Farheena Danta, PhD (Dibrugarh)

Specialization/Areas of interest: American Literature, Modernist Poetics, Cultural Studies

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P K Das, PhD (Gauhati)

Specialization/Areas of interest: Indian Writing in English, American Literature

E-mail: prsntdas@tezu.ernet.in

Madhumita Barbora, PhD (Tezpur)

Specialization/Areas of interest: Linguistics (Morphology, Syntax, Language Acquisition)

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G K Borah, PhD (NTNU, Norway)

Specialization/Areas of interest: Philosophy of Language, General and Cognitive Linguistics, English Literature, Applied Linguistics

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ASSOCIATE PROFESSORS

D Mohapatra, PhD (EFLU, Hyderabad)

Specialization/Areas of interest: Curriculum Development, Materials Production, Language Policy

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Sravani Biswas, PhD (NEHU)

Specialization/Areas of interest: Critical Theory, Indian Writing in English

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Assistant Professors

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R Chakraborty, MPhil (JNU)

Specialization/Areas of interest: Chinese Language & Literature

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Reetamoni Narzari, MA (NEHU)

Specialization/Areas of interest: Women's Writing, Commonwealth Literature, Indian Writing in English

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Pallavi Jha, PhD(Hyderabad)

Specialization/Areas of interest: Children's Literature, Popular Culture and Literature, Postcolonial Writing

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S Sahoo, PhD (Tezpur)

Specialization/Areas of interest: Indian Writing in English, Ecocriticism, Travel Writing

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Bashabi Gogoi, MPhil (EFLU, Shillong)

Specialization/Areas of interest: Indian Writing in English, Critical Theory

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A K Nath, PhD (JNU)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics

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Bipasha Patgiri, MPhil (JNU)

Specialization/Areas of interest: Phonology, Dialectology, Optimality Theory, Semantics

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Esther Daimari, MPhil (Gauhati)

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P Kumar, PhD (JNU)

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Ningshen Zingjarwon, MPhil (JNU)

Specialization: Chinese Language & Literature

E-mail: zingjar@tezu.ernet.in

B Medhi, MPhil (JNU)

Specialization: German Language (Ecocriticism, Exile Literature, Holocaust Literature, Post-War Literature)

E-mail: bid1983@tezu.ernet.in

A Sarkar, MA (Calcutta)

Specialization: Cognitive Linguistics, Computational Linguistics, Construction Grammar, Pragmatics

E-mail: abhisek@tezu.ernet.in

S Ahmed, Diplôme de deuxième cycle (Université de Paris I. Panthéon-Sorbonne Paris, France)

Specialization: French Language (Problems and practices of urban development in developing countries)

T K Majumdar, Diploma in German (Calcutta University), Advanced Diploma in German (Gorky Sedan, Kolkata)

Specialization: German Language

THE STAFF OF THE DEPARTMENT

Technical staff

H Das, MSc (Gauhati)

Technical Officer

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Office Staff

B Bhattarai, BA (Gauhati)

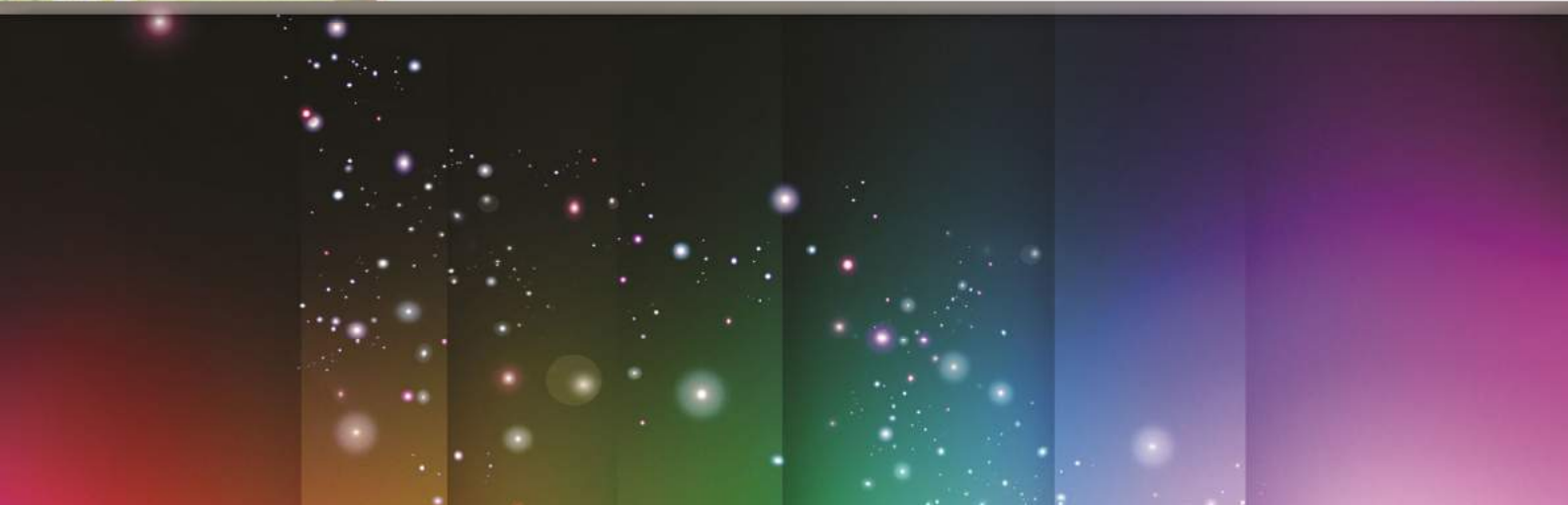
UDC

E-mail: bhattarai@tezu.ernet.in

U Ray

MTS





DEPARTMENT OF HINDI

THE DEPARTMENT

The Department of Hindi was established in January 2010. At present the Department offers a Post Graduate Diploma Programme in Translation (Hindi), Hindi as a Modern Indian Language (MIL) to students of integrated BA and a PhD Programme (in Hindi literature/language). Apart from these courses the Department offers a Certificate Course in Official Hindi (Level-1) to the employees of the University.

ACADEMIC PROGRAMMES

- Certificate Course in Official Hindi
- Post Graduate Diploma in Translation (Hindi)
- MA in Hindi
- PhD

STUDENT INTAKE

Programme	Student Intake
Certificate Course	10
PGDT	23
MA	25
PhD	Intake variable, 06

PUBLICATIONS

In International and National Journals

- Anjulata. Hindi kahanikavikashaurasamajikprivartn, Aaroh, 2014.
- Anushabda. Bhramargit: Tarkbanam Astha, Anukriti, 6, 2014.
- Anushabda. Akhabaricatoononkasamajiksarokar, Malti, 2, 2014.
- Anushabda. Patrakaritakesabhyanakhoon: Akhabari cartoon, Samasaamayik Srijan, 2014.
- Anushabda. Bhartiyaswatantratakeshilpi: Sardar Patel, Niruprah, 2, 2014.
- Anushabda. Wyangyaurwyangyachitra: Alga wke kuchh bindu, Sahriday, 22, 2014.
- Anushabda. Bhaktikalinsahityameinstri-prashna, Samawet, 4, 2015.
- Tripathi, S. Loksahityakasamanyaparichyaurmahatva, Sahitya Vimarsh, 3(1), 2014.
- Tripathi, S. Naikavitaurvichalan: Dhumilkebahane, Ananya, 7, 2014.
- Tripathi, S. Vidyapatikaabhivayaktikaushal, NavNikash, 8, 2014.
- Tripathi, S. Shalivichar: Hindi bhashakasandarbhya, Ananya, 8, 2014.
- Tripathi, S. Samanyabhashabanamvyangyakibhasha, Sahitya Vimarsh, 3, 2014.
- Tripathi, S. Vidyapatiaur Chandidas, Dwibhashi Rastrasewak, 10, 2015.

Books and Book Chapters

- Anjulata. 2014. Dalit sahyalekhanauryatharwad. In R.K.Gour and M.P.Singh (eds). Samkalinvimarsh: Muddeaurbehas. Delhi: AnangPrakashan.
- Anushabda. 2014. Hindi Patrakarita: Roopakbanam Mithak. Delhi: Vani Prakashan.



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Aushabdaparticipated,Refresher course in Hindi,MANUU,Hyderabad,05-25 January, 2015.

Aushabda presented a paper, Mishinglokgitonmeinpratibimbitjanajatiyajiwan, National Seminar, Lokaur Shastra: Janjatiyasandarbh, Department of Hindi, Tezpur University and SahityaAkademi, Delhi. 26-27 March2015.

Aushabda attended a workshop, Regional Training Programme cum workshop on Shodh Ganga and Anti-Plagiarism software, Central Library, Tezpur University in association with INFLIBNET Centre, Gandhinagar, 28 November 2014.

S K Tripathi presented a paper, Maitraipuspakiatmkathaaaurshailisandarbh, National Seminar Atmakatha: SandarbhaaurChunautiyan, Department of Hindi, Tripura University, Agartala, 30March 2015.

S K Tripathiattended a Workshop, Regional Training Programme cum workshop on Shodh Ganga and Anti-Plagiarism software, Central Library, Tezpur University in association with INFLIBNET Centre, Gandhinagar. 28 November 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Aushabdadelivered a lecture, Hindi saptahsamaroh, organized by Hindi Sahitya Sammelan, Tezpur University, Assam, 21 September 2014.

Aushabda delivered a lecture,Vyawaharik Hindi-Shikshan, organized by Kendriya Hindi Sansthan Guwahati, at Rashtrabhasha Vidyalaya, Tezpur, 24September 2014.

Aushabdadelivered a lecture, Hindi Vyakaran: MahatwaewamAnuprayog, organized by Kendriya Vidyalaya, Tezpur University,11 December 2014.

Aushabdadelivered a lecture,AkhilBharatiya RajabhashaSangoshthi, organized by DRL, Tezpur, Assam, 6 February 2015.

Aushabda delivered a lecture, Matribhashakamahatwa, organized by Kendriya Hindi Sansthan, Guwahati, 21February 2015.

S K Tripathidelivered a lecture, Hindi bhashameinvartanisambaddhitrutiaevamsamadan, workshop on Hindi Training organized by Kendriya Vidyalaya Tezpur University, 21 May 2014.

S KTripathi delivered a lecture, Dwitiya bhashashikshankisamsyane, Kendriya Hindi Sansthan, Regional Centre, Guwahati, 25 September 2014.

S K Tripathidelivered a lecture, Jayshankar Prasad kisrijanyatra, National Seminar, VidyashriNyas and S.B.P.G. Collage, Badagano, Varanasi, 14 January 2015.



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

National Seminar, Lokaur Shastra: JanjatiyaSandarbh, Department of Hindi, Tezpur University in association with Sahitya Akadami, New Delhi, 26-27 March 2015.

NUMBERS OF STUDENTS QUALIFIED NET-JRF/GATE [2014-2015]

SLET – 02

THE FACULTY OF THE DEPARTMENT**Professor**

A K Nath, PhD (Manipur)

Specialization/Areas of Interest: Medieval Poetry, Folkloristic, Comparative Literature

E-mail: ananta@tezu.ernet.in

Associate Professor

S K Tripathi, PhD (BHU)

Head of the Department

Specialization/Areas of Interest: Applied Linguistics, Indian Poetics, Folkloristics

E-mail: sktripathi@tezu.ernet.in

Assistant Professor

Anjulata, PhD (Tezpur)

Specialization/Areas of Interest: Medieval Poetry, Fiction

E-mail: anju@tezu.ernet.in

Anushabda, PhD (Delhi)

Specialization/Areas of Interest: Linguistics, Media, Poetry, Indian and Western Poetics.

E-mail: anush@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

S Ingti, BA (Gauhati)

UDC

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B Borah

MTS





DEPARTMENT OF MASS COMMUNICATION AND JOURNALISM

THE DEPARTMENT

The Department of Mass Communication and Journalism was established in 2001. A prominent media Department in the region, it is engaged in teaching and research in Media and Communication studies in tune with emerging trends in the field both locally and globally. The thrust areas of the Department have been social communication, new media and audience studies with emphasis on critical understanding of theory and practice. The faculty is specialized in diverse areas of the discipline. In order that students can gain first-hand experience the Department organizes two 4-week internship training programs every year in collaboration with various media organizations. In the interests of the North-East the Department is concentrating at the moment primarily on development communication. The Department also publishes a monthly laboratory journal called the News Café.

Since August 2010 the Department has also been running a one-year (2 semesters) PG Diploma Programme in Mobile and Multimedia Communication (PGDMMC) under the innovative programme scheme of UGC. The syllabus of the programme has been designed taking into consideration the special demands of the media market in the region. The Department also offers a PhD programme.

ACADEMIC PROGRAMMES

- MA in Mass Communication and Journalism
- PhD

STUDENT INTAKE

Programme	Student Intake
MA in Mass Communication and Journalism	37
PhD	Intake variable, 08

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Curriculum Development Project for MA in communication for development	UNICEF	2.50 Lakh	2014-2015	Joya Chakraborty

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Anbarasan, P. and Ratnamala, V. Images of violence in Northeast India and national press: A case study of Bodos and bengali speaking muslims ethnic conflict, *Contemporary Discourse*, 6(1) 2015.

Bora, A. and Rajkumar, A. Through the looking glass, *Vidura*, 6(3), 2014.

Bora, A. Challenges as goals for India's education sector, *Journal of UGC-Academic Staff College, Himachal Pradesh University*, XVII(1), 2014.

Chakraborty, J. International Perspectives in Information and Communication Technologies for Development: Imperatives of Technology and Intersecting Community Needs, *The Communicator*, IIMC, 2015.

Lakhendra B. Rup Konwar Jyoti Prasad Agarwal and his contribution to Assamese Films, *Pramana*, I, 2015.

Lakhendra B. Self Help Groups (SHGs) for women empowerment in rural India and uses of ICTs: A case study of Sonitpur District of Assam, *Hindu*, 2(6), 2015.



- Lakhendra, B. A study on the influence of mass media on the culture and tradition of Singpho tribe in Tinsukia district of Assam, *Journal of Business Management & Social Sciences Research*, 3(2), 2014.
- Malakar, K. Redefining the Role of altruism in shaping household development, *International Journal of English Language Literature and Humanities*, III(I), 2015.
- Malakar, K. Role of cell phone in creating coveted mobility in job viewing the current employment challenges in service economy, *Paripex- Indian Journal of Research Journal*, 2015.
- Malakar, K. Situational analysis of the impact of liberalism on policy paradigm and growth stats of telecommunication in India, *International Journal of English Language Literature and Humanities*, III(I), 2015.
- Nagraj, A. Advertisements that seek to transform a nation, *Vidura*, 6(2), 2014.
- Pegu, Uttam, Universities in an era of open and distance education: Reflections on the technological challenges and new directions in higher education, *Pierian Spring*, 2014.
- Pegu, Uttam. Concerns and constraints of filmmaking in North-East India, *Mass Communicator-International Journal of Communication Studies*, 2015.
- Pegu, Uttam. Information and Communication Technology in Higher Education in India: Challenges and Opportunities, *International Journal of Information and Computation Technology*, 4, 2014.
- Pegu, Uttam. Media coverage on ethnic conflict in North-East India: An analysis on the issues and challenges in conflict communication, *Global Journal of Finance and Management*, 6(1), 2014.
- Pegu, Uttam. The changing paradigm in teaching-learning in higher education: an analysis on the problems and prospects in technology enhanced knowledge dissemination, *Insight*, 2014.
- Pegu, Uttam. The paradox of sustainable development: Understanding the socio-cultural impact of dam-induced development in North-East India, *Literary Churning International Journal of Language, Literature and Culture*, X, 2015.

BOOKS AND BOOK CHAPTERS

- Anbarasan, P. 2014. *European Union and Media: Constructing identity beyond borders*, New Delhi: Transknowledge Publishers
- Anbarasan, P. 2015. Perceptual dichotomy of violence on women and television spectacle: A case in Assam. In Babu John (ed). *Media and Human Rights in India*, New Delhi: Dominant Publishers and Distributors.
- Chakraborty, J. 2014. *ICT for development in Northeast India critique of policy and practice*, Silchar: GC College Press
- Chakraborty, J. and Borah, A. 2014. (Forthcoming). *C4D Training in India: Exploring the missing link between academia and industry*. In Dutta Ankuran (ed). *Community Media for Development*, [accepted].
- Chakraborty, J. and Borah, A. 2014. *Children and media: Status and scope for participation child rights in Northeast India*. In Kaushik Alankar & Abir Suchiang (eds). *Perspectives on Media*, Guwahati: MRB Publishers.
- Lakhendra, B. 2014. *Radio Broadcasting in North East India: An overview*. In Alam Zakirul (ed). *Journalism & Media Industry of North East India*, Guwahati: EBH publishers.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

- B Lakhendra participated in the two weeks workshop, *Research Methodology in Social Sciences*, organized by the Department of Mass Communication and Journalism, Tezpur University, Assam, 24 November – 3 December 2014.
- B Lakhendra participated in two weeks faculty development programme (FDP), *Current Approaches in teaching and research in Science and Technology*, organized by the School of Engineering, Tezpur University, 15-27 December, 2014.

B Lakhendra participated, Two Week ISTE Workshop on computer programming, IIT Bombay under National Mission on Education through ICT (MHRD), Govt. of India, 20 May – 31 June 2014 .

B Lakhendraparticipated, UGC sponsored Orientation Programme, organized by the UGC Academic Staff College, University of Allahabad, 25 June – 22 July 2014.

B Lakhendrapresented a paper, BodhisatavBabasahebDr B R Amedkar and his philosophy of Buddhism, in the international seminar, Understanding Dr. Ambedkar's Concept of Dhamma: Transforming self and society, organized by School for Ambedkar Studies, B.B.A.U, Lucknow, 14-15 April 2014.

B Lakhendra presented a paper, Role of entrepreneurship and skill development among the youth of Northeast India, International Symposium, 8th South Asian University Festival 2015, Mohanlal Sukhadia University, Rajasthan, 9 March 2015.

B Lakhendra presented a paper, Role of Media in conflict resolution and peace, International Seminar, Media's role in facilitating peace in conflict situations in northeast India and neighboring countries, Department of Mass Communication, Rajiv Gandhi University, Arunachal Pradesh, 9-10 October, 2014.

B Lakhendra presented a paper, RupkonwarJyoti Prasad Agarwala and his contribution to Assamese films, at the National Seminar, Life and Works of Jyoti Prasad Agarwala, L G B Girls College, Tezpur, Assam, 7-8 November, 2014.

B Lakhendra presented a paper, गैंगल कछारी जनजाति का तोरा चरि त्योहार और उनका संस्कार गीत: एक अध्ययन, National Seminar, LokAur Shastra: JanajatiyaSahitya, Department of Hindi, Tezpur University, Assam, 26-27 March, 2015.

Jaya Chakraborty and A. Borah presented a paper, Participatory strategies for realizing child rights: Revisiting the MoinaParijat experience, at the IAMCR conference at Hyderabad, 15-19 July, 2014.

Jaya Chakraborty and M. Hazarika presented a paper, BurhiAairXadhu: A textual analysis on the adaptation of Bezbaroa's folktales into multimedia formats, National Seminar on 'Modern Assamese society, literature and Bezbaroa' organized by Centre for Assamese Studies, Tezpur University during 3-4 April, 2014.

Jaya Chakraborty presented a paper, Leveraging the digital discord: Adolescents and information and communication technologies, International seminar, Media Initiative for Peace and Communal Harmony in North East India, organized by Department of Mass Communication and Centre for Bangladesh Studies, Assam University Silchar, 30-31 January, 2015

Jaya Chakraborty presented a paper, The dying languages of eastern Himalayas: Strategies for revival and conservation, 5th Himalaya International Seminar, organized by Himalayan Heritage Research Development Society (HHRDS) in collaboration with Nehru-Wangchuck Cultural Centre under ICCR, Ministry of External Affairs, Government of India at Thimphu Bhutan, 27-29 April, 2014.

Jaya Chakraborty, A Borah and MHazarika presented a paper, Communal conflict in Bodoland: A media at International seminar, Media Initiative for Peace and Communal Harmony in North East India, organized by Department of Mass Communication and Centre for Bangladesh Studies, Assam University Silchar, 30-31 January, 2015.

KapouMalakar presented a paper, An analysis on the role of mobile telephony to empower housewives and women of rural poor households, at the International Seminar, Women Empowerment: Issues and Challenges, Gossaigaon College, Assam, 4-6 February, 2015

P Anbarasan attended a one-week colloquium, communication at Academic Staff College, JNU, New Delhi, 27-31 December, 2014.

P Anbarasan attended one-week workshop, Facilitating participatory communication with special focus on RI, Department of MCJ, Tezpur University in collaboration with UNICEF, 23-28 February 2015.

P Anbarasan presented a paper, Cultural nationalism: Essentialism versus constructivism in European integration, at the International Seminar, Philosophy of culture, Department of Cultural Studies (UGC



SAP-DRS I), Tezpur University, Indian Council for Philosophical Research, New Delhi, held on 31 March –01 April, 2014.

P Anbarasan presented a paper, Hapless women as media spectacle: Different women and indifferent responses a case study of television spectacle of tribal and non-tribal women bodies in Assam, National Seminar, Ethnicity and Gender: North East India and Beyond, Tribal studies centre, Assam University Diphu Campus 16-17, March, 2015.

P Anbarasan presented a paper, Muslims as illegal migrants in Assam: A media hype or social reality? at the International Conference, Muslims, Democracy, and the Media: Challenges and Prospects, organized by the Maulana Azad National Urdu University, Hyderabad, 17-18 March, 2015.

U Pegu presented a paper, Endangered languages in North-East India: The case of Arunachal Pradesh, National Seminar, Cultural Heritage of Assam, organized by the Department of Anthropology in collaboration with Indira Gandhi Rashtriya Manav Sangrahalaym, Bhopal, Gauhati University from 23-25 April 2015.

U Pegu presented a paper, Gender diversity in media organization: The case of North-east India, National Seminar on Ethnicity and Gender: North-East India and Beyond, Tribal studies centre, Assam University, Diphu Campus, 16-17 March 2015.

U Pegu presented a paper, Mass Media (ted) reports on identity and ethnic assertions in North-East, at the International Conference, Contesting 'Self' and 'Other': Identities of caste, tribe, gender and beyond, Assam University, Diphu Campus, 27-28, March, 2015.

TALKS BY THE FACULTY ABROAD AND IN INDIA

B Lakhendra delivered a talk, Role of NCC cadets in National Integration, National Integration Camp of NCC organised by NCC Group Headquarter, Tezpur, Tezpur University, 26 December - 06 January 2015.

P Anbarasan delivered a lecture, Critical discourse analysis methods in communication studies, in the ICSSR sponsored Research Methodology Programme for PhD students, organized by the Department of Journalism and Mass Communication, Periyar University, Salem, 10 – 19 September 2014.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

A one-day state level consultation, C4D curriculum development for internal faculty members, Department of Mass Communication & Journalism, Tezpur University, sponsored by UNICEF, Assam, 28-29 July, 2014.

National Level consultation, C4D curriculum development, Department of Mass Communication & Journalism, Tezpur University, sponsored by UNICEF, Assam, 24-25 September, 2014.

Workshop on, Research Methodology course in Social Sciences sponsored by ICSSR, New Delhi, 24 November- 3 December, 2014.

Workshop on Facilitating Participatory Workshops, Training of Trainers with special focus on RI, held during 23 - 28 February, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

A Uppal, VikalpKriya, Mumbai

Prof A Aram, Anna University, Chennai

Dr B D Sarma, Professor, Satyajit Ray Institute of Films & Television Studies, Kolkata

P Bose, VikalpKriya, Mumbai

Prof P K Jena, Guru Jambheshwar Technical University, Hissar, Haryana

Prof S Basu, Head, Department of Journalism and Communication, Banaras Hindu University

Prof S K Behera, Head, Department of MCJ, Bherampur University

R Dayakar, (Former Ambassador to Baghdad and Jordan), Mayur Bihar, Phase I, Delhi

R Gogoi, Chairperson, ASCPCR, Guwahati

SDowerah, Senior Journalist, Web Magazine Mumbai

S GKahsyap, Indina Express, Guwahati

STalukdar, Chief NE Correspondent, The Hindu, Guwahati

VBelavadi, Associate Professor, University of Hyderabad, Hyderabad

Prof V Natarajan, Head, Department of Mass Communication and Journalism, Perriyar University

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Faculty

A Bora, awarded the Rotary peace study fellowship at the ChulalongKorn University in Thailand, Bangkok, 10-18June 2015.

Students

Amlan Kishore Hazarika, a student won the first prize, photography competition at Communika, Gauhati University.

Dorodi Sharma, alumni of MCJ, has joined the MPP (Master of Public Policy) programme, University of Maryland, College Park, Washington.

JyotishaSaikia, won the best debater award in D. K. D College Debate Competition 2014.

Jurismita Pujari, a student of this department was awarded Silver Karmaveer Chakra, for making best contributions towards educating the underprivileged.

RupjyotiKalita and JyotishaSaikia, were awarded the best team jointly in D. K. D College Debate competition, 2014.

UddipanaGoswami, won the award of best debater in Parag Kumar Das Memorial Inter College/University State Level Debating Competition, organized by 'Xadin /PratidinGusti'.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Department has signed an MoU with UNICEF (Indian chapter) for launching a programme in Development Communication.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]

JRF – 1

NET – 3

NOTABLE PLACEMENT [2014-2015]

ITLT communication – 1

NAZDIK NGO – 1

News Time, Assam – 1

Shillong Times – 3

SESTA – 3

THE FACULTY OF THE DEPARTMENT

Associate Professors

A Bora, PhD (Gauhati)

Specialization/Areas of interest: Radio, Development Communication, Print media,

E-mail: abhijitb@tezu.ernet.in



P Anbarasan, PhD (JNU)

Specialization/Areas of interest: Media Studies, Cultural and Subaltern Studies, International Communication, Reporting & Editing

E-mail: anbu@tezu.ernet.in

Assistant Professors

Joya Chakraborty, PhD (Hyderabad)

Specialization/Areas of interest: ICT for Development, Development Communication, Women and Media; Traditional Media.

E-mail: jc@tezu.ernet.in

U K Pegu, PhD (JMI)

Specialization/Areas of interest: Information and Communication Technology Implications on Society, Science Communication, Film Studies, Media Analyses

E-mail: uttamkp@tezu.ernet.in

B Lakhendra, PhD (Tezpur)

Specialization/Areas of interest: Radio, Television & Film, Youth & Rural Development, Traditional Media, Public Relation & Development Communication, Environment (Coastal Environment)

E-mail: lakhendra@tezu.ernet.in

A Nagaraj, MA (Hyderabad)

Specialization/Areas of interest: Electronic Media Production, Documentary Filmmaking, Television Production and Advertising

E-mail: nagraj@tezu.ernet.in

PJDaimari, MA (Tezpur)

Specialization/Areas of interest: Film Studies, Photography, Development Communication

E-mail: daimari@tezu.ernet.in

Anjuman Borah, MA (Tezpur)

Specialization/Areas of interest: Development Communication, Traditional Media, Television

E-mail: anjuman@tezu.ernet.in

KapouMalakar, MCRC (JMI)

Specialization/Areas of interest: New Media for development, Multimedia Journalism, Media Studies, Film studies, Cultural studies,

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THE STAFF OF THE DEPARTMENT

Technical staff

R CNath, MA (Gauhati), Technical Officer

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C Singha, Diploma (SCTE, Guwahati)

Senior Technical Assistant

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Office Staff

DipaliSonaNayak, BCom (Gauhati)

LDC

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L Bhuyan

MTS

DEPARTMENT OF SOCIAL WORK

THE DEPARTMENT

The Department of Social Work was established to respond to the dearth of Social Work schools and trained social work professionals in the North-eastern Region of India. Students from multi-disciplinary backgrounds are trained in the core values and skills of the social work profession. The curriculum is designed to train students with the generic approach of social work, which leads to the conduct of research in emerging areas of social work profession and issues related to the region. Through the fieldwork practicum (a crucial and integral part of social work training), the students are exposed to different economic, socio-cultural and political realities of the region. Additionally, the students are exposed to various social welfare programmes implemented at the grassroots level through the community, NGOs and government settings. Graduates from the Department are envisaged to be placed in various positions in social welfare organisations, in non-profit and private sectors, and in academics.

ACADEMIC PROGRAMMES

- MA in Social Work

STUDENT INTAKE

Programme	Student Intake
MA in Social Work	15

PUBLICATIONS

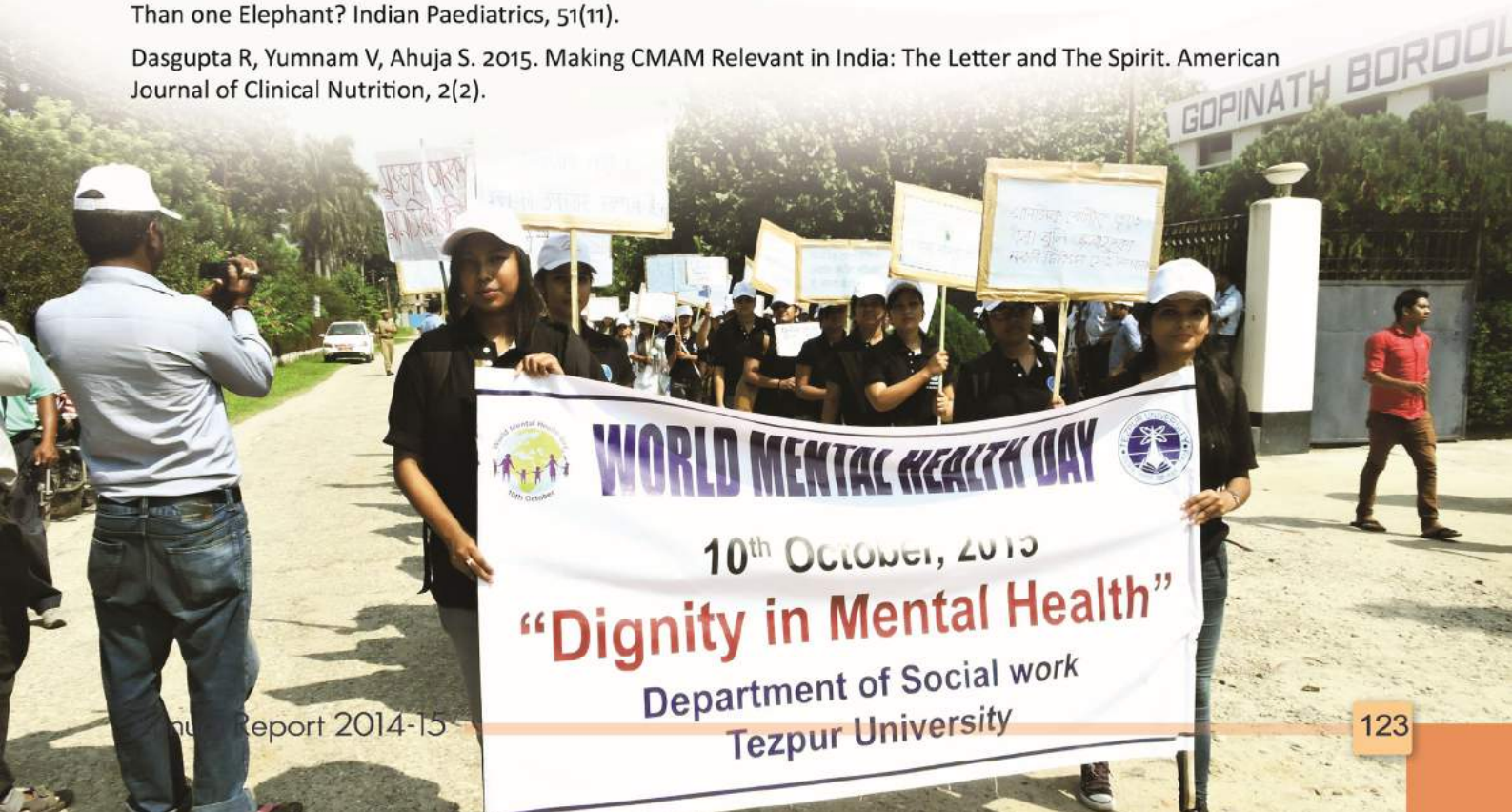
IN INTERNATIONAL AND NATIONAL JOURNALS

INTERNATIONAL

Dasgupta R, Ahuja S and Yumnam V (2014). Can Nutrition Rehabilitation Centers Address the Problem of Severe Malnutrition in India? *Indian Paediatrics*, 51(2).

Dasgupta R, Sinha D, Yumnam V. 2014. Programmatic Response to Malnutrition in India: Room for More Than one Elephant? *Indian Paediatrics*, 51(11).

Dasgupta R, Yumnam V, Ahuja S. 2015. Making CMAM Relevant in India: The Letter and The Spirit. *American Journal of Clinical Nutrition*, 2(2).





NATIONAL JOURNALS

BOOKS AND BOOK CHAPTERS

BOOK CHAPTERS

Dasgupta, R. and Yumnam V. 2015. Social and behavioral sciences in health. In O P Ghai and P Gupta (eds). Textbook of Preventive and Social Medicine. New Delhi: Cbs Publishers & Distributors.

Deuri, S P. and Saha, A. 2014. Adolescent Mental Health and Suicide. In M Hazarika and S Badamath (eds). Child and Adolescent's Responsive Education: Manual for Parents, Teachers and Caregivers. Guwahati: Pathan Hazirika Charitable Trust.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

INTERNATIONAL AND NATIONAL

INTERNATIONAL

Yumnam V attended an international workshop, The Edinburgh AROGYAM Peri-Doctoral Workshop, School of Social and Political Science, The University of Edinburgh, Scotland, 2015.

NATIONAL

A Saha attended a UGC sponsored national seminar, Role of Self-Help Group in Socio-economic Development, organised by the Department of Sociology, Sankardeva Mahavidyalaya, Lakhimpur, 2014.

Rajesh Kalarivayil attended a national workshop, Philosophy, Culture, Anthropology, Community, Politics and Democracy, organised by the Indian Council of Philosophical Research, New Delhi and Department of Cultural Studies, Tezpur University, 2015.

TALKS BY THE FACULTY ABROAD AND IN INDIA

A Saha conducted a session at a two-day national level workshop, Psychosocial Care for Children affected by Communal Violence, organised by the Department of Psychiatric Social Work, LGB Regional Institute of Mental Health, Tezpur, 2014.

A Saha acted as Chief Guest for two-day national level workshop, Role of Social Enterprises in Today's World, organised by D C B Girls' College, Jorhat, 2014.

A Saha delivered a talk, Research Methodology, at the Department of Social Work, University of Science and Technology, Meghalaya, 2015.

A Saha delivered a talk, Adolescent Mental Health, at a three-day orientation programme organized (under a UNICEF sponsored project) by Department of Cultural Studies, Tezpur University, 2015.

K Kalarivayil delivered a talk, Contextualizing Adolescent Issues in Assam at a three-day orientation programme organized (under a UNICEF sponsored project) by Department of Cultural Studies, Tezpur University, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof Geeta Balakrishnan, Principal College of Social Work, Nirmala Niketan, Mumbai

Prof Sonia P Deori, Head, Department of Psychiatric Social Work, LGBRIMH, Tezpur, Assam

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

WORLD MENTAL HEALTH DAY CELEBRATION

The Department participated in the World Mental Health Day Celebration in collaboration with LGBRIMH, Tezpur, TISS, Guwahati, INCENSE, Assam Don Bosco University and Handicap Association Tezpur, 10 October 2015. The event was covered in both Assamese and English local newspaper.

THE FACULTY OF THE DEPARTMENT

Professor

S K Dutta, PhD (Viswa Bharati)
 Head, Department of Social Work
 Specialization/Areas of interest: Folkloristics, Assamese Culture, Language, and Literature
 E-mail: skd@tezu.ernet.in

Assistant Professor

A Saha, PhD (NIMHANS, Bangalore)
 Areas of interest/ specialization: Social Work & Mental Health, Psychosocial Care in Disaster Management, Street Children, and Application of Social Work Methods
 E-mail: apurbasaha@tezu.ernet.in

Veda Yumnam, MPhil (JNU)
 Areas of Interest/Specialization: Social Determinants of Health, Disaster Management, Nutrition, Social Epidemiology of HIV/AIDS, Health Systems Research
 E-mail: vedamsw@ tezu.ernet.in

R Kalarivayil, MPhil (JNU)
 Area of Interest/Specialization: Urban and Rural Community Development, Science, Technology and Innovation Studies
 E-mail: rajeshk@tezu.ernet.in

Deepshikha Carpenter
 Area of Interest/Specialization: Interest Women’s Studies, Social Work Education and Research, Disability, Crime and Violence
 E-mail: deepshikha@tezuernet.in

Guest Faculty

Smitha Sasidharan Nair, M Phil (JNU)
 Specialization/Area of Interest: Gender, Health, Social Movements.
 E-mail: smithas@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

Office Staff

A Bharali
 Upper Division Assistant
 E-mail: amar@tezu.ernet.in

G Dharborah
 MTS





DEPARTMENT OF SOCIOLOGY

THE DEPARTMENT

Established in 2006, the Department of Sociology offers a post graduate programme in Sociology. Subsequently, it launched a PhD programme in 2008. Through rigorous teaching pedagogy, the Department strives towards nurturing competent and socially sensitive graduates. The focus of research is on emerging issues of sociological relevance. Specific attention is paid to themes pertaining to the northeast region of India. The students pursuing their Masters in the Department not only have to learn critical approaches and perspectives in the classroom but are also encouraged to participate in field visits during vacations as part of their mandatory research projects. The Department also takes care to expose the students to the prevailing social realities through activities such as out-reach programmes, regular film screening, seminars and other programmes in collaboration with other social organizations.

ACADEMIC PROGRAMMES

- MA in Sociology
- PhD

STUDENT INTAKE

Programme	Student Intake
MA in Sociology	35
PhD	Intake variable, 10

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
K Kikhi & A K Das	<p>Status Report on Children and Women in the Tea Gardens of ATCL, Assam Around 13,500 household are settled in 15 ATCL tea gardens spread in 7 districts of Assam. The study focuses on children and women and subsequently investigates the following aspects with regard to the workers and the management of the ATCL owned tea gardens:</p> <ul style="list-style-type: none"> • Status of tea garden workers vis-à-vis health, nutrition, water & sanitation, education and child protection. • Knowledge of tea garden workers about the existing government schemes in the above mentioned sectors. • Status of tea garden workers as beneficiary of various government welfare/development schemes i.e. an assessment of implementation of the schemes among the tea garden workers.
Nirmali Goswami	<p>A micro study of medium of instruction and languages taught in the primary schools of Assam</p> <ul style="list-style-type: none"> • The project aimed at examining the extent to which primary school system in Assam is responsive to the socio-linguistic diversity of school going children given the multilingual nature of population. • The findings based on Sonitpur, therefore, affirm the understanding that primary level schooling in Assam is faced with a major challenge of dealing with a linguistically diverse school-going-population. Even though the state has arranged for teaching and learning of at least three languages and provided for medium of instruction other than Assamese, yet, a close examination of classroom situation suggests that the school system is ill-prepared to handle the same in an effective manner.



Research Projects, ongoing and new

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Land Identity and Development in Nagaland	ICSSR	15 lakhs	2013-15	K Kikhi
Gender and Mental Health in Assam: A study on Magnitude, Causes and Impact of Mental Illness on women	ICMR	12.75 lakhs	2014-15	K Kikhi
Class, Caste and Commons: A study of Nagaon District of Assam	ICSSR	5.5 lakhs	2014-16	Sarmistha Das
Primary Health Care System and Inclusive Development in North East India: A Situation Analysis of Primary Health Centres in Assam	UGC	10.69 lakhs	2013-15	Sumesh S S

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Choudhury, Nandarani and KedilezoKikhi. Understanding schizophrenic behaviour from a cultural perspective, *Man and Society: A Journal of North-East Studies*, 2015. (Accepted).

Das, A.K. Developing Inter-Sectoral synergies: Re-defining state-NGO relations in the field of education, *Jamia Journal of Education*, 1(2), 2014.

Das, A.K. Undermining Adivasi interests, *Economic and Political Weekly*, 50(1), 2015.

Goswami, N. Costs, Security and Discipline: Gendering the debate on school choice in India, *Indian Journal of Gender and Society*, 22(2), 2015.

Kalam M.A. The Xenophobia of Patriots, *Economic and Political Weekly*, XLIX(40), October 4, 2014.

Pappu, R. and N. Goswami. Introduction to special issue on current issues in gender and education, *Indian Journal of Gender and Society*, 22(2), 2015.

Sharma, C.K. and I. Sarma. Issues of conservation and livelihood in a forest village of Assam, *International Journal of Rural Management*, 10(1), 2014.

CONFERENCE PROCEEDINGS

Kikhi, K. Naga nationalism and its challenges. In *Proceedings of the Indian Association for Asia & Pacific Studies [Biennial Publication]*, IAAPS publication, 2014.

Books and Book Chapters

Das, A K. 2014. Territory, Cultural Identity and Capitalist Expansion: Tribal Resistance in Niyamgiri Hills, Odisha. In Mishra K. K. and Das N. K. (eds). *Dissent, Discrimination and Dispossession: Tribal Movements in Contemporary India*, New Delhi: Manohar.

Das, S. 2014. Panchayati Raj institutions and Inclusive growth in India: Myth or Reality. In Ferdusi Begum (ed). *Panchayati Raj System and Involvement of Women in Rural Development*, Guwahati: Ajanta Press.

Deka, R. 2014. Ideals of Romanticism and its Reflection in the Works of LakshminathBezbaroa. In Sarma M.M. & Nath D.P. (eds). *LakshminathBezbaroa: The Architect of Modern Assamese Literature: Issues of Nationalism and Beyond*, Guwahati: Perfect Imagers.

Goswami, N. & S. Das. 2014. Community Rights and Women in Khasi Society. In BorthakurTamuli, S. (ed). *Women Empowerment in Northeast India*, Guwahati: Eastern Publishers.

Kikhi, K. (forthcoming). Contextualising and Understanding the Complex Interface of Land, Identity and

Development in Nagaland State. In Luke, R. (ed). Politics of Location with Special Reference to Northeast India. Delhi: Regency.

Ray, S. (forthcoming). Studying Laboratories: A Sociological Inquiry of Research Practices in Genetics. In Hebbbar R & Bandyopadhyay M (eds). A New Sociology of India: Altered Realities, New Field Sites and Methodological Challenges, Orient Blackswan.

Sharma, C K. 2014. Contemporary Social Milieu and Bezbaroa's Works. In Sarma M.M. & Nath D.P. (eds). Lakshminath Bezbaroa: The Architect of Modern Assamese Literature: Issues of Nationalism and Beyond, Guwahati: Perfect Imagers.

Sharma, C. K. (forthcoming). Immigration, Indigeneity and Identity: The Bangladeshi Immigration Tangle in Assam, In Gogoi, D. (ed). Unheeded Hinterland: Identity and Sovereignty Debates in Northeast India. Delhi: Routledge.

Sharma, Chandan Kumar. 2014. Samaaj Nirmaanar Aadi Aakhora. Guwahati: Aank Baak.

Shimreiwung, A S. 2014. Print Culture and the rise of Identity Consciousness in Oral Society: Trajectories in Conception of Community Identity in Tangkhul Literature. In Vashum et al (eds). Encountering Modernity: Situating Tangkhul Nagas in Perspective, New Delhi: Chicken Neck.

Shimreiwung, A.S. et.al. (eds.). 2014. Encountering Modernity: Situating Tangkhul Nagas in Perspective. New Delhi: Chicken Neck.

BOOK REVIEWS

Amiya Kumar Das. 2014. Ananta Kumar Giri (ed). A New Morning with Chitta Ranjan: Adventures in Co-Realizations and World Transformations. Sociological Bulletin, 63(3).

Amiya Kumar Das. 2014. Yogesh Atal (ed). Rethinking planning and development: The Indian context - Tribute to Tarlok Singh. Sociological Bulletin, 63(1).

Chandan Kumar Sharma. 2014. K. Mishra, (ed). Unfolding Crisis in Assam's Tea Plantations: Employment and Occupational Mobility. Social Change, 44(2).

Chandan Kumar Sharma. 2014. Arupjyoti Saikia. A Century of Protests: Peasant Politics in Assam since 1900. Labour and Development, 21(2).

Nirmali Goswami. 2014. Sleeter et al (eds). School Education, Pluralism and Marginality. Sociological Bulletin, 63(1).

Sarmistha Das. 2015. Catherine Bernard & John J. Shea (eds). Nurturing Families around the World: Building a Culture of Peace. Sociological Bulletin, 64(1).

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

A K Das presented a paper, Sociology of governance: An exploration of elections in India, Inter Congress of IUAES (International Union of Anthropological and Ethnological Sciences) and JASCA (The Japanese Society of Cultural Anthropology) on the theme the Future with/of Anthropologies, Makuhari Messe, Chiba, Japan, 15-18 May 2014.

K Kikhi presented a paper, Contextualizing and understanding the complex interface of land, identity and development process in Nagaland State, at UGC sponsored National Seminar, Politics of location with special reference to Northeast India, organized by Sazolie College, Jotsoma, Nagaland, 14-15 November, 2014.

M A Kalam and H Singh presented a paper, Arundhati Roy on Gandhi, Ambedkar, and the annihilation of caste: Perpetuating the myth of religion, Hinduism and caste, at All India Sociological Conference, Varanasi, 29-30 November, 2014.



M A Kalam and Singh H presented a paper, Interrogating mainstream sociology of caste: questions of theory and method, All India Sociological Conference, Varanasi, 29-30 November, 2014.

R Deka presented a paper, Caste, religion and social dominance in contemporary Assam, National seminar on Interrogating Caste in Assam: History, ideology and manifestation, Department of History, Dibrugarh University, 18 October, 2014.

S Das attended a workshop, Strengthening community engagement in Higher Educational Institutions, IIT, Guwahti, UNESCO and ICSSR in association with the British Council, 17-18 September, 2014.

Sumesh S S presented a paper, Teaching Sociology in a new age central university of India's Northeast, at the National Conference on Sociologists and Sociology: Autobiographies and Biographies, organized by the Centre for Advanced Studies, Department of Sociology, SavitribaiPhule Pune University, 15-16 September, 2014.

TALKS BY FACULTY ABROAD AND IN INDIA

A K Das delivered a talk, Sociology of Governance: A case study from Assam, India, in the international seminar of INDAS, India Area Studies programme, Kyoto University, Japan, 22 May, 2014.

A S Shimreiwung delivered a talk, Christianity and popular culture: Changing trends in contemporary Naga pop music, 2nd Hutton Lecture Series, Kohima Institute, Kohima, Nagaland, 3-4 December, 2014.

A S Shimreiwung delivered a talk, Mining policy in Ukhrul, people's response to proposals for mining in Ukhrul, Tangkhul Scholars Association, University of Delhi, Delhi, May 2014.

C K Sharma chaired the session, Achieving sustainable rural development: The managerial policy perspectives, National Seminar on, Managing rural development in Northeast India: Perspectives, policies and experiences, Department of Business Administration, Tezpur University, 7-8 November, 2014.

C K Sharma chaired the session, North East India: History, Polity and Contemporary Dimensions, 7th Biennial International Conference of the Indian Association for Asian and Pacific Studies, organized by Maulana Azad Centre for Research on Northeast India and Department of Sociology, Tezpur University, 20-22 December, 2014.

K Kikhi chaired a panel, Northeast India: History, polity and contemporary dimensions, IAAPS Seventh Biennial International Conference, Tezpur University, 20-22 December, 2014.

K Kikhi chaired a technical session, National Seminar on Politics of Location with special reference to Northeast India, Sazolie College, Jotsoma, Nagaland, 14-15 November, 2014.

M A Kalam delivered a lecture, Witch hunting in Assam, Department of Sociology, Dibrugarh University, Dibrugarh, Assam, 22 November, 2014.

M A Kalam delivered the inaugural lecture, Imagination and initiatives based on the works of Nobel laureates of the year 2014, in Series of Lectures on Frontier Knowledge, Tezpur University, 10 November, 2014.

M A Kalam delivered the Inaugural Lecture, Social science research in Rural Development, course on research methodology in Rural Development, National Institute of Rural Development, North East Regional Centre, Guwahati, 27 October, 2014.

M A Kalam delivered the valedictory address, Rural development with particular reference to North East India, National Seminar on Managing rural development in North East India: Perspectives, policies and experiences, Department of Management Studies, Tezpur University, 8 November, 2014.

R Deka delivered key note address, Suicide and the youth, National workshop on Suicide and the Youth with special reference to Northeast India, Karmargaon College, Golaghat, Assam, 12-13 September, 2014.

S Ray delivered a talk, Methodology in social sciences, Modular workshop for PhD students, organized by Tata Institute of Social Sciences, Guwahati, 5 September, 2014.

S Ray panelist, Bridging the Digital Divide, TechXetra, Tezpur University, September 2014.

S Ray panelist, National Unity Day, Heroes and historians in the life of a Nation: The example of Sardar Vallabhbhai Patel, Tezpur University, 31 October, 2014.

S Ray participated as discussant, Winter school on Research Methodology, organized by Tata Institute of Social Sciences, Guwahati, 17 December, 2014.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

7th Biennial International Conference, Indian Association for Asian and Pacific Studies, sponsored by Indian Council of Social Science Research, New Delhi & Maulana Abul Kalam Institute of Asian Studies, Kolkata, 20-22 December, 2014.

International Seminar, Shared Rivers in South Asia: Challenges & Prospects in Lower Riparian Areas, sponsored by Maulana Abul Kalam Institute of Asian Studies, Kolkata, 13-17 March, 2015.

Training-Cum-Workshop on Statistical Package for Social Sciences (SPSS), in collaboration with the Indian Council of Social Science Research North Eastern Regional Centre, Shillong, 3-9 November, 2014.

Public Lecture

Prof V Rodrigues, Centre for Political Studies, Jawaharlal Nehru University, New Delhi, delivered a lecture, Indian Democracy and the Reconstitution of Dalit Self: Contemporary Dalit Writings, Council Hall, Tezpur University, 17 October, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof C S Bhat, Founder-Director of the Centre for the Study of Indian Diaspora, University of Hyderabad

Dr C J Thomas, Director, Indian Council of Social Science Research, North eastern Regional Centre, Shillong

Prof M N Karna, Former Director, A.N. Sinha Institute of Social Studies, Patna

Prof S T Madsen, Nordic Institute of Asian Studies, Copenhagen, Denmark

Dr S Wentzel, Senior Consultant with German Federal Enterprise for International Cooperation, Germany

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

ICSSR Doctoral fellowships were awarded to 3 Research Scholars

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-2015]

NET – 7

NOTABLE PLACEMENT [2014-2015]

Bhaswati Das, Assistant Professor, Department of Sociology, Barpeta College, Barpeta

Chandana Koch, Assistant Professor, Department of Sociology, Marigaon College, Morigaon

Jahnobi Borgohain, Assistant Professor, Department of Sociology, Margherita College, Margherita

Shruti Talukdar, Assistant Professor, Department of Sociology, N.E.F College of Management and Technology, Guwahati



THE FACULTY OF THE DEPARTMENT

Professors

M A Kalam, PhD (Madras)

Professor of Eminence

Specialization/Areas of interests: Migration, Identity Politics, Ethnicity, Environment and Society

E-mail: kalam@tezu.ernet.in

C K Sharma, PhD (Delhi)

Specialization/Areas of interest: Sociology of Development, Environmental Sociology, Social Movements, Identity Politics, Culture Studies, Northeast India.

E-mail: chandan@tezu.ernet.in

Associate Professors

R Deka, PhD (Dibrugarh)

Specialization/Areas of interest: Sociological Theories, Sociology of Movement, Agrarian Sociology

E-mail: rdeka@tezu.ernet.in

K Kikhi, PhD (NEHU)

Head of the Department

Specialization/Areas of interest: Sociology of Northeast India, Gender and Society, Sociology of Development, Tribal Studies.

E-mail: kedi@tezu.ernet.in

Assistant Professors

A K Das, PhD (Tezpur)

Specialization/Areas of interest: Sociology of Development, Research Methodology, Sociology of Medicine.

E-mail: amiyadas@tezu.ernet.in

Sumesh S S, PhD (Kerala)

Specialization/Areas of interest: Social Stigma and Social Exclusion, Public Health, Environmental Sociology, Quantitative Sociology.

E-mail: sumesh@tezu.ernet.in

NirmaliGoswami, PhD (IIT Kanpur)

Specialization/Areas of interest: Sociology of Education, Multiculturalism, Multilingual education, Community identity and women

E-mail: nirmalig@tezu.ernet.in

Sarmistha Das, MPhil (JNU)

Specialization/Areas of interest: Gender Studies, Sociology of North East India, Agrarian Studies

E-mail: sarmistha@tezu.ernet.in

S Ray, MPhil (Delhi)

Specialisation /Area of Interest: Sociology of Science, Sociology of India, Sociological Theory, Sociology of Literature.

E-mail: sray@tezu.ernet.in

A S Shimreiwung PhD (JNU)

Specialisation/Area of Interest: Sociology of Religion, Culture and Art, Urban Sociology, Orality and Colonial Photography.

E-mail: shim@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

Pranita S. Talukdar, BSc (Gauhati), Assistant

E-mail: pranita@tezu.ernet.in

J Das, MTS

CENTRE FOR ASSAMESE STUDIES

THE CENTRE

Since its inauguration in June, 2014, the Centre for Assamese Studies of Tezpur University has been aiming to undertake and foster intensive and innovative study and research in Assamese Language, Literature and Culture in their varied dimensions adopting a wide perspective and an all-encompassing worldview.

Prof Ranjit Kumar Dev Goswami, former Professor of the Department of English, Gauhati University, joined as the SrimantaSankaradeva Chair Professor at Tezpur University on 02.02.2015.

CURRENT TEACHING ACTIVITIES

- One 3 credit CBCT course (Communicative Assamese)
- One course (2 credit) on MIL (Assamese) for BA BEd
- One course (3 credit) on MIL (Assamese) for MA

DR BHUPEN HAZARIKA FELLOWSHIP

Provision for PhD research has been initiated with the institution of the Dr Bhupen Hazarika Fellowship at the Centre. The first Bhupen Hazarika Fellowship was awarded to Ms Prerana Choudhury, who joined the Centre as a doctoral fellow in 2014.

PUBLICATIONS

CONFERENCE PROCEEDINGS

Dutta, J. Lakshminath Bezbaroar Natakak Swadeshpremaru Jatiya Cetana: Patabhumiaru Pratiphalan. In Proceedings of a National Conference on LakshminathBezbaroa: AdhunikAsomiya Sahityar Agradutaru Jatiyatabadar Sthapati (Lakshminath Bezbaroa: A Pioneer of Modern Assamese Literature and Architect of Assamese Nationalism), Nowgong Girls' College, Nagaon, 19-20 September, 2014.

Books

Dutta, J. 2014. Ethnic Worlds in Select Indian Fiction. New Delhi: SAGE Publication India.

Book Chapters

Barua, S. Hermeneutics of the experiencing self and encountered other. In Sarma, M. M. and Nath, D. P.(eds). LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond. Guwahati: Perfect Imagers. 2014.

Dutta, J. Bezbaroaas a Dramatist: A Journey from Satirical to Serious Drama. In Sarma, M. M. and Nath, D. P. (eds). LakshminathBezbaroa: The Architect of Assamese Literature- Issues of Nationalism and Beyond. Guwahati: Perfect Imagers. 2014.

Other Publications

Munro, Alice. Office.Trans.Juri Dutta.Janambhumi- Special Rongali Bihu Issue (Weekly) in April 2014. Guwahati: Janambhumi Press Pvt Ltd .68 (5).

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Juri Duttaattended a National Seminar, Modern Assamese Society, Literature and Bezbaroa, Centre for Assamese Studies, Tezpur Universityon the occasion of the 150th birth anniversary of SahityarathiLakshminathBezbaroa, 2-3 April, 2014.

JuriDuttapresented a paper, Translation of Literature and National Integration: A Re-appraisal, at the National seminar on Comparative Indian Literature and National Integration, Department of Modern IndianLanguages, Gauhati University, 8-9 August, 2014.



Juri Dutta attended User Awareness Programme on Access to E- Resources, Central Library, Tezpur University, 19-20 May, 2014.

Juri Dutta attended a workshop on Gendered Teaching: Pedagogical Practices, Centre for Women Studies, Tezpur University, 16 March, 2015.

Juri Dutta presented a paper, Lakshminath Bezbaroar Natak Swadeshpremaru Jatiya Cetana: Patabhumiaru Pratiphalan, at the National seminar on Lakshminath Bezbaroa: A Pioneer of Modern Assamese Literature and Architect of Assamese Nationalism, Nowgong Girls' College, Nagaon, 19-20 September, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

R K Dev Goswami, delivered a talk, Lakshminath Bezbaroa and the Intellectual History of Assam, at a seminar, Assam Association, New Delhi, 28 February, 2015.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Third Foundation Day, 6 June 2014 with a lecture delivered by Dr Lakshmi Goswami, eminent physician and social worker of Tezpur on Social History of Tezpur after the Post-Independence Period.

National Seminar, Modern Assamese Society, Literature and Bezbaroa, on the occasion of the 150th birth anniversary of Sahityarathi Lakshminath Bezbaroa, 2-3 April, 2014

A volume, Lakshminath Bezbaroa: The Architect of Modern Assamese Literature- Issues of Nationalism and Beyond, (edited by M. M. Sarma and D. P. Nath) with 15 research papers authored by members of the Faculty of the University got published on the occasion of the 150th birth anniversary of Sahityarathi Lakshminath Bezbaroa, 3 April, 2014.

DISTINGUISHED VISITORS TO THE CENTRE

Prof B N Datta, Eminent Scholar, Folklorist and Former President of Asam Sahitya Sabha

Prof N Saikia, Eminent Scholar and Former President of Asam Sahitya Sabha

Prof S Bharali, Former Jawaharlal Nehru Professor, Gauhati University

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

Translation of Rajanikanta Bordoloi's 19th century novel Miri Jiyori (by Dr Suranjana Barua) has been awarded the first Pallavi Barua Memorial Translation Award, 2014 for best translation from Assamese to English for the years 2012-2013 combined.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The two Research Associates (Dr Juri Dutta and Dr Suranjana Barua) helped in the translation of earmarked portions of the Bishnu Rabha Volume (a project undertaken by Tezpur University).

Current Research Activities of the Centre

Dr. Juri Dutta is translating Narayan's Kocharethi: The Araya Woman into Assamese (originally in Malayalam) from the an English translation by Catherine Thankamma. A translation of this multi-prize winning novel dealing with the Malayarayar tribe in Kerela into Assamese would serve the Centre's important objective of translation of important indigenous texts while also enriching the domain of Assamese literature through introduction of other Indian literary perspectives.

THE FACULTY OF THE CENTRE

Chair Professor

Prof R K Dev Goswami

Srimanta Sankaradeva Chair Professor and Head, Centre for Assamese Studies

Specialization/Areas of Interest: Sankaradeva Studies, Nineteenth Century Assam, Intellectual History, European Poetry

E-mail: rdg2015@tezu.ernet.in

THE STAFF OF THE CENTRE

Research Associates

Juri Dutta, PhD(RGU)

Specialization/Areas of Interest: Regional Literatures of India, Translation Studies and Comparative Literature

E-mail: juri@tezu.ernet.in

Suranjana Barua, PhD (Delhi)(till July, 2014)

Specialization/Areas of Interest: Sociolinguistics (Conversation/Discourse Analysis), Translation Studies, Gender Studies, Language Teaching

E-mail: suranjana@tezu.ernet.in

Office Staff

A Dutta, BA (Gauhati)

UDC

E-mail: ashish@tezu.ernet.in

H Das

MTS





CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN'S STUDIES**THE CENTRE**

Chandrapraba Saikiani Centre for Women's Studies (CSCWS) was established in the year 2009 in support of redistribution and control of resources in favor of women. The Centre thus aims at promoting theoretical studies on women in general and women belonging to the diverse socio-cultural milieu of North – East India in particular.

CURRENT TEACHING ACTIVITIES

Two CBCT courses in Women's Studies:

- WS 101 - Introduction to Women's Studies
- WS 102 - Introduction to Women's Studies- Project

CONFERENCE PROCEEDINGS

Goswami, M. Women of the North East India: Status and challenges. In Proceedings of the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 2014.

Mahanta, M. Political Violence: It's impact on Mental Health. In Proceedings of the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 2014.

Goswami, M. Interpreting Women in Cultural Studies. In Proceedings of an International Seminar on Cultural Studies: Global and Local perspectives. Tezpur University, Tezpur, 2015.

Books and Book Chapters

Mahanta, M. 2014. Chandraprabha Saikiani: Personality and Progress. Tezpur University Publication, Assam.

SEMINARS/CONFERENCES/SYMPOSIA ATTENDED**International and National**

Madhurima Goswami attended a meeting on Women's Studies Syllabus drafting, Dibrugarh University, Dibrugarh 5- 6 May 2015.

Madhurima Goswami attended a National Seminar, Gender in Different Cultural and National Contexts: Local and Global Impact on it and its role. Nowgong College, Nagaon, 20-21 January, 2015.

Madhurima Goswami attended an International Seminar on Cultural Studies: Global and Local Perspectives Tezpur University, Tezpur, 7-9 February, 2015.

Madhurima Goswami attended the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 17- 22 August, 2014.

Mousumi Mahanta attended the 12th International Interdisciplinary Conference on Women, Hyderabad University, Hyderabad, 17- 22 August, 2014.

WORKSHOP ORGANISED BY THE CENTRE

An Interaction cum Awareness Program on Security for Women at Workplace, Tezpur University, 26 May, 2014.

A two days training programme, Capacity Building Programme on Women Leadership and Participation in collaboration with NSS, Tezpur University and sponsored by Rajiv Gandhi Institute of Youth Development, Tamilnadu, 27- 28 November, 2014

A One day training programme for high school teachers, Gender teaching: Pedagogical practices, 16 March, 2015

An awareness and sensitization programme among the womenfolk of Amolapam on legal provisions for women, M.V. School, Napaam, 12 August, 2014



DISTINGUISHED VISITOR TO THE CENTRE

Prof B Sarmah, Director, OKDISC, Guwahati

THE FACULTY OF THE CENTRE

Associate Professor

Madhurima Goswami, PhD (Tezpur)

Head of the Centre

Specialization/Areas of Interest: Gender Studies, Critical Theory, Performance Studies and Sanskrit Literature

E-mail: mgs@tezu.ernet.in

Assistant Professor

Mousumi Mahanta, PhD (Tezpur)

Specialization/Areas of Interest: Women and Mental Health, Women's Studies, Feminist Research Methodology, Anthropology

E-mail: mousumi@tezu.ernet.in

THE STAFF OF THE CENTRE

P K Sarma

Data Entry Operator

E-mail: pranjal@tezu.ernet.in



SCHOOL OF MANAGEMENT SCIENCES

During the concerned period the School of Management Sciences added a feather in its cap by starting a new department, viz. the Department of Commerce. The Department has started functioning with its first batch of students from August 1, 2014. The integrated MCom programme is designed to provide the basis for developing the skills necessary to face the challenges of the job market. We are happy to receive an overwhelming response from students to this programme and they should be able to fulfil the requirements of careers in teaching, research, industry and consultancy.

The Department of Business Administration has been successful in carrying out research projects and consultancy besides its core teaching activity. The Department is carrying out a UGC-SAP [DRS-I] project on Micro-Finance and Livelihood, which is on the verge of completion. Most of the pass-outs of Departments have joined organizations of repute immediately after completion of the course.

The Centre for Disaster Management has been offering inter-disciplinary courses to the students of the University, which have become very popular.

The Intellectual Property Rights Cell successfully implemented three inter-disciplinary courses on IPR in UG, PG and PhD level in 2014-15. Twenty (20) workshops/training and outreach programmes were organised by the Cell in Assam and the nearby states. During the concerned period, out of 5 patent and copyright applications processed during this period, 2 software copyright applications were granted. I am also happy to mention the most significant achievements of the Cell during this period: processing 94 applications for the status of authorised user of muga silk, which is given by the GI Registry at Chennai only to the producers of authentic muga products.

The School of Management Sciences with its two Departments, one Centre and one Cell have been trying hard towards meeting the objectives of the University.

Dean, School of Management Sciences

Professor S S Sarkar, PhD (Tezpur)

E-mail: subh@tezu.ernet.in

THE STAFF OF THE OFFICE OF THE DEAN

UDC

B Das, BA (Gauhati)

E-mail: bhrigu@tezu.ernet.in





DEPARTMENT OF BUSINESS ADMINISTRATION

THE DEPARTMENT

The Department of Business Administration was established in the year 1995. The flagship programme of the Department is its 2-year Master's degree in Business Administration. Other programmes of the Department include a Post Graduate Diploma in Tourism Management and a Doctor of Philosophy in areas like Human Resource Management, Financial Management, Marketing Management, Operations Management, and Systems. The faculty members of the Department have been actively involved in research and other academic activities, availing of overseas fellowships, and participating in national and international seminars and conferences. The Department has also been regularly organizing seminars, conferences, symposiums and refresher courses since its inception. It has also been conducting MDPs/FDPs for the corporate executives and academics. The Department has been awarded special assistance under UGC-SAP DRS-1. The Department was rated A3 by AIMA in 2012. The students of the Department have been enthusiastic in participation in extra-curricular activities and have also bagged numerous prizes in and outside the University.

ACADEMIC PROGRAMMES

- MBA
- Post-Graduate Diploma in Tourism Management (PGDTM)
- PhD

STUDENT INTAKE

Programme	Student Intake
MBA	50
PGDTM	23
PhD	Intake variable, 01

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

The Department has one air-conditioned Boardroom which facilitates for case discussions. Classrooms have audio-visual facilities such as LCD projectors, sound systems etc.

The Department has a small library-cum-reading room, a fully air conditioned seminar hall, computer lab and a training hall. The Office is equipped with a modern office automation system.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

The Department has been on a SAP-DRS-I (UGC) project on Micro-Finance and Livelihood.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
An Impact Assessment of Microfinance Programme of MFIs on their Clients in the Sonitpur District of Assam	ICSSR	1.4 Lakh	2012-2014	A Roy
Commercialization of Traditional Crafts in Post-Independent Assam: A study on Select Items	ICSSR	5 Lakh	2014-2016	M K Sarma
Implementation of Performance Related Pay (PRP) Based Performance Management System (PMS) in Assam Petrochemicals Limited, Namrup	Public Enterprise Department, Govt of Assam	0.5 Lakh	2014-2015	S S Sarkar Papori Baruah



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Evaluation of Evaluation Study of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)	Planning Commission	26 Lakh	2014-2016	S S Sarkar Papori Baruah
Implementation Of Performance Related Pay (PRP) Based Performance Management System (PMS) in Assam Gas Company Limited, Duliajan	Public Enterprise Department, Govt of Assam	0.5 Lakh	2014-2015	S S Sarkar Papori Baruah

CONSULTANCY PROJECTS

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Training Needs Analysis, Design of Training, Training Plan and Training Policy of State Level Public Enterprises (SLPEs); and (ii) Support and facilitation for introducing and institutionalizing Memorandum of Understanding (MoU) based performance rating system at Assam Cooperative Jute Mills Limited	Public Enterprise Department, Govt of Assam	12 Lakhs	2014-2016	S S Sarkar (Coordinator)

PUBLICATIONS

In International and National Journals

Barpujary, H. Assessing Quality of Websites Through Observation, International Journal of Research in IT, Commerce and Management, 4(1), 2014.

Baruah, P., and Baruah, R. R. Students' Perception on Teamwork: A study of course objectives Accomplishment and Satisfaction in Higher Education, Pratidhwani the Echo, II(IV), 2014.

Baruah, P., and Chutia, L. K. Change Initiatives in the Retail Sector of India: A Literature Study, Global Journal of Commerce & Management Perspective, 3(5), 2014.

Baruah, P., and Millo, Y. Factors Affecting Development: a Study in a State of North Eastern India, Economic Insights – Trends and Challenges, III (LXVI), 2, 2014.

Baruah, P. Performance Linked Reward and Job Satisfaction: Banking Sector, SCMS Journal of Indian Management, October-December, 2014.

Baruah, P. Role of the Non-Governmental Organisations (NGOs) in Economic Development-With Special Reference to the North East Economy, Economic Planning Forum, 2014.

Baruah, P. Telecom sector in India: Past, Present and Future, International Journal of Humanities and Social Science Studies, I (III), 2014.

Bhuyan, A., and Chutia, L. K. Rural women weavers' of Assam: Artistic skills and entrepreneurial issues, Asian Journal of Management Research, 5(3), 2014.

Das, D., and Borbora, S. Financing Value Chains for Developing Rural Livelihoods, International Journal of Managing Value and Supply Chains, 5(1), 2014.

Das, D., and Dutta, P. Indian MFI at crossroads: sustainability perspective, CORPORATE GOVERNANCE, The international journal of business in society, 14(5), 2014.

- Das, D., and Dutta, P. Regulating Microfinance Institutions in South Asia: Issues and Challenges with Special Reference to India, *Vinimaya (NIBM)*, XXXV (1), 2014.
- Goswami, C., and Begum, R. Business Economics of Street Vending, *Journal of Research, Extension and Development*, 3 (1), 2014.
- Goswami, C., and Choudhury, B. Leakage of Tourism Revenue, *A Review Journal of Social Sciences Bodoland University*, 2(1), 2014.
- Goswami, C., and Phukan, L. Understanding Creativity Level of Students of 10th and 12th Standard: Evidence from Assam, India, *Review of Integrative Business and Economics Research*, 3(2), 2014.
- Goswami, C., Credit Preference of Micro and Small Enterprises of Assam (India), *Review of Integrative Business and Economics Research*, 3(2), 2014.
- Mahanta, K. Assessment of Employer Branding from the Perspectives of Potential Employees, *Vanijya*, 24(1), 2014.
- Mahanta, K. Recruitment: An insight into Indian BPO industry, *Research Promoter*, 4(4), 2014.
- Roy, A. A. Model of Security Selection and Portfolio Building through Z-Scores, *Global Business Review*, 2014.
- Roy, A. Effects of Online Securities Trading: Some Important Issues, *Lakhimpur Commerce College Research Journal*, 1(2), 2014.
- Roy, A. The Dynamics of SHG Business Model and Women Empowerment: A Study on the Scheduled Caste Women in the Sonitpur District of Assam, *Pacific Business Review*, [In Press].
- Sarma, M. K., and Goswami, S. Management of Guest Delight in Hotels: An Exploratory Study, *Vision*, 18(1), 2014.
- Sarma, M. K., and Goswami, S. Relationship Management: Dimensions for Tourism, *SCMS Journal of Indian Management*, XI (2), 2014.
- Sarma, M. K. Crafts of Assam: An Exotic Attraction for Wanderers, *Brahmaputra Review*, III, 97-110, 2014.
- Sarma, T. R. Study on the Support and Facilities Provided by Assam Agriculture Competitiveness Projects to the Dairy Cooperative Societies of Kamrup District of Assam, *Indian Journal of Animal Production and Management*, 30 130-132, 2014.
- Sarma, T. R. Sustainability Of The Waste Management Practices In Tourist Destinations Of Nagaland: A Critical Review, *International Journal of Research in Commerce and Management*, 3(1), 2014.
- Tiwari, R. K. Fraud Examination: Investigators Perspective, *Kangleipak Business Review*, VIII, 2014.
- Tiwari, R. K. Innovative Learning Pedagogy in Business Schools, *International Journal of Research In Commerce, Economics & Management*, 4(8), 2014.

Conference Proceedings

- Bhuyan, A., Kalita, B. J. and Dutta, H. Prospects of developing bamboo products as souvenirs: a study on selected bamboo craftsmen of Sonitpur district of Assam. In *Proceedings of a National Seminar on Tourism and Handicraft: Challenges and Opportunities for Local Economic Development*, Department of Business Administration, Tezpur University, Tezpur, Assam, 2014.
- Bhuyan, A. and Dutta, H. Risk management through formal arrangements in rural Assam: a way forwarded for sustainable growth and development with special reference to Sonitpur district of Assam. In *Proceedings of the UGC SAP (DRS-1) National Seminar on Managing Rural Development in North East India*, Department of Business Administration, Tezpur University, Tezpur, India, 2014.
- Bhuyan, A. and Kalita, B. J. Role of periodic markets in rural development: a study on rural periodic markets of Sonitpur district of Assam. In *Proceedings of the UGC SAP (DRS-1) National Seminar on Managing Rural Development in North East India*, Department of Business Administration, Tezpur University, Tezpur, India, 2014.



Das, R. and Baruah, T. Experimental Modelling of Marketing Inclusion for Rural Agriculture Sector. In Proceedings of the UGC SAP (DRS-1) National Seminar on Managing Rural Development in North East India, Department of Business Administration, Tezpur University, Tezpur, India, 2014.

Goswami, C. and Begum, R. Comparison of Two Important Segments of Urban Informal Sector: Home-Based Enterprise and Street Vendors of Assam, India. In Proceedings of the SIBR 2014 Bangkok Conference, Bangkok, Thailand, 2014.

Sarma, T. R. Efficient Agri Value and Supply Chain Management for achieving Rural Development: A study on Jorhat Town. In Proceedings of a National Seminar on Managing Rural Development in North East India: Perspectives, Policies and Experiences, Tezpur University, Tezpur, India, 2014.

Sarma, T. R. Economic viability of the small holder dairy farmers in Barpeta district Assam. In Proceedings of a National Seminar on Managing Rural Development in North East India: Perspectives, Policies and Experiences, Tezpur University, Tezpur, India, 2014.

Books and Book Chapters

Barpujary, H. 2015. Promotion of Handicrafts through Websites. In Goswami, C., Bhuyan, A. and Das, N. (eds). *Tourism and Handicrafts: A Sustainable Approach*. New Delhi: Excel India Publishers.

Bhuyan, A. 2014. A critical assessment of gender biased labour market in Assam. In Phukan, D. and Saikia, B. (eds). *Gender Issues and Status of Women in India*. New Delhi: Avon Publications.

Bhuyan, A. 2014. Local entrepreneurship as an Approach towards Sustainable Tourism Development in the North-Eastern Region of India. In Manhas, P. S., Gupta, D. R. and Gupta, A. (eds). *Strategic Development Policies and Impact Studies of Sustainable Rural and Community-based Tourism*. New Delhi: Primus Books.

Goswami, C. and Choudhury, B. 2014. Leakage of Tourism Revenue in Kaziranga National Park: Development of North-East India: Issues and Dimensions. New Delhi: Lakshi Publisher and Distributors.

Goswami, C. and Borkotoky, R. 2015. Enhancing Women Empowerment through Involvement in Handicraft Business in Tourism Sector: A Study of Kaziranga National Park. In Goswami, C., Bhuyan, A. and Das, N. (eds). *Tourism and Handicrafts: A Sustainable Approach*. New Delhi: Excel India Publishers.

Goswami, C. and Gurung, D. J. 2015. Developing Linkage between Wildlife Tourism and Handicraft for Local Economic Development: A Case Study of Kaziranga National Park. In Goswami, C., Bhuyan, A. and Das, N. (eds). *Tourism and Handicrafts: A Sustainable Approach*. New Delhi: Excel India Publishers.

Goswami, C. and Bharali, P. 2015. Product Adaptation: Popularising Assam Silk as a Tourism Product. In Goswami, C., Bhuyan, A. and Das, N. (eds). *Tourism and Handicrafts: A Sustainable Approach*. New Delhi: Excel India Publishers.

Roy, A. 2014. Impact of Microfinance on the Schooling of Children's: A study with reference to some MFIs in Sonitpur District in Assam. In *Managing Rural Development in North East India: Perspectives, Policies and Experiences*. Tezpur: Department of Business Administration, Tezpur University.

Sarma, T. R. and Aienla, A. 2015. Community's Perception on the Socio-Economic and Environmental Impacts of Tourism in the Tourist Villages of Nagaland. In Goswami, C., Bhuyan, A. and Das, N. (eds). *Tourism and Handicraft : A Sustainable Approach*. New Delhi: Excel India Publishers.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Reshma Tiwari attended a National conference, Slow Down, Banks and Role of Apex Banking Institution in the Market Economy of India: The Way Forward, Centre for Research in Rural and Industrial Development, Chandigarh, India. 26-27 February, 2015.

Reshma Tiwari attended a National conference, Corporate Governance and Companies Act 2013, Ethics in Management: Trends and Issues, Centre for Management Studies, Dibrugarh University, Dibrugarh, India,

13-14 February, 2015.

Reshma Tiwari attended a conference, Financial Inclusion: A Study of Street Vendors in Nagaland, National Seminar on Managing Rural Development in North East India: Perspectives, Policies And Experiences, Tezpur University, Tezpur, India, 7-8 November, 2014.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Two nos. of Management Development Programme, Finance for Non-finance, for the Numaligarh Refinery Ltd. Executives at NRL Campus, Numaligarh, India, June and October, 2014.

UGC SAP (DRS-1) National Seminar on Managing Rural Development in North East India, Tezpur, India, 7-8 November, 2014.

ICSSR sponsored National Seminar on Tourism and Handicraft: Challenges and Opportunities for Local Economic Development, Tezpur, India, 22-23 December, 2014.

Two days workshop on Company Act 2013 and corporate Governance jointly organized by School Management Sciences, Tezpur University & ICAI New Delhi, 30-31 January, 2015.

Six Sigma Green Belt Certification Programme (in collaboration with ISI Bangalore), 26-29 March, 2015.

Management Development programme for the Power Grid Corporation of India Ltd's Executives, Tezpur University, Tezpur, India, 07-09 July, 2014, 28-30 August, 2014, and 18-20 September, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Amitabha De, Director, Rajiv Gandhi Indian Institute of Management, Shillong.

Bhaskar Jyoti Mahanta, IPS, Additional Director General of Police, Assam.

Prof Devi Singh, Director, Indian Institute of Management, Bangalore.

Jamuna Ravi, Founder and Managing Director, Pinovous Consulting Pvt. Ltd.

Joydeep Chakroborty, Global Account Manager, Wipro.

Mukul Rastogi, Member, Corporate Social Investments, ITC Ltd.

P Padmanabhan, CMD, Numaligarh Rifinery Ltd.

Rashmi Borthakur, Director, American Express.

V V R Sasstry, Retd. CMD, Bharat Electronics Ltd.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Department organized the annual Industry Academia interaction, Sampark- the Interface, at Department of Business Administration, Tezpur University, Tezpur, Assam, 6-7 February, 2015. With SAMPARK, the Department in particular and Tezpur University in general aims to stand high on a pedestal where our illustrious legacy comes together with the corporate world to script a golden future. P. Padmanabhan, CMD, Numaligarh Refinery Ltd. was the Chief Guest while many other senior corporate executive attended the two day event.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE

NET – 6

UGC-JRF – 2

NOTABLE PLACEMENT

No. of Students placed

North Eastern Development Finance Corporation Ltd

2

National Handloom Development Corporation Ltd.

7

Vodafone Ltd

5



NOTABLE PLACEMENT	No. of Students placed
Axis Bank	3
HDFC Bank	9
HCL Ltd	1
Dabur India	2
Hindustan Motors	2
ICICI Pru Insurance Ltd.	6
Pradan	1
Café coffee Day	1
Nile stream Infotech Ltd.	2

THE FACULTY OF THE DEPARTMENT

Professors

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Reshma Tiwari, PhD (Gauhati)

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THE STAFF OF THE DEPARTMENT

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Office Staff

B Borah, BCom (Gauhati)

LDC

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S Borah

MTS



DEPARTMENT OF COMMERCE

THE DEPARTMENT

The Department of Commerce is the second department established under the School of Management Sciences of the University. It was opened in 2014 with a 5-year Integrated MCom programme. The Department is committed to quality education to students. It also guides students who want to write competitive examinations or pursue their CA, CS, ICWA and the like.

ACADEMIC PROGRAMMES

- Integrated MCom

STUDENT INTAKE

Programme	Student Intake
Integrated MCom	30

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Computer Lab

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Workshop on Indian Company Act, 2013 and Corporate Governance, jointly organized by Tezpur University and ICAI, 30-31 January, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof Ashok K Dutta, Founder Director, IIM Shillong

Dr Buddhadeb Ghosh, ISI Kolkata

Prof Debdas Bharali, Gauhati University

Sri Manas Thakur, Institute of Cost Accountants of India,

Dr Parimal Sen, Goyenka College of Commerce and Business Administration

Prof Sujit Sikider, Gauhati University

Sri Vijay Kapur, Chairman, Board of Studies, Institute of Chartered Accountants of India, New Delhi

Sri Vivekananda Mukherjee, Institute of Cost Accountants of India

THE FACULTY OF THE DEPARTMENT

The Faculty members of the Department of Business Administration has started the academic programme of this Department. Recruitment of Faculty for the Department is under process.

CENTRE FOR DISASTER MANAGEMENT

THE CENTRE

The Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. At present the Centre is functioning under Tezpur University. The main objectives of the Centre are to:

- Organise and conduct training programmes, conferences, and workshops on disaster management
- Extend academic support to other organisations
- Conduct regular courses on Disaster Management.

COURSES CONDUCTED / INTRODUCED

- One CBCT course on Disaster Management for the PG students.
- One CBCT course on Disaster Management for the UG students.
- One add-on course on Risk and Disaster Management in Healthcare of Diploma in Healthcare Informatics and Management under Department of Electronics and Communication Engineering.
- Two courses in the Post Graduate Diploma in Environmental Management are offered under CODL, Tezpur University.

FACULTY AND STAFF PARTICIPATED AS EXPERTS/RESOURCE PERSON

D Nath participated as an expert in the meeting on permanent protection of erosion at JiaBharali, held in the office of the Deputy Commissioner, Sonitpur, Assam, 8 May, 2014.

DNath participated as a resource person and delivered a talk, Introduction to Disaster Management, in the Faculty Development Programme under NEQIP project, H. R. H. the Prince of Wales Institute of Engineering and Technology, Jorhat, Assam, 14 February, 2015.

PUBLICATIONS

Deb Nath, R., and Nath, D. Educational Vulnerability and Risk Factors of Tea Garden Workers with Special Reference to Dewan Tea Garden Village, Cachar, Assam, India, International Research Journal of Social Sciences, 3(9), 2014.

Deb Nath, R., and Nath, D. Women's Movement for Human Rights in India and Bangladesh: A Sociological Analysis, Intellection: A bi-annual interdisciplinary research journal, III(I), 2015.

THE FACULTY OF THE CENTRE

Assistant Professors

D Nath, PhD (Gauhati)

Head of the Centre

Specializations/Areas of interest: Nuclear Physics & Cosmic Radiation / Disaster Risk Mitigation

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THE STAFF OF THE CENTRE

B Das

UDC

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নেওফি কম্পিউটন চেম্বার
NEOFCOMPUTATION CHAMBER

স্বাগতম

স্বাগতম

INTELLECTUAL PROPERTY RIGHTS CELL

THE CELL

Tezpur University Intellectual Property Rights Cell (TUIPR Cell) was established in 2009 with a view to developing human resource in the management of Intellectual Property Rights and initiating and executing IPR capability development in the North East Region through IP workshops and training programmes. The Ministry of Human Resource Development (MHRD), Government of India, instituted a MHRD IPR Chair in 2010. The key objectives and achievements of the Cell are:

- To integrate IPR with the education process (the Cell has been successfully implementing Choice Based Credit Courses on IPR in UG, PG and PhD level since 2012);
- To ensure speedy and accurate identification and protection of innovations carried out in the University; to widen the scope of their commercialization;
- To offer assistance to grassroot innovators in the North-East region;
- To act as a think tank on policy matters related to IPR in India with special emphasis on issues relevant to the North-East region;
- To disseminate the knowledge of IPR in and around the state of Assam by means of awareness programmes/workshops, etc (so far twenty workshops/trainings and outreach programmes have been organised by the Cell in Assam and the neighbouring states. The Cell also organises need based programmes for the faculty and researchers of Tezpur University).

CURRENT TEACHING ACTIVITIES

Choice Based Credit Course in Intellectual Property Rights (IPRs)

- CBCT IPR (3 credit) in Under Graduate (only Spring Semester)
- CBCT IPR (3 credit) in Post Graduate (only Autumn Semester)
- CBCT IPR (4 credit) in PhD (both Spring and Autumn Semesters)

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- The Cell has a good collection of books by Indian and foreign authors. These expensive and not very easily available books in the field of IPR are made available for the students through the Central Library of Tezpur University.
- Remote lecturing mode through National Knowledge Network using Video-Conferencing facility of the University. This facility exposes the students to the IP experts from different parts of the country.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
P Ganguli	The project has been initiated to identify the key reasons for low usage of the GI - Muga Silk of Assam. The project identified select areas in which "Sericulture to Production of MUGA Products" is active, to understand the dynamics of the MUGA Silk value chain. The ongoing project aims to realize the economic benefits through proper utilization of GI certificate and GI logo for Muga Silk of Assam. Currently, the project is exploring the reasons for the low number of Authorized users of this first GI from the state and finds means to enhance the registration of Authorized Users. Assam Science Technology and Environment Council (ASTECC) Guwahati, collaborated in this project as it is the "Registered Proprietor" of GI -Muga Silk of Assam.



Principal Investigator	Salient Research Findings
P Deb	The project Mukha-GI was initiated in October 2014. The aim of the project was to carry out an in-depth study on this five hundred years old art form of mukha (Musk) making of Assam in general and Majuli in particular and its potential as Geographical Indication (GI). This project also aims to assess the viability of mukha in an effective commercial value chain.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount(in INR)	Duration	Principal Investigator
MUGA –GI	MHRD	5,255.00	2014-2015	P Ganguli
MUKHA – GI	MHRD	2,784.00	2014-2015	P Deb

CONFERENCE PROCEEDINGS

Hussain, A., Saikia, J.B., Goswami, S., Deb, P., Ganguli, P. Geographical Indication as a tool for Facilitating Preservation of Traditional Products and Processes with Concurrent Economic Benefits-A Case Study of Muga in Assam. In Proceeding of a Conference on Tourism and Handicrafts: A Suitable Approach. Department of Business Administration, Tezpur University, 2015.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

International and National

P Ganguli and P Deb attended a National level IPR workshop, National Law University, Delhi, 14-15 February, 2015.

P Ganguli chaired two sessions, Licensing and Technology Transfer and National IPR Policy, 7th Global Intellectual Property Convention, Mumbai, 15-17 January, 2015.

P Ganguli chaired a session, Patent Cliffs, at a National IPR Conclave, Legal Era, Mumbai, 02 August, 2014.

P Ganguli participated in two panels at an International IP Enforcement Summit, organised by the Government of UK, London, UK, 11 June 2014.

P Ganguli presented a paper, The Issue of Working of Patents and Its Implications on Domestic Trade, Economic Development and Technology Transfer in the WIPO-WTO IP Teachers Colloquium, Geneva, Switzerland, 16-27 June, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

P Deb delivered a lecture, Innovation: the way forward for India in 21st Century, at a national workshop, Problems and Challenges in IPR, USTM, Meghalaya, 11 April, 2015.

P Ganguli acted as an invited faculty in an extended lecture programme on diverse topics in IPR. College of Law, University of South Africa (UNISA), Pretoria 01-11 March, March, 2015.

P Ganguli delivered a lecture, Healthcare in India Opportunities at a crossroads, Brussels, Belgium, 12 June 2014.

P Ganguli delivered a lecture, International Forum on Nanotechnology Economy, Tehran, Iran, 12-14 October, 2014.

P Ganguli delivered a lecture, IP Monetising From Fuzziness to marketable realities, at an International Seminar, IP, It makes Sense. Adastra and Malaysian Patent Office, Kuala Lumpur, Malaysia, 06 November, 2014.

P Ganguli delivered an invited talk, the TAA-JRD Tata Public Lecture, TIFR Alumni Association, TIFR, Mumbai, 30 October, 2014.

Suchibrata Goswami delivered a lecture, Copyright Protection in India and Abroad, at a national workshop, Intellectual Property Rights Awareness. National Institute of Electronics and Information Technology (NIELIT), Itanagar, 08 March, 2015.

Suchibrata Goswami delivered a lecture, Introduction to Intellectual Property Rights at a national workshop, Problems and Challenges in IPR, USTM, Meghalaya, by 11 April, 2015.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

National Workshop, Patent Search and Analysis, sponsored by MHED, GOI, Tezpur University, 6 September, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

C G Naidu, Asstt. Registrar of Trade Mark, Office of Geographical Indications, Chennai

YD Panwar, Director, TIFAC, DST, Delhi.

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

P Ganguli awarded, the Lifetime Achievement Award in IPR, by the legal fraternity under the banner of LEGAL ERA in India at the National IPR Conclave, 2 August, 2014.

P Ganguli awarded, the TAA Excellence Award 2014, on the occasion of Professor Homi Bhabha's Birthday Celebrations and TIFR Foundation Day, TIFR Alumni Association (TAA), 30 October, 2014.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Innovation

IPR Cell provides technical support in filling the intellectual property generated from various research outcomes of Tezpur University. Process of filling Patent and Copyright applications in Indian Patent/copyright Offices are done through IPR Cell. During the year 2014-15, following applications were processed from the Cell:

P. Deb, Software Copyright on Kinlac-programme for Kinetic analysis of Solid State Process (granted)

P. Deb, Software Copyright on MaxQ-programme for Microstructural study of Nano Materials from X-ray Diffraction Pattern Analysis (granted)

One software copyright has been applied.

Two patent applications have been processed for filing.

Outreach programme

Regional Workshop, Effective use of Geographical Indication status for community benefit of stakeholders of Muga Silk, sponsored by MHRD, GOI, N.L. College, Lakhimpur, 17 March, 2015.

Regional Workshop, Protection of Traditional Product Names in the North East Region using Geographical indications: Its importance in enhancing business and promoting Regional Art and Craft, sponsored by NEDFi and MHRD, NEDFi House, Guwahati, Assam, 09 January, 2015.

Contribution of the Centre to the society

The Cell, under its ongoing project Muga GI, processed 94 (ninety four) applications of Authorized Users to the GI office, Chennai. This progress was a significant hike against 19 applications processed between 2007 to 2014 under the supervision of the Registered Proprietor of GI-Muga Silk of Assam, ASTEC, Guwahati. Soon these applicants will be bona fide users to use both the GI and the logo for muga silk. Not having sufficient amount of authorized users was one of the reasons of slow progress of the GI within the state, as identified during the project. The endeavor of the Cell towards the distinctive product of Assam got special mention in The Hindu dated 9 June, 2015.



THE FACULTY OF THE CELL

MHRD IPR Chair Professor

P Ganguli, PhD (TIFR Mumbai)

Specialization/Areas of Interest: Chemistry, All the areas of IPRs, including Patent.

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Coordinator

P Deb, PhD (Jadavpur)

Specialization/Areas of Interest: Nanoscience

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THE STUFF OF THE CELL

Research Officers

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Specialization/Areas of Interest: Copyright, Trademark and Traditional Knowledge and IPR

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Project Fellow

A Hussain, MBA (Tezpur)

Office Staff

M Das

MTS





School of Sciences

- Dean, School of Sciences
- Dept of Chemical Sciences
- Dept of Environmental Sciences
- Dept of Mathematical Sciences
- Dept of Molecular Biology and Biotechnology
- Dept of Physics
- DBT Nodal Centre



THE SCHOOL OF SCIENCES

The School of Sciences of the University comprises five departments, namely, Departments of Chemical Sciences, Environmental Sciences, Mathematical Sciences, Molecular Biology and Biotechnology (MBBT), and Physics. The Departments under the school offer 14 different MTech, MSc, Integrated MSc and Integrated BScBEd programmes besides the PhD programme in each department. All five departments offer MSc and PhD-programmes in their respective discipline. Departments of Chemical Sciences, Mathematical Sciences, MBBT and Physics also offer Integrated MSc programmes with an intake of 20 each. Three Departments, namely, Chemical Sciences, Mathematical Sciences and Physics also offer Integrated BSc BEd programmes. The Department of Chemical Sciences also offers MTech programme in Polymer Science and Technology, and Department of Physics offers MSc programme in Nanoscience and Technology. The faculty members and the technical staff of all the five Departments in the School also support the teaching and laboratory courses of the first two semesters of BTech programmes offered by the School of Engineering. The total intake of students on all 14 non-PhD programmes currently running in the School is 282 in addition to an intake of 13 on the Self Supporting Scheme.

The total faculty strength of the School is 81, which includes 23 Professors, 20 Associate Professors and 38 Assistant Professors. In addition, the Bharat Ratna Gopinath Bordoloi Chair is also presently with the School. The Chair is currently occupied by Padma Shri Prof RS Sirohi, former Director, IIT Delhi.

The faculty members of the five Departments in the School of Sciences are engaged in cutting-edge research in their respective areas. They have made several significant research contributions during 2014-2015. The Departments of Chemical Sciences, Physics and MBBT have got UGC research grant under SAP-DRS-II. The faculty members of the School brought projects funded by different funding agencies of a total grant to the tune of Rs. 349.06 lakhs. Two faculty members of the Department of MBBT have got projects grants above 100.00 lakhs each from DBT.

The faculty members of five departments in the School published 319 research papers in peer-reviewed journals during 2014-2015. The Department of Chemical Sciences published 158 research papers; MBBT 67; Physics 48; Mathematics 38 and Environment Sciences 8. Prof A K Mukherjee of the Department of Molecular Biology and Biotechnology received the prestigious National Bioscience Award (2013), DBT, Govt. of India, and the prestigious Seenivasaya Memorial Award (2014), Society of Biological Chemist (India), for his outstanding research contributions in the field of Biochemistry. Prof N Karakwas awarded the Ninth Foundation Polymer Award (2014), Sukumar Maiti Foundation. Dr A Phukan received the Bronze Medal (2015), Chemical Research Society of India (CRSI).

Dr Nabanita Saikia of the Department of Chemical Sciences got a postdoctoral fellowship, Ohio, USA; Dr Anindita Dewan of the same Department was awarded the Dr D S Kothari postdoctoral fellowship of UGC in 2015. Mr Manjil Pratim Saikia, who passed Integrated MSc in Mathematical Sciences in 2014 (first batch) was selected for an Advanced Diploma in Mathematics, ICTP, Italy.

In 2015, 16 students passed NET; 30 students SLET; 24 students GATE competitive examinations.

The Departments under the School regularly keep organizing conferences/workshops. During the period the Department of MBBT of the School organized 8 national and international conferences and workshops while the Departments of Chemical Sciences, Physics and Mathematical Sciences organized four such conferences each.

Dean, School of Sciences

Professor A Kumar, PhD (IIT Kanpur)

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THE STAFF OF THE OFFICE OF THE DEAN

D Bania

MTS



DEPARTMENT OF CHEMICAL SCIENCES

THE DEPARTMENT

The Department of Chemical Sciences was established in the year 1997 with the prime objective of creating manpower in different areas of Chemical Sciences. Initially, the Department offered an MSc programme in Polymer Science. The Department started Integrated MSc in Chemistry programme in 2009, and MSc in Chemical Sciences in 2010. Since autumn 2011, the Department has been offering MTech in Polymer Science & Technology and Integrated BSc BEd in Chemistry. The Department has also been running a PhD programme covering several important areas of research in Chemical Sciences. The Department has eighteen well-experienced (both in academy and industry) and highly qualified faculty members who are actively engaged in research in various fields of Chemical Sciences. During the last five years, the faculty of the Department has published more than 200 high quality publications in peer reviewed international journals and successfully completed more than 20 major research projects. The Department is well equipped with sophisticated equipment. The alumni of the Department are well placed in different industries, R&D organizations and other prestigious institutes in India and abroad.

ACADEMIC PROGRAMMES

- MSc in Chemistry
- Integrated MSc in Chemistry
- MTech in Polymer Science and Technology
- Integrated BSc-BEd. In Chemistry
- PhD

STUDENT INTAKE

Programme	Student Intake
MSc in Chemistry	20
Integrated MSc in Chemistry	20
MTech in Polymer Science & Technology	10
Integrated BSc-BEd In Chemistry	10
PhD	Intake variable, 18

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- 400 MHz NMR spectrophotometer, Jeol
- GCMS, PerkinElmer
- Thermal Analyzer, (Model TGA-50 & DSC-60, Shimadzu (FIST Funded)
- CHN Analyzer, Model PR 2400 Series II Perkin Elmer (FIST Funded)
- FTIR spectrophotometer, Model: Nicolet Impact I-410
- FTIR spectrophotometer, PerkinElmer
- Automated Compression Press, S5 Type, Santac
- Polarizing Microscope, Olympus, M B201
- UV-Visible Spectrophotometer, Shimadzu, UV-2550 Model Carry 100 Bio
- Universal Testing Machine, 10 KN Zwick
- Rheometer, Bohlin Instruments
- Microwave reactor
- High performance computational facilities



- Digital Polarimeter
- Millipore Water Purification System
- Table Top Magnetometer
- Single Screw Laboratory Extruder
- Cyclic Voltameter

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
RK Dutta	<ul style="list-style-type: none"> • A fluoride removal method known as 'Fluoride Nilogon' and an arsenic removal method known as 'ArsironNilogon' have been developed. • User trials have been carried out for the respective methods in fluoride and arsenic affected villages of various districts of Assam.
N Karak	<ul style="list-style-type: none"> • Hyperbranched waterborne polyurethane and its nanocomposites have been developed for advanced coating application. • Carbon dots as water soluble nanomaterials have been developed as fluorescent materials. • Sunflower oil based hyperbranched polyurethane/protein modified MWCNT nanocomposite has been developed as a bone tissue engineering scaffold material. • Castor oil based hyperbranched polyurethane/RGO-TiO₂ nanocomposites have been developed as smart self-healing materials.
TK Maji	<ul style="list-style-type: none"> • Plant extract encapsulated phosphorylated chitosan-montmorillonite nanoparticles were prepared and characterized. • FITC tagged aminated starch coated iron oxide nanoparticles loaded with curcumin were prepared and assessed in terms of release behavior, cytotoxicity, cellular uptake and ROS studies etc. in human cancer cell lines.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Improving Drug Properties by Cocrystal Technology	UGC-BSR	6.0 Lakh	2013-15	B Sarma
Rational strategies to build nano-magnets	DST	24.5 Lakh	2013-16	N Gogoi
Development of exchange biased {3d-4d/5d} assemblies: A rational route towards high Tb nanomagnets	CSIR	12.42 Lakh	2014-17	N Gogoi
Hyperbranched Epoxy Nanohybrids Immobilized Natural Biocide for Advanced Marine Coating	NRB	38.00 Lakh	2012-15	N Karak
Development of multifunctional dendritic polymers for injectable bone tissue engineering	DBT	64.00 Lakh	2012-15	N Karak
Studies on green polymeric nanocomposites for development of insect repellent formulations.	DRL	9.55 Lakh	2011-14	N Karak
Magnetic nanoparticles decorated biodegradable polyurethane MWCNT nanocomposites as shape memory material	DST	38.00 Lakh	2010-13	N Karak

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Preparation and characterization of peroxo-metal compounds and studies on their biological significance in cellular signaling(Collaboration with Centre for DNA Finger Printing and Diagnostics (CDFD), Hyderabad)	DBT	70.50 Lakh	2011-15	Nashreen S Islam
Design of non-precious cobalt oxide based electrocatalysts	CSIR	6.0 Lakh	2014-16	P Bharali
Synthesis, characterization and application of novel solid base green catalysts for nucleophilic addition reactions	DST	30.30 Lakh	2014-17	R C Deka
Hybrid Quantum Mechanics / Molecular Mechanics Calculation on Palladium Supported TiO ₂ for CO Oxidation	DST-UKIERI	31.25 Lakh	2013-15	R C Deka
Popularization of an integrated Arsenic and iron removal method,'ArsironNilogon' at the Arsenic affected rural areas of Assam	NCSTC, DST	9.42 Lakh	2014-16	R K Dutta
Computational Studies of Bare and Zeolite-Supported Metal Nanoclusters and their Application in Catalysis	DST	53.00 Lakh	2013-16	R C Deka
Investigation of one pot synthesis of acridine derivatives using greener approach	CSIR	17.00 Lakh	2012-15	Ruli Borah
Asymmetric Syntheses of New Classes of Unnatural ?-Amino Acid Derivatives	DST	24.8 Lakh	2014-17	S K Das
Asymmetric Synthesis of Benzo-Annulated Oxa-Heterocycles via Lewis Acid and Transition Metal-Catalyst-Free Intramolecular Aziridine Ring-Opening	UGC	6.0 Lakh	2014-16	S K Das
Graphene/ graphene oxide based polymer nanocomposite as biosensor and super capacitor	CSIR	15.00 Lakh	2012-15	S K Dolui
Development of stimuli responsive polymeric hydrogel and their application	DRDO	28.29 Lakh	2012-15	S K Dolui
Development of polymer nano composite based photovoltaic device	DIT	92.00 Lakh	2013-16	S K Dolui
Development of natural polymeric system for controlled delivery of Anticancer agents	CSIR	10.92 Lakh	2011-15	T K Maji
Development of Bio Nano Composite for removal of contaminants from water	DRL	9.57 Lakh	2011-15	T K Maji

PUBLICATIONS

In International and National Journals

Assanvo, E. F., Gogoi, P., Dolui, S. K. and Baruah, S. D. Synthesis, characterization, and performance characteristics of alkyd resins based on Ricinodendronheudelotii oil and their blending with epoxy resins, Industrial Crops and Products, 65, 293-302, 2015.



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BOOKS AND BOOK CHAPTERS

Borah, J. and Karak, N. 2014. Dendrimers and hyperbranched polymers- A new dimension of polymer sciences. In Tiwari, A. and Demir, M. M. (eds). *Advanced Materials: A book series*. USA: Wiley-Scrivener Publishing.

Bordoloi, S., Gogoi, S. and Dutta, R. K. 2015. A low-cost arsenic removal method for application in the Brahmaputra -Ganga plains: Arsiron Nilogon. In Ramnathan, A. L., Johnston, S., Mukharjee, A. and Nath, B. (eds). *Safe and sustainable use of arsenic-contaminated aquifers in the Gangatic Plains: A Multidisciplinary approach*. Switzerland: Springer and New Delhi: Capital.

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SEMINARS/CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

RK Dutta attended the National Conference on Frontiers at the Chemistry-Allied Sciences Interface, University of Rajasthan, Jaipur, India, 13-14 March, 2015.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Four popular lectures, Quantum chemistry and computational chemistry, delivered by Dr Sourav Pal, Director, National Chemical Laboratory, November 20-22, 2014.

A talk, Basics and applications of X-Ray crystallography, delivered by Dr (Mrs.) Vedawati G Puranik, Scientist, National Chemical Laboratory, Pune, November 23, 2014 to December 05, 2015.

Popular lecture, Theoretical Chemistry, delivered by Prof K L Sebastain, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore, March 18, 2015.

Two lectures, Science and Scientists, and Photochemistry in a Capsule, delivered by Prof V Ramamurthy, University of Miami and Senior Editor of the journal, *Langmuir* (ACS Publications), March 25-26, 2015.

TALKS BY THE FACULTY ABROAD AND IN INDIA

N Karak delivered an invited talk, Biodegradable Hyperbranched Polymer Nanocomposites for Biomedical Applications, QIP short term course on Advances in Biomedical Engineering, IIT Guwahati, February 25 – March 01, 2015.

N Karak delivered an invited talk, Bio-based hyperbranched polymeric nanocomposites for multifaceted advanced applications, National seminar on Multifunctional Polymer Materials (Poly-2014), Viva-Bharati, Santiniketan, February 14, 2015.

N Karak delivered an invited talk, Bio-based hyperbranched poly(ester amide) nanocomposites: Advanced multifaceted materials, International symposium on Polymer Science and Technology (MACRO2015), IACS, Kolkata, January 23-26, 2015.

N Karak delivered an invited talk, Bio-based industrially important hyperbranched polymeric nanocomposites as sustainable advanced materials, National symposium on Advances in sustainable polymers (ASP-2015), IIT Guwahati, January 21-22, 2015.

N Karak delivered an invited talk, Material research on bio-based hyperbranched polymers, nanomaterials and nanocomposites, Continuing Education Program (CEP-2014), DRL, Tezpur, November 10-14, 2015.

N Karak delivered an invited talk, Emerging trend in material research on vegetable oil based hyperbranched polymer nanocomposites for multifaceted applications, National Conference on Recent Trends in Chemical, Environmental and Material Sciences (CEMS-2014), Punjab University, Chandigarh, October 15, 2014.

N Karak delivered an invited talk, Nano composites, smart polymers and their properties, Workshop on Testing and Quality Control of Plastic Products, CIPET, Guwahati, March 10-21, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr G Narahari Sastry, Scientist, Indian Institute of Chemical Technology (IICT), Hyderabad

Dr Kalyan Raidongia, Northwestern University, USA

Prof KL Sebastian, IISc, Bangalore

Dr Prasanta Das, National Chiao Tung University, Taiwan

Prof V Ramamurthy, University of Miami, USA

Dr (Mrs) Vedawati G Puranik, National Chemical Laboratory, Pune

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

FACULTY MEMBERS

A Phukan was awarded Bronze Medal, Chemical Research Society of India (CRSI), (2015).

B C Sarma was elected Executive Council Member of National Magnetic Resonance Society (NMRS) India (2014)

N Karak received the Ninth foundation Polymer Award by Sukumar Maiti Foundation (2014).

P Bharali, B. C. Sarma, S. Pratihar were appointed Associate Editor of GSTF Journal of Chemical Sciences (2015)

Research Scholars/ Doctoral /Post-Doctoral fellows

Anindita Dewan awarded Dr. D. S. Kothari postdoctoral fellowship of UGC, 2015.

Ankita Hazarika awarded postdoctoral fellowship, Ulsan National Institute of Science and Technology, South Korea, 2014.

B Borthakur awarded Royal Society of Chemistry (RSC) fellowship to participate in the 9th CRSI-RSC joint symposium and the 17th CRSI National Symposium in Chemistry held at National Chemical Laboratory, Pune, 8 February, 2015.

Nabanita Saikia awarded postdoctoral fellowship, Ohio State University, Columbus, Ohio, USA.

Shreemoyee Bordoloi won First Prize in German Water Partnership (GWP) Award India 2014.



OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Department of Chemical Sciences is UGC- SAP funded. It has completed DRS Phase-I and UGC has approved for DRS Phase-II. The total amount sanctioned for DRS-II is Rs. 45,00,000.00 for 5 years.

The Department of Chemical Sciences is DST- FIST funded (2010-2015). The total amount sanctioned is Rs. 58,00,000.00 for 5 years [Sanction Order No.& Date- SR/FST/CSI-203/2009/1 Dtd. 06/05/2010].

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE[2014-2015]

NET:05

GATE: 07

SLET: 06

NOTABLE PLACEMENT[2014-2015]

03 (at BCPL, Dibrugarh)

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DEPARTMENT OF ENVIRONMENTAL SCIENCE

THE DEPARTMENT

The Department of Environmental Science, which was initially a Centre, was established in 2004 with the prime objective of imparting education on regional and global environmental issues. The flagship programme of the Department, i.e., the MSc Programme, has been emphatically focusing on contemporary problems of natural resource conservation and environmental quality. On the other hand, Environmental pollution, Greenhouse gas emission, Riverine hazards, Climate, Geomorphology, Atmospheric processes, Vulnerability & Adaption, Hydrogeochemistry, Vermicomposting, Pollution remediation and Biodiversity conservation have been the major thrust areas of research in both the Masters and PhD programmes.

ACADEMIC PROGRAMMES

- MSc in Environmental Science
- PhD

STUDENT INTAKE

Programme	Student Intake
MSc in Environmental Science	30
PhD	Intake variable, 16

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

FACILITIES

The Department has a sophisticated instrumentation laboratory to facilitate research and other academic activities. The laboratory has the following equipments: ICP-OES, Laser Leaf Area Meter with Root Measurement Attachment, Light Meter, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler and Flame Photometer, GIS laboratory and plant culture house.

- ICP
- Gas Chromatograph with ECD& FID Detector
- Gas Chromatograph with ECD& FID Detector
- Portable Photosynthesis system
- Laser leaf area meter with root measurement Attachment
- High Speed Refrigerated Centrifuge
- HOBO Pro V2 Tea/RH data logger
- Respirable dust sampler with gaseous sampling attachment
- UV-Visible spectrophotometer
- Electrophoresis gel unit
- Flame photometer
- Nephelometer
- Trinocular Microscope with Camera & Software
- Sartorius RO System
- Sartorius Ultra Pure Water Purification System
- REMI Centrifuge
- Arc GIS Master Lab Kit (Software)
- ERDAS Software



MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
A K Das	<ul style="list-style-type: none"> Channel changes in Ai-Manas river system during the last three decades are characterized by neck cut off and channel length reduction in downstream reaches and gradual widening in the upper reaches. Meandering shift and frequent alternation in direction are common too. In terms of floodplain alternation, deposition is dominant over erosion during last three decades.
Ashalata Devi	<ul style="list-style-type: none"> Analysis of plant diversity in the four typical forests of Assam reveals high species diversity under threat. One of the forests (Kumarakota Reserve Forests) is highly disturbed, quantified based on disturbance score values. New distribution record of <i>Macacamunzala</i> in high altitudes of Tawang and West Kameng of Arunachal Pradesh.
K KBaruah	<ul style="list-style-type: none"> During a 3 year study on monsoon rice ecosystem, it is found that this ecosystem can act as an effective sink of carbon with an overall SOC accumulation rate of 0.566 Mg C ha⁻¹ yr⁻¹. Bahadur and Dinanath were identified to have high photosynthetic efficiency and high partitioning efficiency out of 06 genotypes of irrigated boro rice studied, and these two varieties are also identified to be low methane emitting rice variety A modern wheat variety, WH-1021 with higher yield and higher photosynthetic efficiency was identified, out of 07 wheat varieties grown under irrigated condition and is considered to be suitable for cultivation in future climate change situation in Indian agriculture.
K P Sarma	<ul style="list-style-type: none"> Identified a wetland plant of Assam for remediation of Arsenic from aqueous solution
M Kumar	<ul style="list-style-type: none"> Arsenic and Fluoride contaminations are reported in the Brahmaputra flood plains however correlation is weak between the two and hot spots are different. Mostly metals are found in residual fractions with the maximum probability of Pb to be leached down to the groundwater and thus enter in food chain through drinking water. Five districts of Assam and four districts of Bihar were evaluated for arsenic contamination in different seasons and geochemical mechanism of arsenic release was evaluated and health risks were calculated.
S Mitra	<ul style="list-style-type: none"> Alkali metals Na and K are present in the ginger growing soils of northeast India in very high amount than that of alkaline earth metals Ca and Mg. Among the micronutrients concentration, Mn is higher in all the soils than all other elements. Chromosome number of some species of <i>Kaempferia</i> and <i>Hedychium</i> is a new count. The ploidy determination has been done for the first time for many species and does not show any polyploidy.
S S Bhattacharya	<ul style="list-style-type: none"> Vermicomposting efficiency of <i>Metaphireposthuma</i> has been established. Moreover, metal remediation potential of vermitechnology has been explored mechanistically. Application of vermicomposted MSW could substitute 20% chemical fertilizer without compromising the yield potential of both boro and sali rice. 7 bacterial isolates from vermicompost and 2 from the intestinal gut of <i>Eiseniafetida</i> (earthworm) have been identified for their prolific N fixing and P solubilizing potential.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Hydro-geomorphic characterization of Manas- Aie and Gaurang river basins- A base line study of geomorphic response to observed precipitation change over Indian region	DST-SERB	24.60 Lakh	2013-2016	A K Das
Exploration, utilization, conservation and documentation of Alliumspecies in northeastern India	UGC	10.89 Lakh	2011-2014	Ashalata Devi
Studies on distribution, behavioural ecology, habitat structure and conservation of newly discovered Arunachal macaque (Macacamunzala) in western Arunachal Pradesh India	DST	23.98Lakh	2011-2014	Ashalata Devi
Documentation, collection and preservation of biodiversity of Tezpur University	Tezpur University	2.15 Lakh	2014-2016	Ashalata Devi
Sacred groves of Assam: Biodiversity status and strategies for their conservation	GBPIHED	9.96 Lakh	2014-2017	Ashalata Devi
Evaluation of Carbon Sequestration and enhancing carbon sinks in rice based agro-ecosystems of Assam	DST	62.42 Lakh	2012-2015	KKBaruah
Soil plant atmospheric study in relation to the CO ₂ flux from terrestrial ecosystem of Assam	Ministry of Earth Science	54.89 Lakh	2013-2016	KKBaruah
Distribution and enrichment of heavy metals among sediments, water and aquatic plants and modeling of ecological impact on wetland ecosystem of the Brahmaputra valley	UGC	8.32 Lakh	2012-2015	KP Sarma
Spatial Distribution of uranium and associated water quality parameters in six districts of Assam (Sonitpur, Lakhimpur, Morigaon, Nagaon, Jorhat, Sibsagar)	Department of Atomic Energy	24.56 Lakh	2014-2017	KP Sarma
Hydro-Geochemical Investigation ofarsenic-contaminated alluvial aquifers of India through multilayer Samplingand evaluations of Applicable Remediation Technique.	DST Fast Track Scheme	23.65 Lakh	2012-2015	M Kumar
Tracing source and distribution of heavy metals in the sediment and water of the Brahmaputra River through coupling of speciation and isotopic fingerprinting	UGC	10.6 Lakh	2012-2015	M Kumar
Understanding of arsenic phase distribution and co-contamination perspective with fluoride in the Brahmaputra flood plains	DST-SERB	25.0 Lakh	2014-2017	M Kumar
Physiochemical characterization of aerosol and source apportionment in mid Brahmaputra plain in Assam; A modeling approach.	Ministry of Earth Sciences	69.7 Lakh	2011-2015	RRHoque
Spatial and Temporal variation of aerosol optical death (AOD) on Mid Brahmaputra valley	UGC	10.10 Lakh	2013-2016	RRHoque
Modelling Atmospheric Pollution and Networking (MAPAN)	Director IITM	20.32 Lakh	2013-2017	RRHoque



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Molecular and Physico-Chemical Characterization of Selected Ginger Species from North-Eastern Region	DBT - Twining	14.7 Lakh	2011-2015	S Mitra
Sustainable utilization of solid waste as a source of plant nutrient in rice based agro-ecosystem of North East India	CSIR	14.80 lakh	2011-2014	S S Bhattacharya
Qualitative development of vermicompost technology through isolation of novel microorganisms and their application in agricultural waste management of Assam	DBT	64.84 Lakh	2012-2015	S S Bhattacharya

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Baroowa, B., and Gogoi, N. Biochemical changes in black gram and green gram genotypes after imposition of drought stress, *Journal of Food Legumes*, 27(4), 2015.

Baruah, S., Borgohain, J., and Sarma, K.P. Phytoremediation of Arsenic by Trapanatans in a Hydroponic System. *Water Environment Research*, 86(5), 2014.

Basak, S. Ramesh, A. M., Kesari, V., Parida, A., Mitra, S., and Rangan, L. Genetic diversity and relationship of *Hedychium* from Northeast India as dissected using PCA analysis and hierarchical clustering, *Meta Gene*, 2, 2014.

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Borah, M., and Devi, A. Phenology, growth and survival of *Vaticalanceaefolia* Bl.: A critically endangered tree species in a moist tropical forest of Northeast, India, *Tropical Plant Research*, 1(3), 2014.

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Daimari, R., Hazarika, N., Hoque, R.R., Nayaka, S., and Upreti, D.P. New Records of Epiphytic Lichens from Three Districts Of Assam, India. *Indian Forester*, 140(8), 2014.

Das, S., Bora, J., Goswami, L., Bhattacharyya, P., Raul, P., Kumar, M., and Bhattacharya, S.S. Vermiremediation of water treatment plant sludge employing *Metaphireposthuma*: A soil quality and metal solubility prediction approach, *Ecological Engineering*, 81, 2015.

Das, A., and Kumar, M. Arsenic enrichment in the groundwater of Diphu, Northeast India: Coupled application of major ion chemistry, speciation modeling and multivariate statistical techniques, *CLEAN - Soil, Air, Water*, 2014, [accepted].

Das, P., Kumar, M., and Sarma, K.P. Speciation of heavy metals in surface sediments of the Brahmaputra River, Assam, *Journal of Environmental Research and Development*, 01(12), 2015.

Das, P., Sarma, K.P., and Kumar, M. Understanding of chemical speciation of lead, zinc and copper in vertical profile of the sediments of the Brahmaputra River Assam, India, *Asian Journal of Water Environment and Pollution*, 12(1), 2015.

Das, P., Sarma, K.P., and Kumar, M. Understanding of chemical speciation of lead, zinc and copper in vertical profile of the sediments of the Brahmaputra river, Assam, India, *Asian Journal of Water, Environment and Pollution*, 12, 2015.

- Deka, P., and Hoque, R.R. Chemical characterization of biomass fuel smoke particles of rural kitchens of South Asia, *Atmospheric Environment*, 108, 2015.
- Deka, J.P., Baruah, B., Singh, S., Chaudhury, R., Prakash, A., Bhattacharyya, P., Selvan, M. T., and Kumar, M. Tracing phosphorous distributions in the surficial sediments of two eastern Himalayan high altitude lakes through sequential extraction, multivariate and HYSPLIT back trajectory analyses, *Environmental Earth Sciences*, 73(11), 2015.
- Deka, P., and Hoque, R.R. Incremental effect of festive biomass burning on wintertime PM₁₀ in Brahmaputra Valley of Northeast India. *Atmospheric Research*, 143, 2014.
- Deka, P., and Hoque, R.R. Diwali firework: early signs of impact on PM₁₀ of rural Brahmaputra valley. *Aerosol and Air Quality Research*, 14(6), 2014.
- Devi, A., Rakshit, K., and Sarania, B., Adi, Apatani, Monpa and Nyishi Community, Ethnobotanical notes on Allium species of Arunachal Pradesh, India, *Indian Journal of Traditional Knowledge*, 13(3), 2014
- Devi, U., Hoque, R.R., and Sarma, K.P. Accumulation of trace metals in soil and trees by the highway passing through an ecological heritage area, *Journal of Environmental Research and Development*, 9, 2015.
- Dutta, G., and Devi, A. Phenology and population structure of six tree species in tropical forest of Assam, northeast India, *Tropical Ecology*, 56(3), 2015.
- Dutta, G., and Devi, A. Impact of lopping on tree species of tropical Indian forests, *Tropical Plant Research*, 2(1), 2015
- Gogoi, A., Bose, S., Bora, J., Bhattacharya, S., and Kumar, M. Effect of vermicomposting on copper and zinc removal in activated sludge with special emphasis on temporal variation, *Ecohydrology & Hydrobiology*, 2014 [In press].
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- Goswami, L., Sarkar, S., Mukherjee, S., Das, S., Barman, S., Raul, P., Bhattacharyya, P., Mandal, N.C., Bhattacharya, S., and Bhattacharya, S.S. Vermicomposting of Tea Factory Coal Ash: Metal accumulation and metallothionein response in Eisenia fetida (Savigny) and Lampitoma uritii (Kinberg). *Bioresource Technology* 166, 2014.
- Handique, S., and Senapati, N. Grain size and texture determination of the Brahmaputra River and 6 of its tributaries. *Geochemistry International*, 2014, [Accepted].
- Hazarika, N., Das, A. K., and Borah, S.B. Assessing land-use changes driven by river dynamics in chronically flood affected Upper Brahmaputra plains, India using RS-GIS techniques, *Egyptian Journal of Remote Sensing and Space Sciences*, 18(1), 2015.
- Hazarika, N. and Das A. K. Process dynamics and controls in two partially-confined rivers of upper Brahmaputra plain. *International journal of Geomatics and Geoscience*, 5(1), 2014.
- Hussain, K., and Hoque, R. R. Seasonal attributes of Urban Soil PAHs of the Brahmaputra Valley, *Chemosphere*, 119, 2015
- Hussain, K., Rajbongshi, R., and Hoque R.R. Understanding Levels and Sources of PAHs in Water of Bharalu Tributary of the Brahmaputra River. *Asian Journal of Water, Environment and Pollution*, 11, 2014.
- Krishan, G., Rao, M.S., Kumar, B., Kumar, C.P., Kumar, S., Jaiswal, R.K., Rao, Y.R.S., Tripathi, S., Garg, P.K., Kumar, M., and Kumar, P. Monitoring of Southwest Monsoon Using Isotope Analysis of Ground Level Vapour (Glv) in Indian Sub-Continent, *Earth Science & Climatic Change*, 5(8), 2014.
- Krishan, G., Rao, M.S., Kumar, C.P., Kumar, M., and Kumar, B. Investigation of geospatial effects on moisture dynamics in Tezpur (Assam) and Roorkee (Uttarakhand) through isotopes observations, *IWRA(India) Journal*, 3(2), 2014.



Kumar, M., Singh, G., Chaminda, T., Quan, P. V., and Kuroda, K. Emerging Water Quality Problems in Developing Countries (Editorial), *The Scientific World Journal*, 2014, 2014.

Kumar, A., Sarma, K., Panvor, J., Mazumdar, K., Devi, A., Krishna, M. and Ray, P. C. Threats to the Bengal slow loris *Nycticebus bengalensis* in and around Itanagar Wildlife Sanctuary, Arunachal Pradesh, India: impediments to conservation. *Endangered Species Research*, 23(2), 2014.

Pandey, A.K., Singh, S., Berwal, S., Kumar, D., Pandey, P., Prakash, A., Lodhi, N., Maithani, M., Jain, V. K., and Kumar, K. Temporal variations of Urban Heat Island over Delhi. *Urban Climate*, 10, 2014.

Paul, S., Gogoi, N., Sharma, B., and Baroowa, B. Biochemical changes in potato under elevated temperature-*Indian Journal of Plant Physiology*, 19(1), 2014.

Prabha, S., Ramanathan, A.L., Gogoi, A., Das, P., Deka, J.P., Tyagi, V. and Kumar, M. Suitability of conventional and membrane bioreactor system in textile mill effluent treatment, *Desalination and Water Treatment*, 2014, [accepted].

Punia, M., Nain, S., Kumar, A., Singh, B. P., Prakash, A., Kumar, K., and Jain, V. K. Analysis of temperature variability over north-west part of India for the period 1970 - 2000. *Natural Hazards*, 75, 2015.

Punia, M., Nain, S., Kumar, A., Singh, B.P., Prakash, A., Kumar, K. and Jain, V. K. Analysis of temperature variability over north-west part of India for the period 1970–2000. *Natural Hazards*, 75(1), 2014.

Sah, R.K., and Das, A.K. Drainage skeletization from flow-accumulated area without the use of threshold, *Geocarto International*, [accepted].

Sahariah, B., Goswami, L., Kim, K.H., Bhattacharyya, P., and Bhattacharya, S. S. Metal remediation and biodegradation potential of earthworm species on municipal solid waste: A parallel analysis between *Metaphireposthuma* and *Eiseniafetida*, *Bioresource Technology*, 180, 2015.

Sahariah, B., Sinha, I., Sharma, P., Goswami, L., Bhattacharyya, P., Gogoi, N., and Bhattacharya, S.S. Efficacy of bioconversion of paper mill bamboo sludge and lime waste by composting and vermiconversion technologies-*Chemosphere*, 109(8), 2014.

Saikia, P., Bhattacharya, S.S., and Baruah, K.K. Organic substitution in fertilizer schedule: Impacts on soil health, photosynthetic efficiency, yield and assimilation in wheat grown in alluvial soil. *Agriculture, Ecosystem & Environment*, 203, 2015.

Saikia, P., and Baruah, K.K. Carbon fixation, partitioning and storage in field plant with wheat at different moisture regimes. *Climate Change and Environmental Sustainability*, 2(1), 2014.

Sarkar, M., and Devi, A. Assessment of diversity, population structure and regeneration status of tree species in Hollongapar Gibbon Wildlife Sanctuary, Assam, Northeast India, *Tropical Plant Research*, 1(2), 2014.

Sarma, B., and Gogoi, N. Germination and seedling growth of Okra (*Abelmoschus esculentus* L.) as influenced by organic amendments, *Cogent Food and Agriculture*, 1:1030906, 2015.

Sarma, B., Devi, P., Gogoi, N., and Devi, Y.M. Effects of cobalt induced stress on *Triticum aestivum* L. crop, *Asian Journal of Agricultural Biology*, 2(2), 2014.

Sharma, P., and Sarma, K.P. In Vitro propagation of *Bambusa pallida* on commercial scale in Assam. *Environmental Research and Development*, 8(4), 2014.

Singh, P., Heikkinen, J., Ketoja, E., Nuutinen, V., Palojarvi, A., Sheehy, J., Esala, M., Mitra, S., Alakukku, L., and Regina, K. Tillage and crop residue management methods had minor effects on the stock and stabilization of topsoil carbon in a 30-year field experiment, *Science of the Total Environment*, 518–519, 2015.

CONFERENCE PROCEEDINGS

Dutta, G., and Devi, A. Inventory of floristic diversity in protected area of tropical forests of Assam, northeast India. In *Proceedings of the Second Indian Biodiversity Congress (IBC 2012)*, December 9-11, 2012,

Perspectives on Biodiversity of India, Voll, Centre for Innovation in Science and Social Action, Thiruvananthapuram, India, 2014.

Sarkar, M. and Devi, A. Tree species diversity of Gibbon Wildlife Sanctuary, Assam and its conservation perspectives. In Proceedings of the Second Indian Biodiversity Congress (IBC 2012), December 9-11, 2012, Perspectives on Biodiversity of India, Voll, Centre for Innovation in Science and Social Action, Thiruvananthapuram, India, 2014.

BOOKS AND BOOK CHAPTERS

Das, N., Khanikar, L., Shah, R., Das, A., Goswami, R., Kumar, M., and Sarma, K.P. 2015. Problem, Perspective and Challenges of Arsenic Contamination in the Groundwater of Brahmaputra Flood Plains and Barak Valley Regions of Assam, India. In Ramanathan, A. L., Johnston, S., Mukherjee, A., and Nath. B. (eds). Safe and Sustainable Use of Arsenic-Contaminated Aquifers in the Gangetic Plain: A Multidisciplinary Approach. New Delhi: Capital Publishing Company and Cham, Switzerland: Springer.

Rao, M.S., Kumar, M., and Kumar, B. 2014. Saline groundwater in the National Capital Territory Delhi: Clues to its origin and evolution. In Yamamoto, K., Furumai, H., Katayama, H., Chiemchaisri, C., Puetpaiboon, U., Visvanathan, C., and Satoh, H. (eds). Southeast Asian Water Environment. IWA Publication.

Singh, D., Prakash, A., Kumar, A., Singh, B.P., Punia, M., Sanyogita, Sharma, H., Kumar, K., and Jain, V.K. 2015. Ambient Noise Levels after CNG Implementation in Transport Sector in Delhi. In Raju N. J., Gossel W., Ramanathan A. L., and Sudhakar M. (eds). Management of Water, Energy and Bio-resources in the era of climate change: Emerging issues and challenges. Cham, Switzerland: Springer.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

INTERNATIONAL AND NATIONAL

A K Das chaired a session in an International conference, Environmental Degradation, Sustainable Development and Entrenchment of Poverty: Issues and policy implementation, CKB College, Teok, Jorhat, August 22, 2014.

A K Das presented an oral paper, Assessing wetland dynamics in Kaziranga National Park, 36 Geographers meet and International Seminar, Gauhati University, Guwahati, February 2015.

Ashalata Devi participated in a training cum workshop on Statistical package for social sciences (SPSS) organized by the Department of Sociology, Tezpur University, November 3-9, 2014.

Nirmali Gogoi participated in a training cum workshop on Statistical package for social sciences (SPSS) organized by the Department of Sociology, Tezpur University, November 3-9, 2014.

S Mitra chaired a session on Agriculture, Environment and Ecosystems in the 16th International Association for Mathematical Geosciences (IAMG) conference on Geostatistical and Geospatial Approaches Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies, New Delhi, October 17-20, 2014.

S Mitra participated in a two days training workshop, Traditional Knowledge, Socio-Economic development and Intellectual Property Rights, organized by Tezpur University, Tezpur, February 10-11, 2014.

SS Bhattacharya attended an International Conference on Environmental Biology and Ecological Modeling organized by Dept. of Zoology, Visva-Bharati University, Santiniketan, West Bengal, February 24-26, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof B N Goswami, Director, IITM, Pune, India.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

World Environment Day was observed on 5th June 2014 with a three day programme.



NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE[2014-2015]

NET:03

GATE: 01

THE FACULTY OF THE DEPARTMENT

PROFESSORS

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Specialization/Areas of Interest:Environmental Plant Physiology and Biochemistry

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ASSOCIATE PROFESSORS

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OFFICE STAFF

J Sarma, MSc (Gauhati)

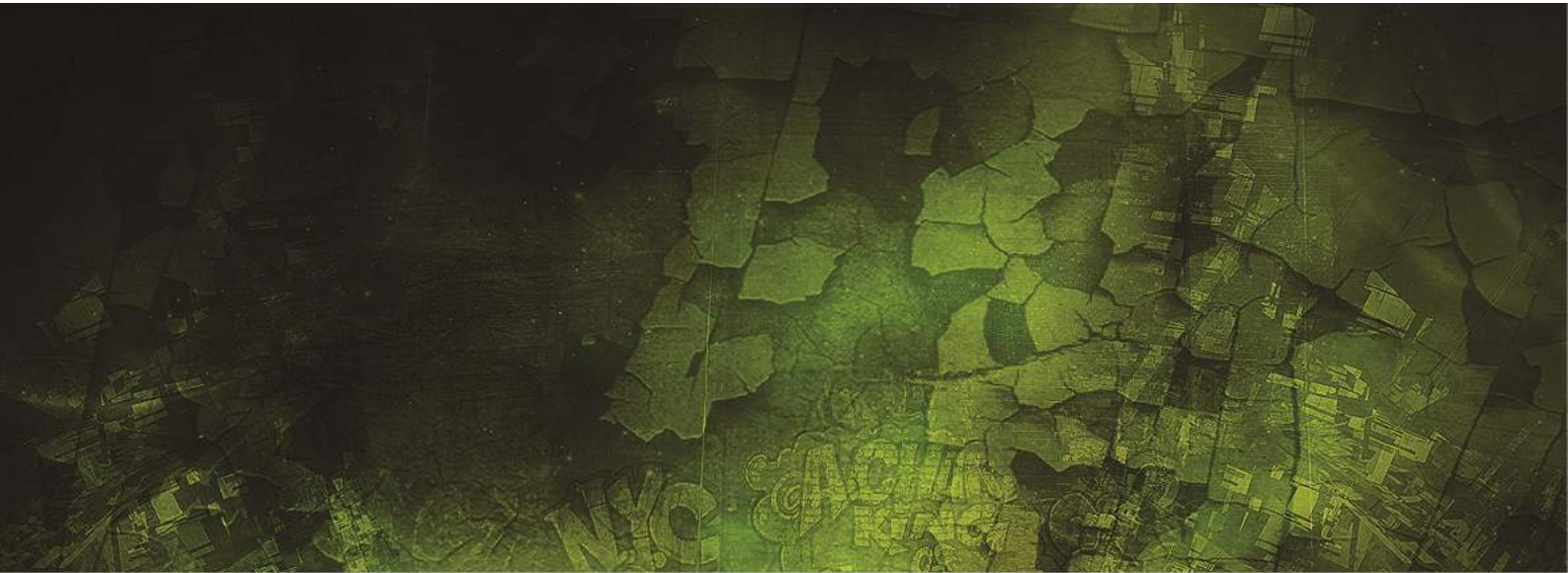
UDC

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P P Basumatary

MTS





DEPARTMENT OF MATHEMATICAL SCIENCES

THE DEPARTMENT

The Department of Mathematical Sciences was established in July 1994. Since its inception, the Department's prime objective has been to produce trained manpower capable of undertaking research and teaching in Mathematics and allied branches. It also attempts at creating trained mathematicians for industry. The Department offers at the moment a 2-year MA/MSc programme in Mathematics; a PhD programme in Mathematical Sciences; a 5-year Integrated MSc programme in Mathematics; and an integrated BSc BEd programme in Mathematics. The Department teaches Mathematics also to the students on various BTech and MTech and Integrated programmes of the University. The major doctoral research areas include Discrete Probability Distributions; Combinatorial Optimization; Number Theory and Mathematics influenced by the work of Ramanujan; Algebraic number theory, Fuzzy Mathematics; Topology and its Applications; Operator Theory and Applications; Finite Element Method, Ring Theory and Graph Theory. Some of the successful completed research projects of the Department were sponsored by DST, ISRO, CSIR, UGC, ICSSR, and DRDO and several other ongoing projects are sponsored by UGC. The Department is also being supported under UGC-SAP [Phase-I] (since 2011) and DST-FIST (since 2014).

ACADEMIC PROGRAMMES

- 5-year Integrated MSc in Mathematics
- 4-year Integrated BSc-BEd (Major in Mathematics)
- MSc in Mathematics
- PhD

STUDENT INTAKE

Programme	Student Intake
Integrated MSc in Mathematics	20
Integrated BSc BEd in Mathematics	10
MSc in Mathematics	42
PhD	Intake variable, 04

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

A computational laboratory was set up in the Department in 2005 with partial assistance from the Department of Science and Technology of the University. It has scientific and mathematical software packages. The laboratory is fully networked, and is linked to the central computer center of the University via LAN, and has access to the Internet. One Systems Analyst along with a technical assistant looks after the laboratory. The laboratory has been fully upgraded in 2015 under FIST grant of the DST.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

- Many new congruences for l -regular partitions, k -diamond partitions, k dots bracelet partitions, and singular overpartitions have been found by Prof N Deka Baruah and two of his PhD students, Z Ahmed and K Das.
- Several infinite families of arithmetic identities and congruences for bipartitions with 3-cores and 4-cores have been found by Prof N Deka Baruah and two of his PhD students, K Nath and K Das.
- Large number of new colored partition identities have been found by Prof N Deka Baruah and his student, B Boruah.



- New generating function for Generalized Frobenius partitions with 6 colors and several new results satisfied by those partitions have been found by Prof N Deka Baruah and Dr B K Sarmah.
- Theory and method of Local smoothing for kernel distribution function estimation is obtained by S Dutta. Also rates of pointwise and uniform convergence of multivariate kernel density estimators using random bandwidths are obtained by S Dutta with K Saha.
- A fourth order essentially compact (4OEC) finite difference scheme for the steady N-S equations in geometries beyond rectangular have been developed by S Sen. Also A new vorticity integral condition has been developed and implemented to compute solution of nonprimitive Navier-Stokes equations by S Sen.
- A Class of almost measure preserving maps on finite simple groups is found by R K Nath.
- Optimal error estimates for two-grid finite element for Navier-Stokes and Oldroyd model with non-smooth data are obtained by D Goswami.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Fully discrete analysis of two-level/two-grid methods for Oldroyd model with non-smooth data	UGC	6 lakh	2014-2015	D Goswami
A study of k-hyponormality and weak k-hyponormality for finite rank perturbation of weighted shift operators	UGC	1.75 lakh	2013-2014	Munmun Hazarika
Performance evaluation of some Markovian and non-Markovian queuing system with Impatience customer	UGC	6 lakh	2013-2014	Pallabi Medhi

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

- Baruah, N. D. and Ahmed, Z. Congruences modulo p^2 and p^3 for k dots bracelet partitions with $k = mp^s$, Journal of Number Theory, 151, 129 -146, 2015.
- Baruah, N. D. and Ahmed, Z. Parity results for broken 5-, 7-, and 11-diamond partitions, International Journal of Number Theory, 11, 527-542, 2015.
- Baruah, N. D. and Boruah, B. Colored partition identities conjectured by Sandon and Zanello, The Ramanujan Journal, 37 (3), 479-533, 2014.
- Baruah, N. D. and Nath, K. Infinite families of arithmetic identities and congruences for bipartitions with 3-cores, Journal of Number Theory, 149, 92--104, 2015.
- Baruah, N. D. and Ojah, K. K. Partitions with designated summands in which all parts are odd, Integers, 15 (A9), 2015.
- Baruah, N. D. and Sarmah, B. K. Generalized Frobenius partitions with 6 colors, The Ramanujan Journal, 2014.
- Baruah, N. D. and Ahmed, Z. New congruences for Andrews' singular overpartitions, International Journal of Number Theory, accepted, 2015.

- Baruah, N. D. and Das, K. Parity results for 7-regular and 23-regular partitions, *International Journal of Number Theory*, accepted, 2015.
- Borah, M. and Mahanta, D. J. Parameter Estimation of Weibull Growth Model in Forestry, *International Journal of Mathematics Trends and Technology*, 8 (3), 157-163, 2014.
- Borah, M. and Mahanta, S. A Study of Goodness-of-Fit Tests for Some Discrete Probability Distribution, *International Journal of Innovative Research in Computer Science & Technology*, 2 (3), 82-84, 2014.
- Borah, M. and Saikia, P. A Comparative Study of Parametric Models of Old-Age Mortality, *International Journal of Science and Research*, 3 (5), 40 -410, 2014.
- Choudhury, A. and Medhi, P. Customers Impatience in a Service facility with limited waiting space, *International Journal Mathematics in Operational Research*, accepted, 2015.
- Das, K. New proofs of some modular equations in the theory of signature 3, *Journal of the Indian Mathematical Society*, (accepted).
- Deka, B. and Deka, R. C. Quadrature based finite element methods for linear parabolic interface problems, *Bull. Korean Math. Soc.* 51, 717-737, 2014.
- Deka, B. and Deka, S. Zeros of trigonometric Like Functions via Two Point Boundary Value Problems, *Mathematical Forum*, accepted, 2015.
- Dutta, S. Local smoothing using the Bootstrap, *Communications in Statistics: Simulation and Computation*, 43 (2), 378-389, 2014.
- Dutta, S., Sarkar, S. and Dutta, P. Analysis of performance of Index funds using co-integration, *Global Business Review*, 16 (3), 511-523, 2015.
- Dutta, S. and Bose, A. Density estimation using bootstrap bandwidth selector, accepted for publication in *Statistics and Probability Letters*, (accepted).
- Dutta, S. Bandwidth Selection for Kernel based Interval Estimation of a Density, *Journal of Data Science*, (accepted).
- Dutta, S. and Biswas, S. Assessing Market Risk of Indian Index Funds, *Global Business Review*, (accepted).
- Dutta, S. Cross Validation Revisited, *Communications in Statistics - Simulation and Computation*, (accepted).
- Dutta, S. and Saha, K. Consistency of multivariate density estimators using random bandwidths, *Communications in Statistics - Theory and Methods*, (accepted).
- Dutta, S. and Saha, K. Pointwise and uniform convergence of multivariate kernel density estimators using random bandwidths, *Communications in Statistics - Theory and Methods*, (accepted).
- Goswami, D., Pani, A. K. and Yadav, S. Optimal L^2 estimates for semidiscrete Galerkin method applied to parabolic integro-differential equations with nonsmooth data, *ANZIAM J.*, 55, 245-266, 2014.
- Goswami, D. and Damazio, P. D. A two-grid finite element method for time-dependent incompressible Navier-Stokes equations with non-smooth initial data, *Numerical Mathematics-Theory, Methods and Applications*, accepted, 2015.
- Haloi, R. Existence of Weighted Pseudo-almost Automorphic Mild Solutions to Non-autonomous Abstract Neutral Differential Equations with Deviating Arguments, *Differential Equation and Dynamical systems*, 22 (2), 165-179, 2014.
- Haloi, R. Solutions to quasi-linear differential equations with iterated deviating arguments, *Electronic Journal of Differential Equations*, 249, 1-13, 2014.
- Haloi, R., Kumar, P. and Pandey, D. N. Sufficient conditions for the existence and uniqueness of solutions to impulsive fractional integro-differential equations with deviating arguments, *Journal of Fractional Calculus and Applications*, 5 (1), 73-84, 2014.



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Nath, R. K. A new class of almost measure preserving maps on finite simple groups. *J. Algebra Appl.*, 13, 1350142, 2014.

Nath, R. K. and Yadav, M. Some results on relative commutativity degree, *Rendiconti Del Circolo Mathematico Di Palermo*, accepted, 2015.

Sarmah, B. K. Proofs of some conjectures of Melham using Ramanujan's ψ_1 formula, *International Journal of Mathematics and Mathematical Sciences*, 738948, 2014.

Sen, S. and Kalita, J. C. Tackling Problems of Moving Boundaries Using the Biharmonic Approach, *International Journal for Computational Methods in Engineering Science & Mechanics*, 15, 309-321, 2014.

Sen, S. and Kalita, J. C. A 4OEC scheme for the biharmonic steady Navier-Stokes equations in non-rectangular domains, *Computer Physics Communications*, accepted, 2015.

Vernant, P., Bilham, R., Szeliga, W., Drupka, D., Kalita, S., Bhattacharyya, A. K., Gaur, V. K., Pelgay, P., Cattin, R. and Berthet, T. Clockwise rotation of the Brahmaputra Valley relative to India: Tectonic convergence in the eastern Himalaya, Naga Hills, and Shillong Plateau, *J. Geophysical Research: Solid Earth*, 119 (8), 6558-6571, 2014.

CONFERENCE PROCEEDINGS

Baruah, N. D. and Das, K. Bipartitions with 4-cores and sextenary quadratic forms, In *Proceedings of the Conference of RMS-2014, RMS- Lecture Notes Series, Ramanujan Mathematical Society*, 21, 27-38, 2015.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

INTERNATIONAL AND NATIONAL

B K Sarmah attended a Refresher course in Mathematics, ASC, Gauhati University, Guwahati, India, 09 February-01 March, 2015.

D Goswami attended a Compact Course on Navier-Stokes Equations for Incompressible Fluids, TIFR-CAM, Bangalore, India, 03-13 June, 2014.

R Haloi attended a Compact Course on Navier-Stokes Equations for Incompressible Fluids, TIFR-CAM, Bangalore, India, 03-13 June, 2014.

R Haloi attended an Advanced Instructional School on Theoretical and Numerical Aspects of Inverse Problems TIFR CAM, Bangalore, India, 16-28 June, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

N D Baruah delivered an invited talk, Fun with Mathematics, Army Public School, Tezpur, India, 10 May, 2014.

N D Baruah delivered an invited talk, Work and Achievement of Manjul Bhargava: Fields Medalist-2014, Department of Mathematical Sciences, Tezpur University, Tezpur, India, 6 September, 2014.

N D Baruah delivered an invited talk, Srinivasa Ramanujan, Kendriya Vidyalaya, Central University, Tezpur, India, 20 December, 2014.

N D Baruah delivered an invited talk, Srinivasa Ramanujan, National Mathematics Day celebration, Kendriya Vidyalaya, Missamari, Sonitpur, India, 22 December, 2014.

N D Baruah delivered a series of four lectures on Number Theory, Refresher Course in Mathematics for Col-lege/University teachers, North Bengal University, West Bengal, India, 19-21 March, 2015.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Lecture on Work and achievement of Professor Manjul Bhargava: Fields Medalist-2014, 06 September, 2014.

Faculty Development Programme for the teachers of Mathematics in degree colleges of Assam, sponsored by UGC-SAP, 12-18 December, 2014.

Workshop on Mathematics for the first year students of MSc in Mathematics, sponsored by UGC-SAP, 02-07 February, 2015.

Workshop on Algebra and Analysis, sponsored by NBHM and Tezpur University, 17-23 February, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof Dilip P Patil, IISc, Bangalore

Prof Martin Kreuzer, University of Passau, Germany

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

S Sen has been selected to visit Helmut-Schmidt-Universität, Hamburg, Germany for 3 months under international collaboration/exchange programme of Indian National Science Academy (INSA) – Deutsche Forschungsgemeinschaft (DFG) during 2015.

Manjil Pratim Saikia, first batch pass out of Integrated MSc, has been selected for Advanced Diploma (leading to PhD) ICTP, Italy. Mr Saikia is also selected for Doctoral programme, University of Vienna, Austria.

Rishabh Sarma, student of Integrated MSc programme received D K Bora memorial NASA Visit award, Govt of Assam. Mr Sarma was also selected for 8th Asian Science Camp, Singapore.

NUMBER OF STUDENTS WHO PASSED NET/SLET/JRF/GATE

NET – 04

SLET – 04

GATE – 04

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K C Das
MTS



DEPARTMENT OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

THE DEPARTMENT

The Department of Molecular Biology and Biotechnology (MBBT), which was established in 1997, completed eighteen years this year. The Department has been recognized by the Department of Biotechnology (DBT) of the Ministry of Science and Technology, Government of India, and has been granted accreditations for its Post Graduate programme. The Department offers a two-year MSc programme in Molecular Biology and Biotechnology, a five-year Integrated MSc in Bioscience and Bioinformatics and a PhD programme in Molecular Biology and Biotechnology. The objective of the Department has been to contribute to the advancement of the emerging areas of basic and applied Life Sciences and to create manpower in the field of Molecular Biology and Biotechnology.

Recognizing the achievements of its students, the high quality research pursued by the faculty, and the advanced facilities for biotechnological research available at the Department, the Department has been ranked amongst the top ten Biotechnology Departments in the country this year.

ACADEMIC PROGRAMMES

- MSc in Molecular Biology and Biotechnology
- Integrated MSc in Bioscience and Bioinformatics
- PhD

STUDENT INTAKE

Programme	Student Intake
MSc in Molecular Biology and Biotechnology	30
Integrated MSc	20
PhD	Intake variable, 11

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- | | |
|---------------------------|---|
| Genomics/Transcriptomics | <ul style="list-style-type: none"> • DNA sequencers (4 capillary) • Bioanalyzer • Gel documentation system • Quantitative PCR |
| Proteomics | <ul style="list-style-type: none"> • Fast protein Liquid Chromatography (FPLC) • UHPLC systems |
| Biochemistry/Metabolomics | <ul style="list-style-type: none"> • GC/MS • Ultracentrifuge • HPLC • Chemidoc |
| Cell biology/Cell imaging | <ul style="list-style-type: none"> • Fluorescence microscope • High speed refrigerated centrifuge • Animal cell culture facility • Plant tissue culture facility • Animal experimentation facility |

Bioinformatics Infrastructure Facility



MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
A K Mukherjee	<ul style="list-style-type: none"> • An acidic non-toxic anticoagulant phospholipase A2 (NnPLA2-I) of molecular mass of 14.2 kDa was purified from the Indian cobra (<i>Naja naja</i>) venom • An antithrombotic active ingredient was isolated from leaves of an important traditional plant of India • Few bacterial strains were isolated from petroleum oil contaminated soil samples collected from ONGC, Assam oil field and they were taxonomically identified.
A N Jha	<ul style="list-style-type: none"> • The interaction of pyrazinamide drug functionalized carbon and boron nitride nanotubes with pncA protein by molecular dynamics and density functional approach are being shown.
A Ramteke	<ul style="list-style-type: none"> • Hypoxia induces triglycerides accumulation in prostate cancer cells and extracellular vesicles supporting growth and invasiveness following re-oxygenation. • Exosomes Secreted under Hypoxia Enhance Invasiveness and Stemness of Prostate Cancer Cells by Targeting Adherens Junction Molecules. • Alcohol and Tobacco Increases Risk of High risk HPV infection in Head and Neck Cancer patients: study from North- East Region of India • We have identified active fraction from the indigenous medicinal plants with anticancer efficacy against breast cancer cells. • Developed biopolymer based nano-delivery system for administering the anticancer cancer agents with poor solubility problem. • We have proposed mechanism of bio-sorption and heavy metal detoxification by metal resistant <i>Pseudomonas aeruginosa</i> RV3
B K Konwar	<ul style="list-style-type: none"> • Bacterial biopolymer: Three different PHA producing bacterial isolates BPC1, BPC2 and BP2 were recovered from the crude oil contaminated soils of Assam. • Nanoparticles were synthesized in the presence of biosurfactant produced by bacteria involved in bioremediation of crude petroleum contaminated soil • Two chemical compounds have been isolated from the plants <i>Eclipta alba</i> Hassk and <i>Aloe barbadensis</i> Miller that exhibited hair follicle regeneration and growth stimulation activities. • Biomass and biofuel characterization of some microalgal species of Assam • Cloning and expression of a lipase coding gene from a soil metagenomic library • The isolated <i>M. balbisiana</i> cellulose impregnated SNP solution exhibited prolonged stability upto 29 days at room temperature. • The metagenomic alkane hydroxylase gene was found to be effective for novel biotechnological applications in the area of petroleum biotechnology.
E Kalita	<ul style="list-style-type: none"> • Work on development of lignocelluloses based functional nanobiomaterials and their characterization.
J P Saikia	<ul style="list-style-type: none"> • Synthesis of biocompatible colloidal silver nanoparticle using <i>Vigna radiata</i> and <i>Vigna mungo</i> seeds without destroying the seeds.
M Mandal	<ul style="list-style-type: none"> • Probiotic starter culture has been developed for production of probiotic Dahi.

Principal Investigator	Salient Research Findings
M Mandal	<ul style="list-style-type: none"> Green synthesis of nanoparticle using medicinal plant for control of microbial biofilm is being developed. Work on development of microbial consortia for maximum utilization of feed for cattle.
M V Satish Kumar	<ul style="list-style-type: none"> Modelled a single stranded DNA (ssDNA) to direct the self-assembly of PAMAM Dendrimers to improve the drug delivery applications in cancer therapy. Developed and modelled poly-ion short single stranded DNA to inhibit the Aβ1-42 peptide; aggregation in Alzheimer's disease. Modelled peptide inhibitors to inhibit the Aβ1-42 peptide; aggregation in Alzheimer's disease.
N D Namsa	<ul style="list-style-type: none"> Elucidation of signaling pathways and identification of host factors that regulate the formation of viroplasm and phosphorylation of rotavirus NSP5 is also being carried out. Identification and characterization of the potential microbes capable of selectively removing sulfur from the refractory organosulfur compounds present in the middle-distillate fractions of diesel.
R Doley	<ul style="list-style-type: none"> The proteome profile of the Indian Daboia russelii (Irula) venom, a medically important member of "Big Four" snake has been completed. A major PLA2 enzyme from the venom of Daboia russelii has been purified and characterized. Naja kaouthia, Indian monocled cobra venom from North-East India has been characterized biologically and biochemically. A novel three finger toxin from Naja kaouthia venom has been isolated and characterized. Transcript encoding thrombin inhibitor has been successfully isolated from salivary gland of Tick. Tick anti-thrombin has been as been successful expressed and characterized. Kunitz-type serine protease inhibitor from Bungarus flaviceps has been successful expressed and characterized.
R Mukhopadhyay	<ul style="list-style-type: none"> Development of novel anti-inflammatory and anti-cancer compounds Development of novel biosorbents for efficient removal of synthetic dyes/heavy metals towards sustainable waste management
S Dasgupta	<ul style="list-style-type: none"> A polyphenol, Ferulic acid (FRL), from leaves of Hibiscus mutabilis, which prevents lipid induced insulin resistance in skeletal muscle cells and adipocytes has been purified. We are also involved in searching the underlying mechanism of obesity induced impairment of adipocyte function and adipocyte-macrophage crosstalk.
S K Ray	<ul style="list-style-type: none"> Two bacteria are isolated from tomato seedling that inhibits R. solanacearum R. solanacearum inoculated into tomato seedlings are found to colonize extensively in the stems while roots showed low level colonization. There is amino acid specific rule for optimal codon choice in bacteria Apart from genome composition, there is a selection mechanism involve in the occurrence of C34 and G34 anticodons in bacteria



Principal Investigator	Salient Research Findings
Sashi Baruah	<ul style="list-style-type: none"> • KIR2DL1-HLAC2+ genotype is identified as a heritable risk factor in Oral Squamous Cell Carcinoma (OSCC) predisposing to disease at younger age in patients with family history of cancer. • The role for neutrophils in inflammation in severe malaria is reported for the first time.
T Medhi	<ul style="list-style-type: none"> • Formulation of botanical insecticide is under trial based on activity profile of resistance related key enzymes. • Improved biosurfactant production protocol to be used in microbial enhanced oil recovery (MEOR) • Purification of cytochrome P450 component and its use in developing biosensor

Research projects, ongoing and new

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Proteomics study of aromatic hydrocarbon degradation enzymes of some selected bacterial strain prospecting strategies for environmental bioremediation.	ONGC CPBT	7.06 lakh	2014 –2016	A K Mukherjee
Venomomics and antivenomics of Indian Cobra and Russell's viper; implications in drug discovery and quality control of antivenoms	DBT	132.0 lakh	2015 - 2017	A K Mukherjee
Application of snake venom toxins labelled with functionalized nanoparticles for detecting endogenous targets in cells and ex vivo tissues with prospects for the development of novel diagnostic and therapy tools.	DBT	45.36 lakh	2014 - 2016	A K Mukherjee
National Bioscience award – 2013 for carrier development	DBT	15.0 lakh	2014- 2016	A K Mukherjee
In-Silico design and evaluation of sequences for gamma D crystallin protein	DBT	48.72 lakh	2013-2015	A N Jha
Studies on Genetic and Epigenetic Alteration in Head and Neck Cancer Prevalent in North East Region of India	DBT	47.02 lakh	2011-2015	A Ramteke
GIS modeling based impact assessment of ground water arsenic contamination in Brahmaputra basin and development of a remediation strategy using endemic lignocellulosic agro waste based nanobiosorbants	DBT	95.79 lakh	2012-2015	E Kalita
Development of nanomaterial based dual mode contrast agent and their surface mediated conjugation study from first principles.	DBT	122.25 lakh	2013-2016	E Kalita (Co PI)
Isolation and characterization of hydrogen producing bacteria from North-Eastern states of India, (With special emphasis on Assam and Arunachal Pradesh), for efficient conversion of biomass to hydrogen	DBT	54.71 lakh	2011-2015	M Mandal

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Study of microbial diversity and biochemical characteristics of selected non alcoholic fermented (milk, vegetable and pulses) food product of Assam and Arunachal Pradesh	DBT	56.20 lakh	2011-2015	M Mandal
Study of microbial biofilm inhibition by traditionally used medicinal plants of Assam and Arunachal Pradesh and their role on extracellular polymeric substances (EPS) secretion	DST	6.0 lakh	2013- 2015	M Mandal
Computational approaches of understanding the pathway of alpha synuclein protein aggregation mechanism	UGC	6 lakh	2014-2016	M V Satish Kumar
In silico study on the human Lemur Tyrosine Kinase 3 interaction with ER- α/β (Estrogen Receptors)	ICMR	17 lakh	2015-2017	M V Satish Kumar
Understanding the functioning of IDPs from Molecular Dynamics simulations	TU	2 lakh	2014-2015	M V Satish Kumar
Estimation of the diversity of endophytes in sub-tropical forest of Arunachal Pradesh and creation of genetic resource	DBT	12.40 lakh	2015-2018	N D Namsa
Molecular Epidemiology of Group A rotavirus (RVA) Infections in the North-eastern region (NER)	DBT	75.18 lakh	2014-2017	N D Namsa
Elucidation of signaling pathways and identification of host cell factors that regulate the formation of viroplasm and hyperphosphorylation of rotavirus nonstructural protein 5 (NSP5)	DST	12.0 lakh	2013-2015	N D Namsa
Molecular cloning, expression and functional characterization of desulfurization enzymes (Dsz A, B & C) of newly identified bacterium Paenibacillus sp. from crude oil contaminated soil of north-east India, Assam.	CSIR	11.0 lakh	2014-2017	N D Namsa
Cloning, expression and structural characterization of anti-thrombin from cattle tick salivary gland: designing of novel anti-thrombin peptide	DST	41.06 lakh	2014- 2018	N K Bordoloi
Studies of the efficacy of flavonoid and non-flavonoid polyphenols against chronic inflammation induced disease pathogenesis & rdquo	DBT	48.6 lakh	2014-2016	R Doley
Role of non-canonical function of ribosomal proteins in inflammation	DBT	152.07 lakh	2014-2017	R Mukhopadhyay
Role of transcription factors IRF8 and KLF4 in lipid induced adipose tissue inflammation and insulin resistance.	INSA	15.0 lakh	2014-2017	R Mukhopadhyay
Characterization of a potential auto transporter adhesion function in Ralstonia solanacearum, the causal agent of bacterial wilt in plants.	DBT	35.66 lakh	2012-2015	S Dasgupta



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Understanding codon usage bias in organisms	DBT	15.50 lakh	2012-2014	S K Ray
Sequencing genomes of bacteria that invades/resides in side tomato plant	DBT-U Excel-NER	123.0 lakh	2013 -2016	S K Ray
Protein Folding Kinetics is a Selection Force on Shaping Codon Usage Bias in the High Expression Genes	DBT	24.72 lakh	2014-2016	S K Ray
Study on the regulation of adipose tissue development and function by post-translational protein arginylation	DBT	56.1 lakh	2012-2015	S Saha
Comparative metagenome of human gut of North and North-eastern region of India	DBT	45.05 lakh	2014-2017	S Saha (Co-PI)
Systemic Lupus Erythematosus (SLE) – An investigation into diagnostics and disease pathogenesis	DBT	119.94 lakh	2015-2019	Sashi Baruah
Development of phytoremediation protocol for crude oil contamination	ONGC	5.0 lakh	2014- 2016	T Medhi
Development of a process for effective use of acetyl choline esterase biosensor for determining the pesticide residue in produce	MOPI/DST	11.5 lakh	2014- 2017	T Medhi (Co PI)

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Banik, N., Ramteke, A. and Maji, T. K. Carboxymethyl chitosan-Montmorillonite Nanoparticles for Controlled Delivery of Isoniazid: Evaluation of the Effect of the Glutaraldehyde and Montmorillonite, *Polymers for Advanced Technologies*, 25 (12), 1580-1589, 2014.

Barua, S., Chattopadhyay, P., Phukan, M. M., Konwar, B. K., Islam, J. and Karak, N. Biocompatible hyperbranched epoxy/ silver-reduced graphene oxide-curcumin nanocomposite as an advanced antimicrobial material, *RSC Advances*, 4 (88), 47797-47805, 2014.

Barua, S., Chattopadhyay, P., Phukan, M. M., Konwar, B. K. and Karak, N. Hyperbranched epoxy/ MWCNT-CuO- nystatin nanocomposite as a high performance, biocompatible, antimicrobial material, *Materials Research Express*, 1 (4), 045402, 2014.

Bharali, P. and Konwar, B. K. A convenient synthesis of novel 5-amyl-pyrido[2,3-d] pyrimidines and screening of their preliminary antibacterial properties, *Tetrahedron Letters*, 2014.

Bharali, P., Ray A. and Konwar, B. K. Ethnobotanical based Phyto-medicines for different Hair Ailments used in North-Eastern Region of India, *Biotic: A collection of Research articles on Biodiversity and Sustainability*, 2015 (Accepted).

Bharali, P., Singh, S. P., Dutta, N., Gogoi, S., Bora, L. C., Debnath, P. and Konwar, B. K. Biodiesel derived waste glycerol as an economic substrate for biosurfactant production using indigenous *Pseudomonas aeruginosa*, *RSC Advances*, 4 (73), 38698-38706, 2014.

Bhattacharya, K., Gogoi, B., Buragohain, A. K. and Deb, P. Fe₂O₃/C nanocomposites having distinctive antioxidant activity and hemolysis prevention activity, *Material Science and Engineering*, 42, 2014.

Biswas, K., Roy, J. K., Doley, R., Mohanta, D. and Mukherjee, A. K. Imaging Bactericidal Effect of Faceted Ag Nanostructures (FagN) on Gram Negative, Coli Form *Escherichia coli*, *Bacteria J. Bionanosci.* 8, 248, 2014.

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- Bora, P., Konwar, L. J., Phukan, M. M., Deka, D. and Konwar, B. K. Microemulsion based hybrid biofuels from *Thevetia peruviana* seed oil: Structural and dynamic investigations, *Fuel*, 157, 208-218, 2015.
- Brahma, R. K., Dixit, V., Sangwan, A. K. and Doley, R. Identification and characterization of *Rhipicephalus (Boophilus) microplus* and *Haemaphysalis bispinosa* ticks (Acari: Ixodidae) of North East India by ITS2 and 16S rDNA sequences and morphological analysis, *Exp. Appl. Acarol.*, 62, 253, 2014.
- Brahma, R. K., Ryan, J. R. McCleary, Kini, R. M., and Doley, R. Venom gland transcriptomics for identifying, cataloging, and characterizing venom proteins in snakes, *Toxicon*, 93, 1-10, 2015.
- De, B., Gupta, K., Mandal, M. and Karak, N. Tough hyperbranched epoxy/neem-oil-modified OMMT thermosetting nanocomposite with an antimicrobial attribute, *New Journal of Chemistry*, 39, 2015.
- Deep, G., Jain, A. K., Ramteke, A., Ting, H., Vijendra, K. C. D, Gangar, S. C., Agarwal, C. and Agarwal, R. SNAH is critical for the aggressiveness of prostate cancer cells with low E-cadherin, *Molecular Cancer*; 13, 37, 2014.
- Dey, M. D. and Mukhopadhyay, R. Adsorptive Removal of Methylene Blue by Biomass of *Aspergillus versicolor*: A Mechanistic Study, *Int. J. Adv. Res. Sci. Technol.*, 4, 398, 2015.
- Dutta, M. and Mattaparathi, V. S. K Inhibition of amyloid fibrils formation as well as disassembly of amyloid fibrils in Alzheimer's disease using the poly-ion, single stranded nucleotide sequence: an in silico study. *Journal of Proteins and Proteomics (Special issue on Biophysics in India)*, 6, 2015.
- Dutta, S., Gogoi, D. and Mukherjee, A. K. Anticoagulant mechanism and platelet deaggregation property of a non-cytotoxic, acidic phospholipase A2 purified from Indian cobra (*Naja naja*) venom: Inhibition of anticoagulant activity by low molecular weight heparin, *Biochimie*, 110, 2015.
- Gogoi, B., Chatterjee, P., Mukherjee, S., Buragohain, A. K., Bhattacharya, S. and Dasgupta, S. A polyphenol rescues lipid induced insulin resistance in skeletal muscle cells and adipocytes, *Biochem. Biophys. Res. Commun.*, 452 (3), 2014.
- Gogoi, K., Phukan, M. M., Dutta, N., Singh, S. P., Sedai, P., Konwar, B. K. and Maji, T. Valorization and miscellaneous prospects of waste *Musa balbisiana* colla pseudostem, *Journal of Waste Management*, 2015 (Accepted).
- Gupta, K., Hazarika, S. N, Saikia, D., Namsa, N. D. and Mandal, M. One step green synthesis and anti-microbial and anti-biofilm properties of *Psidium guajava* L. leaf extract-mediated silver nanoparticles, *Materials Letters*, 125, 2014.
- Gupta, K., Barua, S., Hazarika, S. B., Manhar, A. K., Nath, D., Karak, N., Namsa, N. D., Mukhopadhyay, R., Kalia, V. and Mandal, M. Green silver Nanoparticles: Enhanced Antimicrobial and Antibiofilm Activity with Effect on DNA Replication and Cell Cytotoxicity, *RSC Advances*, 4, 2014.
- Kalita, D., Saikia, J., Mukherjee, A. K. and Doley, R. An ethnomedicinal survey of traditionally used medicinal plants for the treatment of snakebite in Morigaon district of Assam, India, *International Journal of Medicinal and Aromatic Plants*, 4 (2), 2014.
- Kalita, M., Gogoi, P., Barman, P., Sarma, B., Buragohain, A. K. and Kalita, R. D. A new series of Ni(II), Cu(II), Co(II) and Pd(II) complexes with an ONS donor Schiff base: Synthesis, crystal structure, catalytic properties and bioactivities, *Polyhedron*, 74, 2014.
- Konwar, B. K. Economic sustainability of the Himalayan ecosystem, *Yojana*, 52-56, 2014.
- Konwar, B. K. Indian Higher Education and Ranking Standard, *University News*, 52 (49), 18-24, 2014.
- Kumar, N., Hazarika, S. N., Limbu, S., Boruah, R., Deb, P., Namsa, N. D, and Das, S. K., Hydrothermal synthesis of anatase titanium dioxide mesoporous microspheres and their antimicrobial activity, *Microporous &*



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Singh, S. P., Deb, C. R., Ahmed, S. U., Saratchandra, Y. and Konwar, B. K. In silico studies on the molecular interaction analysis of dietary flavonols as a potent inhibitor of heat shock protein 90 enzyme in fighting against cancer, *J. Biomedical Res.*, 2014 (Accepted).

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Yata, V. K., Thapa, A. and Mattaparthi, V. S. K. Structural insight into the binding interactions of modelled structure of *Arabidopsis thaliana* urease with urea: An In silico study, *Journal of Biomolecular Structure and Dynamics*, 33 (4), 2014.

BOOK CHAPTERS

Phukan, M. M. and Konwar, B. K. 2014. Isolation and characterization of freshwater microalgae *Scenedesmus* from contaminated field samples for bio-energy generation. In Kumar, S., Sarma, A. and Tyagi, S. K. (eds). *Recent Advances in Bioenergy Research*, Vol III. Kapurthala: SSS-NIRE National Institute of Renewable Energy.

TALKS BY THE FACULTY ABROAD AND IN INDIA

M V Satish Kumar delivered an invited talk at the National Symposium on Biophysics and Golden Jubilee meeting of the Indian Biophysical Society, Jamia Millia Islamia, New Delhi, India, 14-17 February, 2015.

M V Satish Kumar delivered an invited talk at NEQIP funded workshop on Nanotechnology and Bioinformatics: Applications at Interface, Department of Bioengineering, Gauhati University Institute of Science and Technology (GUIST), Guwahati, India, 6-7 February, 2015.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Lecture series on Recent Advance on Mathematical Biology, 18-19 October, 2014.

Seminar on Recent advances in Biotechnology Research in North East India: Challenges and Prospects, 27-29 November, 2014.

Seminar on Molecular Intricacies of Plant Pathogenic Microorganisms, 21-22 February, 2015.

Workshop on Real Time Based Gene Expression Studies, sponsored by DBT, 27-28 March, 2015.

Workshop on QSAR/QSPR- Applications in drug designing, sponsored by DBT-BIF, 14-16 February, 2015.

Workshop on Exploring biological databases, sponsored by DBT-BIF, 08-09 March, 2015.

Workshop on IBM SPSS statistics, sponsored by IBM, Bangalore, 17 June 2014.

Workshop on Molecular Biological and Analytical Techniques in Petroleum Biotechnology, sponsored by ONGC-CPBT, 1-5 December, 2014.

DISTINGUISHED VISITORS TO THE DEPARTMENT

A Lahiri, Calcutta University, Kolkata

A K Nandi, JNU, New Delhi

A Anand, IIT Guwahati

D Rudra, Institute of Basic Sciences, South Korea

G Bagler, IIT Jodhpur

Gopajee Jha, NIPGR, New Delhi

H K Gautam, IGIB, New Delhi

H Adhikary, Laval University Oncology Axis, CHU Research Center, Quebec, Canada

Indira Ghosh, JNU, New Delhi

I Mukhopadhyay, ISI Kolkata

J Gowrishankar, Director, CDFD, Hyderabad

Jagreet Kaur, Delhi University, New Delhi

M R N Murthy, IISc, Bangalore

M K Santra, NCCS, Pune

P Verma, NIPGR, New Delhi

R Ramanan, CCMB, Hyderabad

R Swaminathan, IIT Guwahati

R V Sonti, CCMB, Hyderabad

R K Layek, IIT Kharagpur

S Bhattacharyya, Vishwabharati, Santiniketan

S Genin, LIPM, Castanet-Tolosan, France

S K Mohapatra, NIBMG Kalyani

S P Pandey, IISER Kolkata

S P Chakrabarty, IIT Guwahati

S Chatterjee, CDFD, Hyderabad

S Sarma, NIH, MRC-Wellcome and DBT Fellow, USA

Sumana Dutta, IIT Guwahati

T K Adhya, KIIT University, Bhubaneswar

T C Ghosh, Bose Institute, Kolkata

V Nagaraja, IISc, Bangalore

V C Kalia, IGIB, New Delhi

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/STUDENTS

A K Mukherjee was awarded the prestigious Seenivasaya Memorial Award 2014, for Research Contribution in the field of Biochemistry by Society of Biological Chemist (India).



A K Mukherjee has received the prestigious National Bioscience Award by DBT, Government of India.

Sashi Baruah of the Department has been selected as member of the DBT Task force for Human Resource Development for the period of three years by DBT, Government of India.

S Das Gupta has been selected to receive the prestigious Innovative Young Biotechnologist Award 2014 by DBT, Government of India.

S Das Gupta has received the UExcel NER grant by DBT, Government of India.

P Baishya, PhD student, won Professor Awtar Krishan Award in the workshop on Basic and Clinical Flow cytometry, jointly organized by The Cytometry Society, India (TCS), Indian Institute of Technology- Guwahati and Cachar Cancer Hospital and Research Centre (CCHRC), 10-11 November, 2014.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2014-15]

NET – 03

GATE – 09

SLET – 07

NOTABLE PLACEMENT [2014-15]

Mr Aniket Parab qualified the NET (UGC-JRF) and joined IISc, Bangalore for his PhD

Ms Dabashree Tagore received the DST inspire fellowship and joined NIBMG, Kalyani for her PhD

Mr Nilanjan Som qualified the NET (CSIR-JRF) with AIR 35 and joined CCMB, Hyderabad for his PhD.

Mr Prakash Lama qualified the DBT-JRF (group A category) and joined NCBS, Bangalore for his PhD.

Ms Sohenii Bhattacharjee, MSc student, qualified in the CSIR-JRF NET examination with AIR 34.

THE FACULTY OF THE DEPARTMENT

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DEPARTMENT OF PHYSICS

THE DEPARTMENT

Since its inauguration in January 1998, the Department of Physics has been delivering quality and commitment not only in its post-graduation teaching but also in pursuing excellence in new frontiers of research. With the advent of new horizons of research in the field of Physics, the Department has been introducing new special papers with adaptation to new developments. With this vision, the Department had started a two-year P.G. programme in Nan science and Technology in July 2005. The thrust areas of specialization for post-graduation are: Condensed Matter Physics; Electronics and Photonics; High Energy Physics; and Nano Science and Technology. The Department also started in 2009 an Integrated MSc in Physics with a view to developing the students from the graduate level. With an objective of upgrading and refreshing the knowledge-base of the teachers at the school level, the Department has also been running a BSc-BEd programme since July 2011. Major thrust areas of research of the Department are, Astrophysics, High Energy Physics (Theoretical), Nanomaterials, Neutrino, Optoelectronics, Plasma Physics, Microwaves and Solid State Ionics.

ACADEMIC PROGRAMMES

- MSc in Physics
- MSc in Nanoscience & Technology
- Integrated MSc in Physics
- Integrated BSc BEd
- PhD

STUDENT INTAKE

Programme	Student Intake
MSc in Physics	20
MSc in Nanoscience & Technology	20
Integrated MSc in Physics	20
Integrated BSc BEd.	10
PhD	Intake variable, 14

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- High Power Nd-YAG Laser
- Microwave Set-up
- High Vacuum Thin Film Coating Unit
- LCRBridge Tester
- Computerized insertion loss measurement x-band system
- CTE measurement setup for polymer materials.
- Electronic Balance
- Tube Furnace
- X-Ray Diffraction (XRD)
- Luminescence Spectro Photometer
- Semiconductor Characterization Setup
- Scanning Electron Microscope (SEM)





- Polarizing Microscope
- UV-Visible Spectrophotometer
- Vector network Analyser
- High Power Microwave Set-up
- FTIR
- CNC Milling Machine



MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Research projects, ongoing and new

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Development of biologically functionalized conducting polymer nanostructures for biosensing applications.	DAE-BRNS	24.7 lakhs	2013-2016	A Kumar
Theoretical spectroscopic studies of polycyclic aromatic hydrocarbon molecules and astrophysical implications.	DST	13.20 lakhs	2013-2016	A Pathak
DST-JSPS International Science & Technology Cooperation Grant.	DST	9.16 lakhs	2014-2016	A Pathak
Effect of ion irradiation on nanostructured transition metal dichalcogenide system.	IUAC	6.0 lakhs	2014-2017	D Mohanta
Investigation of photocatalytic response of TiO ₂ nanostructures under doping and irradiation for practical applications.	UGC	13.97 lakhs	2013-2016	GA Ahmed
Studies on FL and xF ₃ structure functions of hadrons in lepton-nucleus scattering and related nuclear effects.	DAE-BRNS	16.31 lakhs	2012-2015	MK Das
Study on neutrino masses and mixing in context of recent neutrino oscillation data.	UGC	10.50 lakhs	2013-2016	MK Das
Microwave Technology based Tea Processing Systems for NE States.	SAMEER	55.3 lakhs	2013-2016	Nidhi S Bhattacharyya
Study of the role of collisions and their effect on instabilities in high density laser-plasma interactions as well as low-density plasma transport.	DAE-BRNS	24.532 lakhs	2012-2015	Nilakshi Das
A Study of the dynamics of dust particles in strongly coupled plasma.	UGC	9.658 lakhs	2013-2016	Nilakshi Das
Study on the controlled self-assembly of magnetic nanostructures using neutron scattering.	UGC-DAE	7.67 lakhs	2013-2016	P Deb
Development of nanomaterial based dual mode contrast agent and their surface mediated conjugation study from first principles.	DBT	122.25 lakhs	2013-2016	P Deb
A plasma-based study of solar equilibrium structure and fluctuation dynamics.	DST-SERB	12.48 lakhs	2012-2015	PK Karmakar

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Design consideration of SERS substrate for getting extremely enhanced Raman signal.	DST-SERB	27.24 lakhs	2013-2016	P Nath
Ambient noise assisted microzonation of Tezpur, Northeast India with simultaneous multiwave shear wave analysis.	MoES	10.68 lakhs	2014-2017	R Biswas

PUBLICATIONS

IN INTERNATIONAL AND NATIONAL JOURNALS

Ahmed, G.A. and Gogoi, A. Scattering by interstellar graphite dust analog, *Journal of Quantitative Spectroscopy & Radiative Transfer*, 146, 106-112, 2014.

Baruah, N., Das, M. K. and Sarma, J. K. Analysis of small x behaviour of Longitudinal and heavy flavour structure functions of Proton, *International Journal of Theoretical Physics*, in press, 2015.

Baruah, N., Das, M. K. and Sarma, J. K. Longitudinal Structure Function FL of Proton from Regge Like Behaviour of Structure Function at small- x , *Few Body Systems*, 55 (11), 1061-1071, 2014.

Begum, M., Baruah, S. and Das, N. Thermodynamic Properties of Strongly Coupled Plasma in the Presence of an External Magnetic Field, *Plasma Physics Reports*, 40 (7), 583-590, 2014.

Bhattacharjee, S. and Das, N., Interaction mechanisms between dust grains in the presence of asymmetric ion flow and an external magnetic field in complex plasma, *Eur. Phys. J. D*, 68, 184, 2014.

Bhattacharya, K., Gogoi, B., Buragohain, A. K. and Deb, P. Fe₂O₃/C nanocomposites having distinctive antioxidant activity and hemolysis prevention efficiency, *Materials Science and Engineering: C*, 42, 595, 2014.

Biswas, R. Mapping Sediment Thickness in Shillong City of Northeast India through Empirical Relationship, *Journal of Earthquakes*, [In press].

Borah, D. and Das, M. K. Neutrino Masses and Leptogenesis in Type I+II Seesaw Models, *Physical Review D*, 90, 015006, 2014.

Borah, M., Borah, D. and Das, M. K. Radiative Generation of Non-zero θ_{13} in MSSM with broken A₄ Flavor Symmetry, *Nuclear Physics B*, 885, 76-96, 2014.

Borah, D., Patra, S. and Pritimita, P. Sub-dominant type-II seesaw as an origin of non-zero θ_{13} in SO(10) model with TeV scale Zprime gauge boson, *Nuclear Physics B*, 881, 444-466, 2014.

Borah, D. Type II seesaw origin of nonzero θ_{13} , δ CP and leptogenesis, *International Journal of Modern Physics A*, 29, 1450108, 2014.

Borah, M., Borah, D., Das, M. K. and Patra, S. Perturbations to mu-tau symmetry, leptogenesis and lepton flavor violation with type II seesaw, *Physical Review D*, 90 (9), 095020, 2014.

Borah, D. and Dasgupta, A. Galactic Center Gamma Ray Excess in a Radiative Neutrino Mass Model, *Physics Letters B*, 741, 103-110, 2015.

Borah, K., Phukan, A., Bhattacharyya, N. S. and Bhattacharyya, S. Design of light weight microstrip patch antenna on dielectric and magnetodielectric substrate for broadband application in x-band, *PIER B*, 60, 157-168, 2014.

Borah, M. And Mohanta, D. Composite-Hydroxide-Mediated Formation of Barium Titanate Nanocubes and Their Optical Emission Response, *Chinese Journal of Physics*, 53 (1), 020804, 2015.



Bordoloi, A. K., Borah, P., Bhattacharyya, S. and Bhattacharyya, N. S. Planar patch antenna with 100- μm slit for size reduction and dual-band applications, *Microwave and Optical Technology Letters*, 56 (7), 1725-1726, 2014.

Boruah, R., Mohanta, D., Choudhury, A. and Ahmed, G. A. Inverse surface plasmon resonance based effective hydrogen sensing using nanoscale palladium films, *Optical Materials*, 39, 273-277, 2015.

Chamuah, N. and Nath, P. Periodic metal nanopillar for generation of enhanced localized surface Plasmon field, *Plasmonics*, 2015.

Choudhury, B. and Choudhury, A. Oxygen defect dependent variation of band gap, Urbach energy and luminescence property of anatase, anatase-rutile mixed phase and of rutile phases of TiO₂ nanoparticles, *Physica E*, 56, 364, 2014.

Dasgupta, A. and Borah, D. Scalar Dark Matter with Type II Seesaw, *Nuclear Physics B*, 889, 637-649, 2014.

Devi, M. and Sarma, J. K. Analytical approach for the solution of nonlinear GLR-MQ equation, *Proc. of Indian Nat. Science Acad.*, 81, 2015.

Devi, M., Dutta, P. P. and Mohanta, D. Analytical calculation of chain length in ferrofluids, *Bulletin of Materials Science*, 38 (1), 221-226, 2015.

Devi, M., Mohanta, D. and Saha, A. Comparative study of microscopic, spectroscopic and magneto-optic response of ferrofluids subjected to γ -radiation, *Indian Journal of Physics*, 89 (2), 115-121, 2015.

Gogoi, A., Rajkhowa, P., Saikia, G. P., Ahmed, G. A. and Choudhury, A. WEBSCAT: A web application for the analysis of electromagnetic scattering from small particles, *Journal of Quantitative Spectroscopy & Radiative Transfer*, 146, 270-279, 2014.

Gogoi, J. P., Bhattacharyya, S. and Bhattacharyya, N. S. Single layer microwave absorber based on expanded graphite-novolac phenolic resin composite for X-band applications, *Composites Part B: Engineering*, 58, 518-523, 2014.

Gogoi, M. and Deb, P. Magneto-fluorescent hybrid of dye and SPION with ordered and radially distributed porous structures, *Applied Surface Science*, 298, 130, 2014.

Gogoi, M., Deb, P., Sen, D., Mazumder, S. and Kostka, A. Enhanced Quantum Confined Stark Effect in a mesoporous hybrid multifunctional system, *Solid State Communications*, 187, 48, 2014.

Hazarika Nath, J. C. and Kumar, A. SHI irradiation induced enhancement in structural, conformational and electrical properties of polyaniline nanofibers, *Rad. Eff. Def. Sol.*, 169(1), 30-40, 2014.

Hussain, T., Muzahid, S., Narayanan, A., Srikanth, R., Wakker, B. P., Charlton, J. C. and Pathak, A. HST/COS detection of a Ne VIII absorber towards PG 1407+265: An unambiguous tracer of collisionally ionized hot gas?, *Mon. Not. Royal Astron. Soc.*, 446, 2444, 2015.

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Karmakar, P. K. and Borah, B. New aspects on stability analysis of a planar charge-varying collisional dust molecular cloud with finite thermal inertia, *Communications in Physics*, 24 (1), 45-67, 2014.

Karmakar, P. K. and Borah, B. New oscillatory shock-like patterns in solar plasma with Boltzmann-distributed electrons, *European Scientific Journal*, 10 (3), 449-520, 2014.

Karmakar, P. K., Gohain, M. and Deka, U. Stability analysis of the polytropic solar wind, *Canadian Journal of Physics*, in press, 2014.

Khanam, R., Paul, N., Kumar, P., Kanjilal, D., Ahmed, G. A. and Mohanta, D. Teflon impregnated anatase TiO₂ nanoparticles irradiated by 80 keV Xe⁺ ions, *Nuclear Instruments and Methods in Physics Research B*, 336, 135-142, 2014.

Kumar, N., Hazarika, S. N., Limbu, S. Boruah, R., Deb, P., Namsa, N. D. and Das, S.K., Hydrothermal synthesis of anatase titanium dioxide mesoporous microspheres and their antimicrobial activity, *Microporous and Mesoporous Materials*, in press, 2015.

Kuri, D. K. and Das, N. Electron-ion collisional effect on Weibel instability in a Kappa distributed unmagnetized plasma, *Physics of Plasma*, 21, 042106, 2014.

Nath, A.K. and Kumar, A. 100 MeV Si⁺ swift heavy ion irradiation induced enhancement in electrochemical properties of electrolyte membrane composites based on ionic liquid-polymer-nanocomposite, *J. Membrane Sci.*, 485 (1), 30-41, 2015.

Nath, A. K. and Kumar, A. Swift heavy ion irradiation induced enhancement in electrochemical properties of ionic liquid based PVdF-HFP-layered silicate nanocomposite electrolyte membranes, *J. Membrane Sci.*, 453, 192-201, 2014.

Nath, B. C., Gogoi, B., Boruah, M., Sharma, S., Khanam, M., Ahmed, G.A. and Dolui, S. K. High performance polyvinyl alcohol/multi walled carbon nanotube / polyaniline hydrogel (PVA/MWCNT/PAni) based dye sensitized solar cells, *Electrochimica Acta*, 146, 106-111, 2014.

Nath, N. M. and Sarma, J. K. Q² evolution of xF₃ (x, Q²) structure function and Gross-Llewellyn-Smith sum rule up to next-next-to-leading order at low x and low Q² using a Q² dependent Regge ansatz, *Indian Journal of Physics*, in press, 2015.

Nath, N. M., Baruah, N., Sarma, J. K. and Das, M. K. Solution of DGLAP Evolution Equation for xF₃ Structure Function in Leading and Next-to-Leading Order at Small-x, *Universal J. Phys. and App.* 2(2), 80-84, 2014.

Nath, N. M., Das, M. K. and Sarma, J. K. Regge Like Initial Input and Evolution of Non-Singlet Structure Functions from DGLAP Equation up to Next-Next-to Leading Order at Low x and Low Q², *Pramana*, accepted, 2014.

Paul, D., Biswas, R. and Bhattacharya, N. S. Modal parameter analysis of crown and phosphate photonic crystal fibers, *Indian Journal of Physics*, in press, 2015.

Paul, S., Chetri, P., Choudhury, B., Ahmed, G. A. and Choudhury, A. Enhanced visible light photocatalytic activity of Gadolinium doped nanocrystalline titania: An experimental and theoretical study, *Journal of Colloid and Interface Science*, 439, 54-61, 2015.

Saikia, K., Deb, P., Mondal, B. and Kalita, E. Significant improvement in dopant emission and lifetime in water soluble Cu:ZnSe/ZnS nanocrystals, *Materials Research Express*, 1, 015014, 2014.

Santhosh, A. L., Das, S. K. and Bhattacharyya, A. J. Tungsten trioxide nanoparticle as new anode material for sodium-ion battery, *J. Nanoscience and Nanotechnology*, accepted, 2015.

Sarma, R. and Mohanta, D. Luminescence and bioimaging response of thio-glycolic acid (TGA) and sodium dodecyl sulfate (SDS)- coated fluorescent cadmium selenide quantum dots, *Journal of Luminescence*, 161, 395-402, 2015.

Sarma, R., Deka, G. and Mohanta, D. Manifested luminescence and magnetic responses of stoichiometry dependent Cd_{1-x}Mn_xSe quantum dots, *Materials Research Bulletin*, 62, 71-79, 2015.

Sarma, R., Tripathi, S., Misra, R., Dewangan, G., Pathak, A. and Sarma, J. K. Relationship between X-ray spectral index and X-ray Eddington ratio for Mrk 335 and Ark 364, *Mon. Not. Royal Astron. Soc.*, 448, 1541, 2015.



Shalima, P., Gogoi, R., Pathak, A., Misra, R., Gupta, R. and Vaidya, D. B. The Dust Content and Radiation Fields of Sample of galaxies in the ELAIS-N1 Field, *Pub. Astr. Soc. Pac.*, Accepted, 2015.

Upadhyay, J., Kumar, A., Gogoi, B. and Buragohain, A. K. Antibacterial and hemolysis activity of polypyrrole nanotubes decorated with silver nanoparticles by an in-situ reduction process, *Material science and engineering C*, 54 (1), 8-13, 2015.

Books and Book Chapters

Gogoi, R. 2014. Introducing TMT, the Thirty Meter Telescope. In Chutia, H., and Kalita, H. (eds). *Horizon*, Jagiroad College: Jagiroad.

Gogoi, R. 2015. Application of self-similarity in deep inelastic scattering. In Sharma, K (ed). *Bigyan Barnali*, Morigaon: Morigaon College.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

A Kumar attended an international conference, Electromechanically Active Polymer Artificial Muscles & Transducers, Queen Mary University of London, UK, 25-26 November, 2014.

A Kumar attended an international workshop, Ultra-High barriers for plastic electronics, Institute of Physics, 80 Portland Place, London, UK, 24 September, 2014.

A Pathak attended a workshop on Introductory Astronomy and Astrophysics, Department of Physics, J. B. College, Jorhat, India, 13-14 March, 2015.

A Pathak attended an international conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014), Department of Physics, Tezpur University, Tezpur, 15-18 December, 2014.

A Pathak attended the Astronomy and Astrophysics Summer School 2014, Cotton College State University, Guwahati, India, 21 June, 2014.

A Pathak attended the Grain Formation Workshop, Hakone, Japan, 7-9 January, 2015.

A Pathak attended the Introductory Workshop on Relativistic Astrophysics, Physics Department, Gauhati University, Guwahati, India, 22-23 August, 2014.

D Borah attended an international workshop on Frontiers of Physics: Colliders and Beyond, ICTP, Trieste, Italy, 23-27 June, 2014.

D Borah attended an international workshop on LHC and Dark Matter, IACS, Kolkata, India, 16-20 February, 2015.

G A Ahmed attended an international conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014), Department of Physics, Tezpur University, Tezpur, India, 15-18 December, 2014.

G A Ahmed attended an international workshop on hybrid photonics 2015, Department of Physics, Tezpur University, Tezpur, India, 24-26 February, 2015.

R Gogoi attended the Grain Formation Workshop, Hakone, Japan, 7-9 January, 2015.

R Gogoi attended the 40th COSPAR Scientific Assembly, Moscow State University, Moscow, Russia, 02-10 August, 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

A Kumar delivered a talk, Conducting polymer nanostructures: preparation, processing, properties and applications, School of Engineering and Materials Science, Queen Mary University of London, UK, 16 October, 2014.

A Pathak delivered a talk, Basic Astronomy and Stars, Workshop on Introductory Astronomy and Astrophysics, Department of Physics, J.B. College, Jorhat, India, 13 March, 2015.

A Pathak delivered a talk, Dust in the Cosmos, Astronomy and Astrophysics Summer School 2014, Cotton College State University, Guwahati, India, 21 June, 2014.

A Pathak delivered a talk, Dusty Universe, Workshop on Introductory Astronomy and Astrophysics, Department of Physics, J.B. College, Jorhat, India, 14 March, 2015.

A Pathak delivered a talk, Polycyclic Aromatic Hydrocarbons in the ISM,, Department of Astronomy, The University of Tokyo, Tokyo, Japan, 15 January, 2015.

A Pathak delivered a talk, Spectroscopy of Interstellar Polycyclic Aromatic Hydrocarbons (PAHs), Grain Formation Workshop, Hakone, Japan, 7 January, 2015.

A Pathak delivered a talk, Stars: Structure and Evolution, Introductory Workshop on Relativistic Astrophysics, Physics Department, Gauhati University, Guwahati, India, 23 August, 2014.

A Pathak delivered a talk, Theoretical DFT studies of deuterated PAHs , International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014), Tezpur University, Tezpur, India, 17 December, 2014.

A Pathak delivered a talk, Interstellar Medium, Astronomy and Astrophysics Summer School 2014, Cotton College State University, Guwahati, India, 21 June, 2014.

D Borah delivered a talk, Connecting Neutrino Mass, Baryon Asymmetry and Dark Matter with Type II Seesaw, IISER Pune, Pune, India, 17 July, 2014.

D Borah delivered a talk, Connecting Neutrino Mass, Baryon Asymmetry and Dark Matter, JNU, Delhi, India, 06 December, 2014.

D Borah delivered a talk, Possible Origin of Galactic Center Gamma Ray Excess and 3.55 keV X-Ray line within a Radiative Neutrino Mass Model, LHCDM workshop, ICAS Kolkata, 16 February, 2015.

D Borah delivered a talk, Connecting Neutrino Mass, Baryon Asymmetry and Dark Matter with Type II Seesaw, IIT Bombay, Mumbai, India, 09 July, 2014.

R Gogoi delivered a talk, The distribution of infrared point sources in nearby elliptical galaxies, 40th COSPAR Scientific Assembly, Moscow State University, Moscow, Russia, 05 August, 2014.

R Gogoi delivered a talk, Our Universe, IUCAA Outreach Program, Kohima Science College, Jotsoma, India, 26 September, 2014.

R Gogoi delivered a talk, Infrared counterparts of diffuse far UV sources, Interstellar Dust Molecules and Chemistry (IDMC-2014), Department of Physics, Tezpur University, Tezpur, India, 17 December, 2014.

R Gogoi delivered a talk, The dust content and radiation fields of sample of galaxies in the ELAIS-N1 field, Grain Formation Workshop, Hakone, Japan, 7 January, 2015.

R Gogoi delivered a talk, Introduction to infrared astronomy, IUCAA workshop on Introductory Astronomy and Astrophysics, J. B. College, Jorhat, India, 13 March, 2015.

G A Ahmed delivered a talk, Laboratory simulation of light scattering from interstellar dust analogues, Interstellar Dust Molecules and Chemistry (IDMC-2014), Department of Physics, Tezpur University, Tezpur, India, 17 December, 2014.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Workshop on Computational Aspects in Physics, 31 October – 01 November, 2014.

International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014), 15 -18 December, 2014.



Refresher Course in Theoretical Physics, 06-20 January, 2015.

International Workshop on Hybrid photonics, 24-26 February, 2015.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof A A Ferro, UNAM, Mexico.

Prof B G Anand Rao, PRL, Ahmedabad.

Prof D Kanjilal, Director, Inter University Accelerator Centre (IUAC), New Delhi.

Prof J Murthy, IIA, Bangalore.

Prof J R Kayal, Jadavpur University, Kolkata.

Prof PushpaKhare, IUCAA, Pune.

Dr P Shalima, IIA, Bangalore.

Prof U C Joshi, PRL, Ahmedabad.

AWARDS & HONOURS RECEIVED BY THE FACULTY/ STUDENTS/ RESEARCH SCHOLARS

A Pathak received DST-JSPS International Scientific Collaborative project with University of Tokyo, Japan from June 2014-May 2016.

P Deb received UGC Research Awards, 2014-2016.

S K Das received DAAD (German Academic Exchange Service) fellowship, 2015.

NUMBER OF STUDENTS WHO PASSED NET/ SLET/ JRF/ GATE

NET – 01

SLET – 12

GATE – 02

NOTABLE PLACEMENT

Rajiv Gandhi University – 02

Nagaland University – 01

NERIST – 02

Kaziranga University – 01

Duliajan College – 01

Jagiroad College – 01

DR College – 01

Mangaldoi College – 01

Biswanath College – 01

THE FACULTY OF THE DEPARTMENT

PROFESSORS

A Choudhury, PhD (Oxford)

Pro Vice-Chancellor

Specialization/Areas of Interest: Nanotechnology, Condensed Matter Physics, Laser based instrumentation

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 Specialization/Areas of Interest: Materials Science/Condensed matter Physics, GPS
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Nidhi S Bhattacharyya, PhD (Delhi)
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BHARAT RATNALOKAPRIYA GOPINATH BORDOLOI CHAIR PROFESSOR

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A J Choudhury, PhD (Gauhati)
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Specialization/Areas of Interest: Theoretical Condensed Matter Physics
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THE STAFF OF THE DEPARTMENT

TECHNICAL STAFF

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N Sarma
MTS



DBT NODAL CELL

THE CELL

The DBT Nodal Cell, Tezpur University was established in 2009 in collaboration with the Department of Biotechnology, New Delhi. It is mandated to carry out on site development in the North Eastern Region by introducing cutting edge biotechnology tools to the healthcare sector in the region. This mandate is facilitated in situ management mode by implementation, facilitation and monitoring of the following two projects:

- Development/Upgrading Infrastructure in Medical Colleges in North Eastern States (sanctioned with a grant of 40 crore).
- Research Grants to Support MD/MS Thesis to Medical Students in North Eastern Region (sanctioned with a grant of 4 and a half crore).

DEVELOPMENT/UPGRADING INFRASTRUCTURE IN MEDICAL COLLEGES IN NORTH EASTERN STATES

- In 21 projects across Assam, Manipur, Nagaland and Tripura a total of 2458 m² of laboratory space has been developed, equipped with high end equipment and trained manpower.
- These laboratories are now providing diagnostics for at least 20 health related parameters for enhanced patient care and biomedical research in the fields of: Virology, Oncology, Hemoglobinopathies, Therapeutic Drug Monitoring, HLA Tissue Typing and Poison Information.
- Publications, presentations, PhD thesis and support to PG programmes are being produced by the 21 laboratories under the Development/Upgrading Infrastructure in Medical Colleges in North Eastern States.

RESEARCH GRANTS TO SUPPORT MD/MS THESIS TO MEDICAL STUDENTS IN NORTH EASTERN REGION

- Under the project, Research Grant to support MD/MS thesis, 202 students from the Medical Colleges in North East India have so far availed the research grant.
- A total of 100 MD/MS theses have been completed and 102 theses are in progress; 64 presentations in national conferences have been made using the travel grant from this project; 20 publications have been published in various peer reviewed medical and biomedical journals.
- The Expert Committee for the 5th Review & Business Meeting commended the DBT Nodal Cell on the good progress of the Research Grant to Support MD/MS Thesis Scheme.



PUBLICATIONS

Maitra, G. Contributions of Nathaniel Wallich in the Context of His Time and Habitats, Keanean Journal of Science, 3, 2014.

Maitra, G. and Bhattacharya, S. Footprints of Animal Sciences in India, In History of Science in India, vol. IV Part II, Animal Science. National Academy of Sciences, India and The Ramkrishna Mission Institute of Culture, 2015.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Gaurangi Maitra delivered an invited talk at a Sensitization workshop on Technological Empowerment of Women, NEHU, Shillong, 30 June, 2014.

Gaurangi Maitra delivered an invited lecture, The Cell Story, As it Began, at an International Conference on Molecular Signalling: Recent Trends In Biomedical & Translational Research, IIT, Roorkee, 18 December, 2014.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CELL

5th Review and Business Meeting 2015, 27-28 February, 2015

1st Executive Committee Meeting, 28 February, 2015

DISTINGUISHED VISITORS TO THE CELL

Mr Arild Oksnevad, Norwegian Embassy & EU Delegation

Dr Bindu Dey, Advisor, DBT, New Delhi

Prof Narinder K Mehra, Dept of Transplantation Immunology, New Delhi,

Prof N Senthil Kumar, Dept of Biotechnology, Mizoram University, Aizawal, Mizoram.

Dr N Talukdar, Director, IAAST, Guwahati, Assam

Dr Piyush Juneja, M/S Catalyst Clinical Services, Ltd, New Delhi.

Dr Reena Das, Dept of Hematology, PGIMER, Chandigarh

Prof Richard Catlow, University College London

Prof Samir Kumar Sil, Dept. of Physiology, Tripura University

Mr Vivek Dham, Delegation of European Union

THE CURRENT PERSONNEL OF THE DBT NODAL CELL

HEAD AND COORDINATOR

Prof A K Mukherjee

Department of Molecular Biology and Biotechnology

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JOINT COORDINATOR

Prof R C Deka

Department of Chemical Sciences

E-mail: ramesh@tezu.ernet.in

SCIENTIST

Gaurangi Maitra, PhD (Visva Bharati)

E-mail: gmaitra@tezu.ernet.in

OFFICE STAFF

Meetaly Tamuly, BSc (Gauhati)

Assistant

E-mail: meetaly@tezu.ernet.in

CENTRE FOR OPEN AND DISTANCE LEARNING

THE CENTRE

The University established Centre for Open and Distance Learning (CODL) in June, 2011 with the aim of disseminating knowledge and imparting quality education through open and distance learning mode. The centre offers various post –graduate, undergraduate, diploma and certificate programmes in emerging areas of science, technology and engineering, social sciences, management and humanities with a flexible system to cater to the needs of the learners who otherwise can not avail the regular mode of education. The basic focus of the Centre has been to prepare human resources of the region skilled and employable.

ACADEMIC PROGRAMMES

The CODL has been offering the following programmes since 2012:

- MSc in Mathematics,
- MA in Mass Communication
- PG Diploma in Environmental Management, Governance and Development, PG Diploma in Renewable Energy and Energy Management, Functional Hindi, Human Resource Management, Investment Management, Retail Management, System Management

STUDENT INTAKE

Programme	Student Intake
MSc in Mathematics	20
MA in Mass Communication	23
PG Diploma in Human Resource Management	35
PG Diploma in Retail Management	02
PG Diploma in Investment Management	-
PG Diploma in Environmental Management	09
PG Diploma in Renewable Energy and Energy Management	15
PG Diploma in Governance and Development	02
PG Diploma in Functional Hindi	-
PG Diploma in System Management	-

OTHER IMPORTANT ACTIVITIES OF THE CENTRE

CODL has planned to launch the MA programme in English, Assamese, Sociology and Hindi.

Preparation of study materials for these programmes are in progress. It has been endeavoured to make these programmes as up to date as possible. The syllabi have been framed in such a way that it covers the latest developments in the concerned disciplines. Simultaneously, the need of the students and demands of NET examinations have also been taken care of.

Further, it has been decided to launch BA programme from CODL.

Efforts have been made to make the programmes responsive to the needs of the learners in the changed socio-educational environment. In addition to the content based programmes, there will be courses on soft skills. CODL will be activating more study centre so that the Centre can reach more students.



THE CURRENT STAFF OF THE CENTRE

DIRECTOR

S Katakya, PhD (Dibrugarh)
E-mail: sanjibk@tezu.ernet.in

JOINT DIRECTOR

S Sharma, PhD (Tezpur)
E-mail: sss@tezu.ernet.in

ASSISTANT DIRECTOR

S Sahoo, PhD (Tezpur)
E-mail: ssahoo1@tezu.ernet.in

CONSULTANT

S C Bhattacharjee, PhD (Gauhati)
E-mail: satish1@tezu.ernet.in

PROGRAMME COORDINATORS

ABhuyan, Business Administration
A Nagaraj, Mass Communication & Journalism
C K Sharma, Sociology
D C Baruah, Energy
D Nath, Disaster Management
Nirmali Gogoi, Environmental Science
Runumi Das, Business Administration
S Dutta, Mathematical Sci.
S Mahapatra, Energy
S Sahariah, Computer Sci & Engg.
S Sen, Mathematical Sci.
SK Tripathi, Hindi
UK Pegu, Mass Communication & Journalism

OFFICE STAFF

K Konch, BA (Dibrugarh)
Stenographer
E-mail: kkonch@tezu.ernet.in

R Borah
MTS



Central Facilities

- The Central Library
- Centre for Inclusive Development
- Centre for Innovation, Incubation and Entrepreneurship
- Computer Centre
- Engineering Cell
- Health Centre
- Horticulture Section
- Internal Quality Assurance Cell
- International Office



THE CENTRAL LIBRARY

The Central Library of the University was established in 1994 and it has the aim of achieving the stature of an ideal University library in the country in general. As a high priority service, it has been serving the University community in the best possible ways in their academic and research pursuit from the beginning. The Library stocks printed books, journals, magazines, newspaper and provides access to e-journals and databases. The Library system is fully digitized with the integrated multi-user library management system, supporting all its in-house operations.

THE LIBRARY BUILDING

The Central Library is located at the centre of the University campus. It is an aesthetically designed three-storied building occupying a carpet area of 3878 sq m.

MANAGEMENT

The Library Committee is the apex body for management of the Library and it is constituted with the Vice-Chancellor of the University as the Chairman, the Librarian as the Member-Secretary, Deans, nominees of the Deans, and two students as members.

OPENING HOURS

The Library is open from 9 am to 12 midnight on all working days and from 10 am to 9 pm on Saturdays and Sundays.

COLLECTIONS

CURRENT COLLECTION OF THE LIBRARY

Books	65958
Books added during 2014-2015	4116
Indian Journals subscribed for 2015	81(print)
Foreign Journals subscribed for 2015	85 (print) + 484 (online)
Back volume of journals	5084
Theses	323
E- resources through UGC-Infonet Consortium	9081 e-journals and 11 databases
E-resources through DelCon DBT-e Library Consortium	926 e-journals
E –Database subscribed by Tezpur University	3 databases
CD/ DVD-ROM	1900 CD-ROMs and 81 VCDs
VHS Cassettes	36

The Central Library is connected through LAN & WI-FI. All the Departments, the Centres, and the hostels of the University are connected to the Library through INTRANET. All databases, e-journals and other e-resources can be easily accessed from any terminal at the University campus.

DEVELOPMENTS

THE FOLLOWING DEVELOPMENTS TOOK PLACE DURING 2014-2015

- Institutional Membership for Resource Sharing and Inter Library Loan (ILL)
- i) Developing Library Network (DELNET) : The Central Library is subscribing an institutional membership of Developing Library Network (DELNET) for Resource Sharing and Inter Library Loan (ILL). DELNET has been established with the prime objective of promoting resource sharing among the libraries through the



development of a network of libraries. All faculty members, research scholars and students can access the services of DELNET through the World Wide Web and also search various Union Catalogues of the resources available in member-libraries.

The Central Library arranges books and research articles from other libraries on Inter Library Loan (ILL) under a resource sharing agreement signed with DELNET, New Delhi. It also facilitates Demand based procurement of research publications, photocopies of research articles, etc. from other institutions on a reciprocal basis.

ii) The American Library: The Central Library has subscribed an institutional membership of the American Library, Kolkata. The University users can access and use resources of American library, Kolkata.

- Setting up of Electronic Theses and Dissertation (ETD) Laboratory

Central Library has received the Rs. 7.89 lakh for digitization of theses and dissertation and establishment of ETD Lab at Central Library under Shodhganga project of INFLIBNET Centre.

- Bibliography Compiled on Sardar Vallabhbhai Patel

The Central Library has compiled a bibliography covering a wide variety of primary and secondary sources of information on Sardar Vallabhbhai Patel which is useful source of reference for researchers and academicians.

OTHER DEVELOPMENTS

- CCTV was installed.
- The present library building was extended with another 1680 sqmt. with 3 floors with 6 sections and 3 reading halls to accommodate 300 readers more.
- Additional 20 PCs were installed at the E-Resource Retrieval Section.

LIBRARY SERVICES

THE LIBRARY IS PROVIDING THE FOLLOWING SERVICES:

- Book Lending Services
- Book Bank Facility (an additional arrangement of lending books to economically weaker students)
- Reference Services (both in-house and off-house reference services are provided to faculty members, research scholars and other users)
- Online Public Access Catalogue (OPAC)
- User Orientation and Information Literacy Programmes for Research Scholars, faculty members and students
- E-delivery of Literature to Remote Indenters through UGC-Infonet Consortium
- Current Awareness Service (e- News, InfoJournal, InfoGranth)
- A dedicated section on New Arrival of Books
- Training cum Demo on Electronic Resources
- Online Renewal and Reservation of Books
- Photocopy Services
- Mobile Alert Service
- Children section
- Library & Information Services to Outsiders on Request
- Research Support Services

VISITORS TO THE LIBRARY (2014-2015)

Programme	Student	Research Scholar	Faculty member	Staff	Outsider	Total
Average daily visitor	311	20	08	3	4	346

WORKSHOP AND SEMINAR ORGANIZED

The following events were organized during 2014-2015

TWO-DAY USER AWARENESS PROGRAMME ON ACCESS TO E-RESOURCES UNDER UGC-INFONET DIGITAL LIBRARY CONSORTIUM

The Central Library organized, in collaboration with the Information and Library Network (INFLIBNET) Centre, Gandhinagar, Gujarat, a two-day user awareness programme on Access to E-resources under UGC-INFONET Digital Library consortium for University faculty and researchers at Tezpur University on 19-20 May, 2014.

One-Day Regional Training Programme cum Workshop on Shodhganga and Anti-Plagiarism Software (iThenticate/Turnitin)

The Central Library organised a one-day Regional Training Programme cum workshop on Shodhganga and Anti-Plagiarism Software (iThenticate/Turnitin) in association with Information and Library Network (INFLIBNET) Centre, Gandhinagar, Gujarat on 28 November, 2014 at Tezpur University.

BOOK EXHIBITION

On the occasion of Rashtriya Ekta Divas an exhibition of books and photographs pertaining to Sardar Vallabhbhai Patel was organized by the Central Library on 31.10.2014 to 13.11.2014 at Central Library. Books on Sardar Patel's life, struggle for freedom of India, his political career as well as the Indian National Movement were exhibited.

USER ORIENTATION PROGRAM ON ACCESS TO E-JOURNALS

Central Library, Tezpur University in association with Nature Publishing Group, Gurgaon, Haryana organized a User Orientation Program on Access to e-journals of Nature Publishing Group (NPG) through DeL CON Consortia on 26th November, 2014 for faculty members, research scholars and students of the University.

LIBRARY ORIENTATION PROGRAM

Central Library conducts Library Orientation Program for the students, research scholars & faculty members annually. A department-wise Library Orientation Program was conducted from 20.08.2014 to 5.09.2014. The main objective of the programme is to introduce the library users with the library facilities, resources, services and library techniques and to make them a regular user of the library.

LIBRARIAN'S DAY CELEBRATION AT CENTRAL LIBRARY ON 12 AUGUST 2014

Librarians' Day celebrated at central library on 12 August 2014 on accession of birth day of S. R. Ranganathan, who is considered to be the father of Library Science in India. His birthday is observed every year as the National Librarian's Day in India.

PUBLICATIONS**IN NATIONAL AND INTERNATIONAL JOURNALS**

Gohain, A., Saikia, M. & Hazarika, N. Awareness and use of IT based library and information services among B.Tech. Students of School of Engineering of Tezpur University: A survey, *International Journal of Information Dissemination and Technology*, 4(4), 2014.

Hazarika, N., Gohain A. and Saikia M. User Study of College Libraries Affiliated to Dibrugarh University, Assam, *Pearl: A Journal of Library and Information Science*, 8(4), 2014.



CONFERENCE PROCEEDINGS

Rajesh R. Aldarhi, Smitha C., Pratap, D. and Gohain, A. Book Acquisition: Best practices at central library, Tezpur University, in M. Saikia, M. Eqbal and D Pratap (eds) Library Management: New Trends & Challenges, New Delhi : Academic Publication,2015.

BOOKS AND BOOK CHAPTERS

Saikia, M., Eqbal, M. and Pratap,D. (eds). 2015. Library Management: New Trends and Challenges. New Delhi: Academic Publications.

Saikia, M., Eqbal, M. and Pratap, D.(eds).2015. Managing Library and Information Services in Digital Age. Guwahati: DVS Publishers.

Sarma, D. and Pratap, D.2015. Manpower Development in Library and Information Services in India: Issues and Challenges. In Saikia, M.,Eqbal, M. and Pratap, D.(eds). Managing Library and Information Services in Digital Age. Guwahati : DVS Publishers.

SEMINARS/ CONFERENCES ATTENDED

M Saikia was invited as a resource person in PLANNER-2014 organised by Dibrugarh University and INFILIBNET Centre, 25 -27 September, 2014.

M Saikia was invited as a resource person in Promotion Research Excellence in Universities and Support of Libraries in Research Collaborationorganised by INFILIBNET Center at New Delhi,08August, 2014.

M Saikia attended the 22nd DBT Electronic Library Consortiaseminar at New Delhi, 20 October, 2014.

FUTURE PLANS

- Design and Develop Subject Gateway
- RFID implementation
- Remote login access of E- Resources
- Establishment of separate competitive examination section (CES)
- Design and develop Children library Portal
- Design and develop Gov. Publication Portal
- Establishment of Manuscript archival section / museum
- To organize workshops and seminars and conference in the library and information science field.
- Establishment of Braille Section

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D Ahmed
MTS

M Chakraborty
MTS

Kanaka Das
Bearer





CENTRE FOR INCLUSIVE DEVELOPMENT

THE CENTRE

One of the prime objectives of Tezpur University as enshrined in the Tezpur University Act 1993 is: To pay special attention to the improvement of the social and economic conditions and welfare of the people. Furthermore, the Eleventh Plan Document of the Planning Commission emphasizes how institutes of higher education ought to extend its resources and services towards community development. Towards achieving this, Tezpur University has established the Centre for Inclusive Development (CID) as an umbrella organization comprising the Equal Opportunity Cell, SC/ST Cell and the Training & Placement Cell, which have a good deal of functional commonality. It is envisioned that a strengthened approach to this purpose would be achieved by consolidating the activities and collating resources of these three cells. Headed by a Director, the Centre is intended to act as an interface between higher education and community development. The conceptual essence of the Centre lies in the probation of inclusive development opportunities to all groups subjected to different degrees of exclusion owing to the specific socio-cultural, economic and political fabric of the society.

ACADEMIC PROGRAMMES

- UGC Sponsored Six Months Certificate Course in Technical Writing
- PG Diploma in Child Rights and Governance (Proposed to be conducted jointly by Tezpur University and UNICEF)

STUDENT INTAKE

Programme	Student Intake
UGC Sponsored Six Months Certificate Course in Technical Writing	15

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- (i) PPT Room – 01.
- (ii) Computer Laboratory with 13 PCs.
- (iii) Multi-media projector with screen – 01.
- (iv) The facilities of the University are used as required for different activities.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Description of the Project
Nandarani Choudhury	Action Research Project on Developing Child Friendly Panchayats in Three Gaon Panchayat so of Sonitpur Districts (in collaboration with UNICEF).
K Kikhi (PI) Nandarani Choudhury (Coordinator)	ICMR Sponsored Project on Gender and Mental Health in Assam: A Study on Magnitude, Cause and Impact of Mental Illness on Women.

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

Doley, R. K. 2014. One People, Two Tongues: The Misings and Their Bilingual Trait. Saarbrücken, Germany: Scholar's Press, Heinrich-Böcking.



Doley, R K. and N. Choudhury (eds). 2014. Agnikanya Chandrababha Saikiani: A Collection of Articles. Tezpur: Tezpur University Publication.

Choudhury, N. 2014. Chandrababha Saikiani: The Candle in the Wind. In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

Gogoi, B.P. 2014. Religion: A Study among the Misings of Assam. In Sonowal, C. J. (ed). Religion and Ethnic Reconstruction among the Tribes of Northeast India. Delhi: D.K. Agencies.

TRANSLATION OF BOOK CHAPTERS

Choudhury, N. 2014. In Memoriam: Saikiani Baideo (English Translation of an Article by Neera Dogra). In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

Choudhury, N. 2014. Chandrababha Saikiani in the Folds of Poetry (English Translation of an Article by Runu Devi). In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

Doley, R. K. 2014. Chandrababha Saikiani (English translation of an article by Dr. Bhupen Hazarika). In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

Doley, R. K. 2014. In Memory of Chandrababha Saikiani (English translation of an article by Shri Lakhyadhar Choudhury). In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

Doley, R. K. 2014. In Close Association with Chandrababha Saikiani (English translation of an article by Usha Das). In Doley, R. K. and Choudhury, N. (eds). Agnikanya Chandrababha Saikiani – A Collection of Articles. Tezpur: Tezpur University Publication.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

R K Doley presented a paper on Cultural syncretism and heritage continuity: conflicting ways of life. A case study of the Misings presented in the International Seminar on Philosophy of Culture organized by Tezpur University, UGC-SAP and ICPR at Tezpur University, 31 March-01 April 2014.

TALKS BY THE FACULTY ABROAD AND IN INDIA

R K Doley delivered a talk, Soft skills as tools to enhance students' employability, at Genius Academy, North Lakhimpur, 22 August, 2014.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Equal Opportunity Cell organized a State Level Workshop for Capacity Building on Research Methodology Related to Language Teaching – Learning held at Tezpur University sponsored and organized by Tezpur University and UNICEF, March 30-2 April, 2015.

DISTINGUISHED VISITORS TO THE CENTRE

Manas Choudhury, Managing Director of Shillong Times, Shillong.

Pradyot Kumar Bawa, Vice President, Kotak Life.

Dr Tushar Rane, Chief of UNICEF, Assam.

OTHER IMPORTANT ACTIVITIES OF THE CENTRE/ACHIEVEMENTS OF THE FACULTY

All three component cells of CID are actively involved in various activities for the betterment of present and future of the University community in particular and community outside the campus at large:

The outreach programmes have been organized through the Equal Opportunity Cell. Eight villages were directly benefitted from the outreach programmes through the following activities:

- Five Medical Camps on Maternal and Child Health were organized in Ahatguri, Bhalukjaroni (Napaam G.P.), Singitolli A, Singitolli B (Singitolli G.P.) Samdhora A and Bihiagaon (Samdhora G.P.) villages.
- Orientation Programme on Innovative Teaching in Eight Primary Schools of Napaam, Singitolli and Samdhora Gaon Panchayat were organized.
- Vocational Training Programme on Refrigerator Repair and Mobile Repair were organized for the unemployed youth of the neighboring villages.
- Vocational Training Programme on Computer Hardware Repair and Printer Repair were organized for the unemployed youth of neighboring villages.
- Capacity Building Programmes for Anganwadi Centers Workers on Hygiene and Sanitation were organized.

The SC/ST Cell has been directed towards community development with an active involvement of the students of Tezpur University who interested in such activities:

- UGC-CSIR NET coaching was organized during October – November 2014 in association with the Equal Opportunity Cell. 247 students from nine departments, viz., Chemical Sciences, Mathematical Sciences, Molecular Biology & Biotechnology, Physics for CSIR-NET and Cultural Studies, English and Foreign Languages, Environmental Sciences, Mass Communication & Journalism and Sociology for UGC-NET registered in the coaching programme. The category-wise break-up of the students is as follows: SC-29; ST-20; OBC(NCL)-91; Minority- 09 and General- 98.
- A Yoga practice programme was organized during February – May 2015. The total number of students participant was number of students participated was: 73 with a category-wise break-up as follows: SC-12; ST-04; OBC (NCL)-24; Minority- 03 and General- 30.
- The SC/ST Cell coordinated with the ITDP, Government of Assam for timely disbursement of the scholarships for ST students of the University.

The programmes organized through the Training & Placement Cell were aimed at enhancing the employability and general personality of the students. The success of TU students at the Placement 2014-15 reflected the impact of the personality development programmes. The following programmes were held during the concerned period:

- Mahindra Auto Quotient Competition in collaboration with Mahindra & Mahindra on 19 August, 2014.
- Capsule pre-placement grooming programme on 06 September, 2014.
- Under the Industry-Institute Interaction Initiative, organized an invited talk on Talent Evaluation in Changing Environment by Rakesh Ranjan, Head – HR, Vodafone – North East on 17 September, 2014.
- Workshop on Leadership Quality Development for the members of the Students' Council, 9– 10 October, 2014.
- Training on Communicative Skills for engineering students, 10-11 October, 2014.
- Training on Personality Development & Communicative Skills by Anuradha Ghosh, Army cantonment, Tezpur, 25 – 26 October, 2014.
- Aptitude Refresher Programme for engineering students by Focus Academy for Career Enhancement on 25 November, 2014.
- Meeting of the Training & Placement Officers of central government funded educational institutes for enhancing the placement scenario in the Northeast on 26 November, 2014.



- Pre-placement grooming programme for all final year students on resume writing & interview-facing techniques, 27 – 28 February, 2015.

NOTABLE PLACEMENT

Recruiting Organizations	Participants	Students Placed
Pantaloons	MBA students	2
Shriram Value Services	BTech & MBA students	0
Dalmia Cement	MBA (HR)	1
CMS	MA MCJ students	1
Nestle	MBA students	1
AzimPremji Foundation	Humanities & Science students	4
WSP	BTech – Civil & Mechanical students	1
CCD	BTech ECE & ME students	1
Wipro	MCA students	3
TCS	BTech students	Result awaited
Axis Bank	MBA students	6
SeSTA	MBA, MA & BTech students	5
Kotak Life	MBA students	5
Focus Group	MA MCJ & MBA students	Result awaited
Indian Armys' Motivational cum Preliminary Selection team (MPST)	5th Sem. BTech Students	10
KEC international	BTech Civil Engg	2
Shillong Times	MA MCJ students	3
Vodafone	BTech ECE students	0
HDFC Bank	MBA students	5
Berger Paints	MBA students	0
Face	BTech students	2
Asian Paints	MBA	0
Zaloni	BTech, MTech & MCA	
Wipro	BTech (CSE & ECE)	10
Vodafone	MBA students	4
L&T Infotech	BTech (CSE & ECE)	3
ICICI Bank	MBA	3
IBM	BTech, MTech & MCA	17
Software AG	MCA students	4
Tech Mahindra	BTech & MCA	15
TCS	BTech, MTech & MCA	46
Power Grid Corporation of India	BTech Civil Engineering students	1

Recruiting Organizations	Participants	Students Placed
Tech Mahindra	BTech students	13
PRADAN	BTech , MSc & MA students	5
AzimPremji Foundation	Humanities & Science students	1
Nilestream Technologies	BTech& MBA students.	17
Dabur India	MBA students	2
Collabra Tech	BTech students	0

THE STAFF OF THE CENTRE

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J Das
MTS



AUTOMATED COOKING SYSTEM

Developed by
M.Tech students
Manoj Das
Ajay Mishra
Technical staff
Manoj Mahi

Supervisor
Prof. S. Bhattacharyya

Department of Electronics and Communication Engineering
Tatyasaheb Kore University

CENTRE FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP

The Centre for Innovation Incubation and Entrepreneurship (CIIE) was established in September 2013 through a merger with the Entrepreneurship Development Cell (EDC) of the University, which was opened in August 2010. The CIIE is being funded by AICTE and Tezpur University.

PARTICIPATION OF THE CENTRE/CELL IN THE COURSES OFFERED BY ACADEMIC DEPARTMENTS

Course Code	Course Title	Total Credit	Offering Department
ME481	Project-I	12	Mechanical Engineering
ME482	Project-II	24	Mechanical Engineering
EN539	Project (part-I)	08	Energy
EN540	Project (part-I)	16	Energy

MAJOR FACILITIES AND EQUIPMENTS AVAILABLE

The centre is well equipped with the following infrastructure and facilities

- One Class room
- One Laboratory
- One Faculty room
- One Office room
- One Technology Display Hall
- One Central Workshop



TRAININGS/WORKSHOPS/SHORT TERM COURSES/CONFERENCES CONDUCTED

Theme / Title	Duration	Place	No. of Participants
Skill Development Training on Fabrication of Aluminium Building Material	21-23	Central Workshop, TU	13
	March, 2015		10
Brain Storming Session on MSME projects	21 March, 2015	SoE, TU	

FACULTY/STAFF PARTICIPATION IN TRAINING/WORKSHOP/SHORT TERM COURSES/ CONFERENCES

Name of the Faculty/Staff	Programme	Duration	Place
Dr K K Das, Faculty member	Brain Storming Session for MSME projects	21 March, 2015	Conference Room, Dean's Building, School of Engineering, Tezpur University
Dr U K Bharali, Visiting Director			
Prof M Bhuyan, Faculty member			
Dr M K Hazarika, Faculty member			
Dr Partha P Dutta, Faculty member			
P K Laskar, Incubatee			



Name of the Faculty/Staff	Programme	Duration	Place
Champak Talukdar, Incubatee	Brain Storming Session for MSME projects	21 March, 2015	Conference Room, Dean's Building, School of Engineering, Tezpur University
Rajesh Barman, Project student			
Imdadul Hoque Mondal, Incubatee			
Madhurjya Dutta, Incubatee			
Prof M Bhuyan Dr U K Bharali	Meeting and Interaction of the Members of National Innovation Clubs	10 March, 2015	Rashtrapati Bhavan Cultural Centre, President's Estate, New Delhi

EXTERNALLY FUNDED PROJECTS

Project Title	Sponsoring Agency	Sanctioned amount (in INR)	Duration
Design of a dehulling/deseeding machine for all types of oil bearing seeds	Micro, Small and Medium Enterprise, Govt. of India	5.20 Lakh	2 years
Design, development and testing of a green fuel powered energy efficient vehicle	(MSME)	6.25 Lakh	2 years
Production of natural Antioxidant Enriched Sandesh using Single Screw Extruder	MSME	6.25 Lakh	2 years
Development and fabrication of small capacity paddy parboiling system with process completion indicator ahead of onset of husk splitting	MSME	5.50 Lakh	2 years
Portable peripheral nerve testing instrument	MSME	5.90 Lakh	2 years
Polluted Air Purification Machine	MSME	2.50 Lakh	2 years
Low cost and user friendly portable Lift for home – for elderly person and patient	MSME	6.25 Lakh	2 years

PARTICIPATION IN OUTREACH PROGRAMMES

Local unemployed youths (13 Nos) of a nearby village were trained on Skill Development on Fabrication of Aluminium Building Material during 21-23 March, 2015.

ENCOURAGING LOCAL INNOVATOR

Biswajit Nath from Jahamari, Sonitpur has designed a bicycle with a double wheel chain system which runs faster than a normal bicycle. CIIE, TU takes the initiative to encourage the person for his innovation and motivated him for his future work. The bicycle has been preserved in the Central Workshop TU.

INNOVATION DISPLAY HALL

Tezpur University Innovations display hall, TUNOVATION, was inaugurated in December 2014 during the 12th Convocation of the University. TUNOVATION displays various innovations made by students and faculty

members as a part of their projects or research work. Apart from displaying technical items, the hall also displays collection of cultural antiques of the North East Region including musical instruments, masks and terracotta. The hall is looked after by the Centre for Innovation, Incubation and Entrepreneurship (CIIE).

SHOWCASE OF DEVELOPED TECHNOLOGIES

The following technologies and antiques have been displayed

- Low cost and user friendly portable lift for home for elderly persons and patients
- A de-seeding machine for bio-fuel application
- Mechanised paddy thrasher
- Motorised tri-cycle
- Automated public toilet flusher
- Hand-held Tea tasting instrument
- Electric Car
- Chilli gun for self-protection
- Cultural antiques of North East (Musical instruments, Musk and Terracotta)

VISIT OF MSME OFFICERS FOR EVALUATION OF PROJECTS

Two officers of MSME, Guwahati, Shri S Asthana and Shri S S Baruah had visited the university on 3-4 August, 2015 for mid-term evaluation of the projects funded by MSME.

WORKSHOP FACILITIES

The following machineries have been installed in the centre for performing student project and innovative designs

- Arc welding and Teg welding machine with welding accessories
- Hand drill and Portable pillar drill with motor & Choke
- Angle grinder
- Chop saw
- Bench grinder and Grinding stone
- Spary machine
- Electric blower
- Envil

In addition to the above facilities, the Department of Mechanical Engineering and the Department of Electronics and Communication Engineering have the workshop facility for projects.

NEW PROJECTS

The following new projects have been taken up by Dr U Bharali, Innovator and Visiting Director, CIIE

- Floating garden in lakes using coconut coir
- Road Sweeping Tricycle using coconut coir brush

ADVISORY COMMITTEE OF THE CENTRE

Pro-Vice Chancellor

All Deans of Schools

Dean, Research & Development

Dean, Students' Welfare

Head. Dept of ECE

Head, Dept of Energy

Annual Report 2014-15





Head, Dept of ME

Prof Chandan Goswami, Dept of BA

Prof S M Hazarika, Dept of CSE

Prof R C Deka, Dept of Chemical Science

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THE COMPUTER CENTRE

The Computer Centre, which was established in 1997, has been providing ICT services to the University Community and has evolved into a state of the art central support facility of the University. It provides laboratory facilities to the users along with various other services. Presently, there are two units of Computer Laboratories, one with 60 Desktop Computers and other with 68 Desktop Computers and both are housed in two separate buildings, i.e. Academic Complex -2 and School of Engineering (SoE) Complex on the University Campus.

The Centre has built-up its own state-of-the-art Campus LAN using Optical Fiber Backbone covering almost every corners of the campus. The terminals of the University are well connected via Optical Fiber, Copper and Wireless modes. There are approximately more than 1000 official desktops and more than 2500 personal desktops pertaining to students and the staff that are connected to the campus LAN with Gigabit Switches and it is fully managed by the Computer Centre staff.

The IP based CCTV Surveillance System with 23 Cameras are managed by the Computer Centre. The Central Servers are housed at the Server Room of the Centre. All the official desktops utilizes fully licensed version of software like Microsoft Operating System, Microsoft Office, Antivirus, etc.

The part-time (evening) short-term computer training courses (DOEACC O, and A level) have been running smoothly over many years are assisted by Department of Computer Science and Engineering of the University.

The services through 1Gig National Knowledge Network (NKN) have been satisfactory over the past few years, facilitating remote location video lectures/conferences. The University continues with its 2Mbps backup link via Educational and Research NETWORK (ERNET).

SERVICES PROVIDED BY THE COMPUTER CENTRE

The primary goal of the Computer Centre is to provide quality ICT services including computational facilities to the University community. In addition to the maintenance of the existing computational infrastructure, the following services are supported by the Centre:

- Email and Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses organized by various Departments.
- Organizing training programmes for the employees
- Assist the Administration in the process of selection and procurement of computing resources
- Providing maintenance services for computers/ peripherals to the Faculty/Staff /Departments
- Maintaining and monitoring the Campus LAN; Wired as well as wireless.
- Maintaining and monitoring various Internet Links.
- System Administration, Network Administration and monitoring of various servers - Email, Web, Proxy, Firewall, etc.
- Maintaining the University Website and intranet portal.
- Develop, procure and maintain software for administrative and other purposes of the University.
- Software maintenance Services.
- Providing and maintaining the MMPs in the auditorium and conference halls.
- EPABX system administration and maintenance.
- IP CCTV Surveillance Management.



ACADEMIC PROGRAMMES

Name of the Programme	PG / UG	Duration
DOEACC 'O' Level Diploma	UG	1 Year
DOEACC 'A' Level Diploma	UG	1 Year

STUDENT INTAKE

Programme	Student Intake
DOEACC 'O' Level Diploma	20
DOEACC 'A' Level Diploma	20

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

LIST OF EQUIPMENT

Particulars	Hardware (Make/Model)	Quantity
Video Conference CODEC	Polycom 8000 Series	1
VoIP Telephony Server	Avaya S8500	1
Voice Media Gateway	Avaya G650	2
	Avaya G450	2
	Avaya G700	5
	Avaya G430	1
L3 Switch	Extreme X450	4
	Huwawei Quidway 9303	1
Gigabit L2 Switch 48 Port	Extreme X350 48T	56
Gigabit L2 Switch 24 Port	Extreme X350 24T	19
	Extreme X150 24T	8
	Huwawei Quidway S5324TP-PWR-SI	8
	HP 2520G	9
Firewall	Huwawei Edumon	1
Router	Cisco ASR 1000	1
	Cisco 2801	1
	Cisco 1750	1

LIST OF SERVERS

Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
Email cum DNS Server	IBM / X226	Redhat Enterprise Linux ES 4.0/ Sendmail , Bind
Proxy/NAT/Firewall Server	IBM / x3630M3	Redhat Enterprise Linux ES 6.0/ Squid Proxy
Wireless NMS Server	HP / DL-380G5	Cent OS/Aruba

Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
Web cum Secondary DNS Server	IBM / X226	Redhat Enterprise Linux ES 4.0/ Apache
Oracle 10g Database (old)	HP / DL-380G5	Windows 2003 Server/ Oracle 10g Suite
Oracle 10g Database (new)	IBM/X3560	Windows 2008 R2 Server/ Oracle 10g DB
Oracle 10g App. Server (new)	IBM/X3560	Windows 2008 R2 Server/ Oracle 10g App
File cum Kaspersky Antivirus Server	HCL / GL-2360	Windows 2003 Server/ Kaspersky Total Space Security Admin
File Server cum Programming	HP DL 180G5	Redhat Enterprise Linux ES 4.0/ Open Source
Video Streaming Server with Storage	IBM/X3650 + IBM/DS3524	Windows 2008 R2 Server/ Adobe Media Server 5
Network Video Storage (NVR)	Honeywell HUS-NVR-1032	HUS-NVR-1032
CCTV Monitoring Server	IBM/X3560	Windows 2008 R2
VoIP Telephony Server	Avaya/S8500	Avaya Linux Call Manager

COMPUTER TERMINALS AND PERIPHERALS AVAILABLE

Unit No	Unit Name/Location	Terminals & Peripherals
Unit-0	Central Computer Centre (Academic Building -2)	Terminals = 60 (Core i5 / Windows 7 Pro. Desktops) Laser Printer - 2 Scanner - 2
Unit-1	Computer Centre-Cluster-1 (SoE Complex)	Terminals - 68 (Core i5 / Windows 7 Pro. Desktops) Laser Printer -1

SPECIAL COMPUTING FACILITIES

A High Performance Compute Server (SGI Altix350) with four Itanium 2 64-bit processors is being used extensively by the University's research community for computational works.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

INTERNATIONAL AND NATIONAL

D Sarma attended a workshop, 3rd NKN ANNUAL WORKSHOP: NKN: The E4 (Encourage, Empower, Enable, Enrich) NGN, IIT, Guwahati, 15-17 December, 2014

N Sarma attended a workshop, 3rd NKN ANNUAL WORKSHOP: NKN: The E4 (Encourage, Empower, Enable, Enrich) NGN, IIT, Guwahati, 15-17 December, 2014

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Sl No	Activities
1	Implementation of WiFi Network for 2 New Hostels viz. Pobitora Madam Curie Women's Hostel and Saraighat C V Raman Men's Hostel, Tezpur University
2	Implementation of IP Based CCTV in the University Campus
3	LAN Setup for Kendriya Vidyalaya at University Campus



SI No	Activities
4	Live Webcast of 12th Convocation of Tezpur University
5	Implementation for WiFi Network of Central Library Annex Building
6	Implementation of NME-ICT Scheme LAN Setup Scheme for 8 Hostels in the University Campus
7	Modernization of KBR Auditorium Projection System
8	VC Conference Room New Audio/Video Setup

THE STAFF OF THE CENTRE

HEAD OF THE CENTRE

N Sarma, PhD (IIT Guwahati)

Specialization/Areas of Interest: Ad Hoc Networks & Mobile Computing

E-mail: nitya@tezu.ernet.in

COMPUTER ENGINEER

D K Sarma, MS (Tezpur)

Specialization/Areas of Interest: Computer Networks and Security

E-mail: dhiraj@tezu.ernet.in

JUNIOR PROGRAMMERS

D C Choudhury, MCA (Tezpur)

P Rajkhowa, BE (JCE), PGDAC (CDAC) [on EoL]

A Baishya, MCA (Tezpur) [Ad-hoc]

SENIOR TECHNICAL ASSISTANT

A K Das, Diploma in Engg (CSE)

TECHNICAL ASSISTANTS

M Baruah, Diploma in Engg (CSE)

N K Deka, Diploma in Engg (Electronics & Telecommunication)

A Sarmah, Diploma in Engg (CSE)

P Borah, DOEACC-A Level, MS(IT)

MTS

R Baruah

S Khan

EPABX Technicians: 2 (contractual)

Student Assistants: 5

THE ENGINEERING CELL

The Engineering Cell of the University was established in March 1995. It is assigned the prime responsibility of developing and maintaining the infrastructure in the University campus, covering an area of about 262 acres of land. The following are the major duties and responsibilities entrusted on the Engineering Cell:

- i. Allotment and execution of construction projects involving civil, electrical, water supply and sanitary works
- ii. Maintenance and repairing of buildings and roads
- iii. Maintenance of power supply to the University campus
- iv. Maintenance of water supply to all the buildings including hostels and canteens
- v. Preparing agenda notes and writing minutes of the Building Committee meetings
- vi. Maintenance and development of the University campus

CONSTRUCTION ACTIVITIES

The following construction activities were accomplished during 2014-15:

- i. Construction of a RCC School Building for Kendriya Vidyalaya at the University campus
- ii. Construction of a RCC 3-storied Type B residential buildings (2 blocks = 36 units)
- iii. Construction of a RCC 3-storied Type C residential buildings (2 blocks = 36 units)
- iv. Supply, installation, testing and commissioning of a 500 KVA , 415V, Silent DG Set
- v. Construction of a LT Double Circuit O H Line at the University campus
- vi. Providing, erecting and fitting of a False Ceiling in the Central Workshop of the Mechanical Engineering Department
- vii. Designing, interior work and furnishing of the Board Room, Vice Chancellor's Office
- viii. Providing, erecting and fitting of a False Ceiling in the Dhaba Canteen

ONGOING CONSTRUCTION WORKS

Construction works of the following buildings taken up during the year are in progress and are likely to be completed during year 2014-15:

- i. Construction of an Academic Building for School of Humanities and Social Sciences
- ii. Construction of a RCC 3-Storied extension to the Central Library
- iii. Construction of an AT Machine House building for the Department of Mechanical Engineering





WORKS DONE WITH TENDER PROCESS

The following projects are expected to be started inside the current financial year for which the tendering process has already been completed:

- i. Construction of a RCC Academic Building for the Department of Physics
- ii. Construction of an Olympic standard swimming pool
- iii. Construction of a RCC two-storied Security Barrack
- iv. Construction of an Inter Connectivity, linking all the Academic Buildings of the School of Engineering
- v. Supply, installation and commissioning of a 2X500KVA Transformer

POWER SUPPLY

The Govt of Assam has sanctioned 2 MW of power to Tezpur University. This power is released to the University by ASEB as per load demand. Currently, the University is drawing 1500 KW (1.5MW) from the 132/33 KV Depota Grid Sub-Station of ASEB through a 13.50 KM long dedicated power line. This power is received at the University end through a 2 x 2.5 MVA, 33/11KV Sub-Station constructed by the University and is distributed through an 11KV H.T. During 2014-15, the total hours of interruption in supply of power to the University was 298 hours. Out of this maintenance shut down availed by the University was only 9 hours, which was rather insignificant considering the present power crisis in Assam.

Tezpur University has installed and commissioned five 500 KVA, 415 V, 50 Hz, silent AC generators for power supply to the entire University campus during interruption of power supply from ASEB.

WATER SUPPLY

Four deep tube wells (each 102 meters deep) associated with submersible pumps were installed in the University campus to access ground water. The treatment plant consisting of aerator, flush mixture, sedimentation tank, filter unit, chlorination, underground clear water constructed for proper treatment of raw water.

Two overhead reservoir (OHR) of capacity 3.0 lakh litres and 3.50 lakh litres were constructed to store treated water. Water from the OHR reaches the consumer points through a pipe-line network.

The present requirement of water in the University campus is more than 8.00 lakh litres per day. The demand is likely to increase with the completion of new Academic buildings and hostels. There was no instance of interruption in supply of treated water during the concerned year.

PROPOSALS OF THE YEAR

Planning and designing of the following projects have been taken up and construction of these projects are awaited:

- i. Construction of a Central Lecture Hall Complex
- ii. Construction of a 1300 capacity Indoor Stadium
- iii. Sewerage and drainage system
- iv. Construction of a RCC Residential Building (Type B,C and D)

THE STAFF OF THE CELL

EXECUTIVE ENGINEER

R R Hazarika, BE (REC, Silchar)

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ASSISTANT ENGINEER

J C Nath

G Kalita

JR. ARCHITECT

Rashmi Dutta

JR. ENGINEER

D Borkataki

S Goswami

S Talukdar

B Sarma

Assistant

T Das, MTS

THE HEALTH CENTRE

THE HEALTH CENTRE

The Health Centre of the University provides health care services to students, faculty members and staff and their families. It takes care of their basic medical needs by way of consultation and investigation; if required cases are referred to the referral hospitals. Students and employees are provided medicines free of cost. As of now the Centre has over 3500 beneficiaries, which include people working at various construction sites at the University campus.

The Health Centre was shifted to its current new building with modern facilities in September 2010. The Centre is located in the southeast corner of the campus, close to the University Kendriya Vidyalaya.

SERVICES/FACILITIES AVAILABLE

OPD services are offered at the Centre to its beneficiaries. Ten indoor beds are available for initial care of indoor and emergency cases. A 24-hour free ambulance service is also available.

OPD SERVICES

The OPD timings of the Centre are as follows

Session	Morning	Evening
April to September	8.30AM - 12.30PM	4 PM - 6 PM
October to March	8.30AM - 12.30PM	3 PM - 6 PM
Saturdays and Sundays - From 10 AM to 12 NOON		

One Medical Officer is available on emergency duty for 24 hrs everyday. The cases requiring hospitalization are referred to the referral hospitals at Tezpur.

A stock of common medicines as well as life saving drugs are maintained at the Centre and are supplied to patients free of cost. Routine laboratory investigations are also done free of cost. The Centre is also equipped with one fully automatic Autoanalyser and one Hormone Analyser. Services like ultrasound scanning, ECG and x-ray facilities are also available at the Centre. A set of appliances for person with disability is also kept in the centre.

EMPANELMENT OF SPECIALISTS

Specialists of the following disciplines are empanelled

Dental Surgeon	: 2
Orthopaedics Surgeon	: 1
Dermatologist	: 1
Ophthalmologist	: 1

REFERRAL HOSPITALS

At Tezpur: All private hospitals of Tezpur town are considered as referral hospitals of the University.

At Guwahati: Following private hospitals are enlisted as referral hospitals of the University.

Hospitals	Student Intake
GNRC Hospital	Cardiac as well as Neurological
Down Town Hospital	General Specialty
International Hospital	General Specialty



Hospitals	Student Intake
Central Nursing Home, Beltola	Kidney related Surgical problem
Sri Sankardev Netralaya	Eye

VISIT BY SPECIALISTS

Specialists in Paediatrics, Obstetrics, and Gynaecology regularly visit the Health Centre for the benefit of the University community.

A Psychiatrist from LGBRIMH, Tezpur also regularly visits the University to offer counselling on stress related problems.

IMPORTANT ACTIVITIES

- The Medical Officers regularly visit the University hostels and the canteens periodically to assess the prevailing hygiene of the dining hall, water supply and the surroundings
- A Health Checkup Programme is held for the employees every year
- Fogging is done in the campus to prevent outbreak of mosquito borne diseases
- Pulse Polio Immunisation Camps are organized in the campus as per the directive of the Government of India
- A Bone Mineral Density Test for elderly ladies was organized on 12 December 2014
- A Blood Donation Camp was organized on 27 September 2014
- Japanese B encephalitis vaccination camps had been organized on 25.7.2014 and 14.8.2014.
- A talk on swine flu was organized in March 2015
- A free health camp was organized in the campus in February 2015 for the villagers of the neighboring villages adopted by the University.

OTHER ACTIVITIES

- Regular health checkup for students of Takshyashilla Vidyapith and Kendriya Vidyalaya of the University.
- Talk on health and hygiene at the Kendriya Vidyalaya of the University, November 2014.

FUTURE PLANS

- Phasewise upgradation of the Centre to a 30 bedded Health Centre
- OPD facilities for outsiders
- Regular vaccination programme for children

THE STAFF OF THE CENTRE

CHIEF MEDICAL OFFICER

Dr D K Goswami, MD

E-mail: dkg@tezu.ernet.in

MEDICAL OFFICERS

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Amrita Purty, Diploma in GNM
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MTS

M K Saikia
J Rajbongshi



HORTICULTURE SECTION

The Horticulture Section of Tezpur University is assigned the responsibility of landscaping and beautifying the University campus. The Assistant Horticulturist supervises the activities of the section along with a faculty Co-coordinator. The assisting staff includes 1 Multi Task Staff and 24 daily wage labourers. The annual activities carried out by the Horticulture Section during the concerned period are as follows:

PLANTATION PROGRAMMES

Landscaping and plantation was carried out in different parts of the University campus which include VC's residence, Dept of Civil Engineering, Dept of Mass Communication and Journalism, the Health Centre, the Niribili Park (the park along the water body in front of VC's residence), the Central Library garden, the KBR Auditorium premise, the Guest House premise, parts of the Ring Road; the roads of the residential colony, and the extended areas of the University. A total of 413 seedlings of different ornamental plants/shrubs and fruit trees were planted. In the concerned year, various kinds of orchids were planted in some of the existing trees on the campus.

NEW DEVELOPMENTAL WORK

- Landscaping of the Kendriya Vidyalaya premise was carried out. This includes plantation of 83 different ornamental plants and shrubs and about 400 RM hedge.
- Plantation of 150 orchids of various kinds in the trees in various areas the University
- Beautification of the road dividers of the extended plot of the University near Krishi Vigyan Kendra was carried out by planting 178 ornamental shrubs
- A citrus garden (comprising 100 Assam Lemon plants) at the western side of the Academic Building - I was developed

MAINTENANCE OF THE EXISTING TREES

Essential maintenance work was carried out towards each and every existing tree on the campus.

MAINTENANCE OF THE EXISTING GARDENS

Essential maintenance work was done on all the flower gardens on the University campus, which include the gardens in front of the Administrative Building, the KBR Auditorium, the Guest House, the Central Library, the Community Hall, the Health Centre, the Student Activity Centre, Dept of Energy, Dept of Chemical Science, Dept of MBBT, Dept of Environmental Sciences, Dept of Mass Communication and Journalism, Dept of Business Administration, Academic Building - I and Academic Building -II, School of Engineering, Vice Chancellor's residence, the Cafeteria, the Sophisticated Analytical Instrumentation Centre, the Chandraprabha Saikiani Bhawan, the Shopping Complex, the Day Care Centre, , the Car parking near, the Administrative Building, Takshashilla Vidyapeeth, the Childrens' Park, and the Botanical Garden.

MAINTENANCE OF HOUSE PLANT POTS FOR INDOOR DECORATION

Essential maintenance work was regularly done on all the house plant pots (about 850 in number) placed in, the Administration Building, the Academic Building, the Central Library, the Guest House, the Community Hall, the KBR Auditorium, the Health Centre and, the Student Activity Centre.

MAINTENANCE OF VERMICOMPOST PROJECT

A Vermicompost project has also been functional producing organic manure. About 10.75 quintals of vermicompost was produced during the concerned year

MAINTENANCE OF THE UNIVERSITY NURSERY

The University has a nursery of its own, which has been the source of seedlings of ornamental and fruit trees of different types; shrubs; indoor plants and also some seasonal flowers for the use of the University. Regular maintenance work was carried out on the nursery throughout the concerned year.



OTHER ACTIVITIES

In addition to the above, cleaning and maintenance of different parts of the University campus such as the surroundings of the Administrative Building, the Academic Buildings, the Central Library, the KBR Auditorium, the Guest House, the Chandraprabha Saikiani Bhawan, the Community Hall, the Sports Complex, the Shopping Complex, the Day Care Centre, the Childrens' Park, Takshashilla Vidyapeeth, Kendriya Vidyalaya, the car parking area was regularly done throughout the year.

COORDINATOR

Dr U K Pegu

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THE STAFF OF THE CENTRE

G Hazarika, MSc (AAU)

Assistant Horticulturist

E-mail: gin@tezu.ernet.in



INTERNAL QUALITY ASSURANCE CELL

The IQAC moved to its new office premises in the ground floor of the Council Hall Annexe. The IQAC office now includes the chamber of the Director, a discussion room and an office assistant's room.

The IQAC conducted a workshop on Credit Based Academic Programme on 19 June 2014, in the Seminar Hall of the Department of CSE. The workshop attended by over 50 faculty members from different departments of the University was inaugurated by the Vice Chancellor Prof M K Chaudhuri. The purpose of the workshop was to disseminate a wholistic understanding of the concept of Credit Based system vis-a-vis the traditional marks based system. Pro-Vice Chancellor Prof A Choudhury, Prof S M Hazarika, HoD CSE, and Prof U Sharma, Director IQAC, delivered lectures on various aspects of credit based system in general, and the model adopted in Tezpur University. The workshop also included demonstration of some in-house software that are useful in academic tasks in a credit based system, and an open discussion.

A meeting of the IQAC was held on 30 Sept 2014 in the Conference Room of the Guest House. Various matters related to improving quality parameters and assessment by NAAC were discussed at length. Introducing research at

UG level, improving students' placement, improving faculty performance through effective implementation of the API and appraisal system, in-house faculty orientation programmes, and monitoring and documentation of quality indicators were some of the points discussed in the meeting.

The IQAC obtained feedback from guardians of students who graduated in Spring 2014. Though feedback forms were sent to many, only a few guardians sent in their feedback. The feedback indicated a general satisfaction of the guardians regarding the programmes and the provisions in the University, though there was some concern regarding students' placements.

The IQAC carried out assessment of applications by faculty members for promotion under CAS. A core committee within the IQAC verifies the category III scores reported by the applicants. In the process, the committee has identified scope for improvement of the application format for verifiability of performance claims and smooth assessment of the applications.

Development of a software for online submission and tracking of Quality-Suggestions by stake-holders of the University has been initiated. Once deployed this software will allow stake-holders to point out deficiencies and suggestions for improvement of the University.

DIRECTOR, IQAC

Prof U Sharma

E-mail: utpal@tezu.ernet.in

THE STAFF OF THE CELL

B Das

UDC

E-mail: bhrigu@tezu.ernet.in



THE INTERNATIONAL OFFICE

The International Office (IO) of Tezpur University was established in February 2013. The IO is presently manned by a Director (Professor P K Das) and an Assistant Director (Dr Rupak Mukhopadhyay). It has no office staff as yet. The IO is expected to facilitate academic and research collaboration with educational and research institutes abroad. It is also expected to handle the application and enrolment process of international students.

ACTIVITIES

The IO organized a presentation by Mr. Sumanta Basu, Senior Program Manager, USIEF, Kolkata presentation on the Fulbright Fellowships in the Council Hall on April 29, 2014. The presentation was followed by an interactive session in which faculty and research scholars participated.

A team from Myanmar led by the Chief Ministers of Sagaing Region and Kachin State accompanied by Indian Ambassador to Myanmar Shri Gautam Mukhopadhyay and other officials visited Tezpur University on December 4, 2014. The Director, International Office, participated in the meeting. The Ambassador and the two CMs showed keen interest in sending students from Myanmar to study in Tezpur University.

In July 2014, the IO facilitated the admission of Ms. Chutikan Sae Wang, a Thai student sponsored by Indian Council for Cultural Relations, to the MA in Linguistics and Language Technology programme of the Department of English and Foreign Languages.

A team of faculty and students from the Russian State University for the Humanities, Moscow visited Tezpur University from February 10-12, 2015. It was led by Professor Alexander Stolyarov, Director, International Centre for South Asian Studies, Russian State University for the Humanities. On February 11 a meeting was held and was attended by Dean, Humanities and Social Sciences, Director, IO and Heads of Hindi and Cultural Studies. The delegation visited the Departments of Hindi and Cultural Studies. A MoU was signed to initiate academic collaboration in identified areas between the two Tezpur University and Russian State University for the Humanities.

THE CURRENT MEMBERS OF THE CENTRE

Prof P K Das

Director

E-mail: prsntdas@tezu.ernet.in

Dr R Mukhopadhyay

Asstt Director

E-mail: mrupak@tezu.ernet.in



PROGRAMMES CELEBRATED AT THE UNIVERSITY

- ◆ The 68th Independence Day was celebrated on 15 August 2014. Professor Mihir K Chaudhari, Vice-Chancellor hoisted the Tri-colour and urged in his speech the University community to rededicate themselves to the service of the nation.
- ◆ Hindi Fortnight was observed along with the rest of the country from 15 to 29 September 2014 at the University. Various programmes and competitions were organised during the fortnight amongst the University staff, students and school children. Winners of the various competitions were honoured with cash prizes and certificates at the Valedictory Function held on 29 September 2014.
- ◆ The University joined the rest of the country in organizing the Swatch Bharat Abhiyan with a 5-day long programme during 2-6 October 2014. The Abhiyan started with a Pledge taking ceremony and a cleanliness drive inaugurated by Prof Mihir K Chaudhuri, Vice Chancellor, Tezpur University. The University community took active participation in all the programmes.
- ◆ The University observed the Rashtriya Ekta Divas (National Unity Day) on 31 October 2014 with a host of events, which centered around the theme Sardar Patel's Contribution to India's Security, Safety and Unity.
- ◆ The University organized the Tezpur University Endowment Programme, Srimanta Sankaradeva Lecture, on 5 November 2014. A talk, Sri Sri Sankaradeva (1449-1568): Socio-Historical perspectives of the Bhakti Movement, was delivered by Prof Dilip Kumar Barua, eminent scholar and formerly Professor of English at Burdwan University.
- ◆ The birth anniversary of Bharat Ratna Maulana Abul Kalam Azad was observed as the National Education Day on 11 November 2014 with a day-long programme which includes an essay competition on the topic Educational Philosophy of Maulana Abul Kalam Azad, Walk for Creating Educational Awareness and a Talk, Education and its context, delivered by Prof. M M Sarma, Department of English and Foreign Languages of the University.
- ◆ The Twelfth Convocation of the University was held on 20 November 2014. Sri Pranab Mukherjee, Visitor of the University and the President of India, was present as the Chief Guest of the Convocation. The Governor of Assam and Chancellor of the University conferred degrees and diplomas upon the Graduating students. Out of the total of 1511 students 62 students were conferred upon the Degree of Doctor of Philosophy.
- ◆ The International Day of Persons with Disability was observed at the University on 3 December 2014. In continuation of its service to the persons with disabilities at the University, the University has brought out a braille version of its brochure, Tezpur University At A Glance.
- ◆ The University organized an Oratory (Bhaashan Shailee) and Essay Competition on 24 December 2014 to celebrate the Birth Anniversary of Sri Atal Bihari Vajpayee. The programme on Oratory Competition was inaugurated by Professor Khanindra Pathak, IIT Kharagpur, who in his lecture emphasized the need of effective governance to tackle the problems arising out of the increasing population and associated decrees in human value. He also focused on the role of technology innovation in promoting better governance at every walk of life.
- ◆ The University celebrated its 22nd Foundation Day on 21 January 2015 with a host of programmes. The celebrations began in the morning with the unfurling of the University flag by Prof Mihir Kanti Chaudhuri, FASc, FNA, Vice-Chancellor of the University. The Foundation Day Oration was delivered by Prof Richard Catlow, FRS, University College London and Prof Arup Kumar Raychaudhuri, FASc, FNA, S. N. Bose National Centre for Basic Sciences, Kolkata, and the oration was followed by a series of events including release of books by the Faculty and the Staff of the University and awards to the students and staff members.



- ◆ The 66th Republic Day was celebrated with pomp and gaiety on 26 January 2015. Prof Amarjyoti Choudhuri, Pro Vice-chancellor of the University hoisted the National Flag and addressed the gathering urging upon the youth of the University to uphold the secular and democratic fabric of the country.
- ◆ On the 150th Birth Anniversary of Swami Vivekananda the University remembered him with veneration and his message to the youths of India by organizing a five-day camp (19 to 23 August 2014), Youth Counselling for Positive Thinking. The Camp was supported by the Ramakrishna Ashrama, Cherrapunjee. Thirty students drawn from various disciplines of Humanities & Social Sciences, Science, Engineering and Technology took part in the Camp and a group of scholars was invited to address on the abiding relevance of Vivekananda's teachings in all walks of life and disciplines. Swami Sumanasananda Maharaj, Secretary, Ramakrishna Ashrama, Cherrapunjee graced the Valedictory Function of the Camp as the Guest of Honour.
- ◆ The University remembered with veneration and paid tributes to Kalaguru Bishnu Prasad Rabha by organizing a special programme on June 20 2014, being his death anniversary. Dr Anima Choudhury, noted singer and scholar, Guest of Honour, spoke on the multifaceted contributions of the legendary figure.
- ◆ Tezpur University remembered Kaviguru Rabindranath Tagore at a special programme organized on August 7(2014), his death anniversary. Prof Mukti Dev Choudhury, distinguished scholar of Tagore Studies and formerly Principal, Cotton College, Guwahati, graced the occasion as the Guest of Honour and spoke on the ideals of Humanism reflected in Tagore's compositions.
- ◆ In remembrance of Dr Bhupen Hazarika, the maestro of modern Assamese music, Tezpur University organized a special programme on 5 November 2014 at Kalaguru Bishnu Prasad Rabha Auditorium. Srijuta Sudakshina Sarma, veteran music personality, Sangit Natak Akademi awardee and a younger sister of the legendary composer graced the occasion as the Guest of Honour and presented a handful of memorable compositions of Dr Hazarika.
- ◆ The University, with its commitment to the culture and society of Assam, installed busts of three legendary personalities who profoundly contributed to the enrichment of modern Assamese literature and culture – Sahityarathi Lakshminath Bezbaroa, Rupkonwar Jyotiprasad Agarwalla and Natasurya Phani Sarma - inside the University. At a glittering function held on 20 March 20 2015, Professor Imran Shah, former President of Asam Sahitya Sabha and; Professor Dhrubajyoti Borah, noted litterateur and currently President, Asam Sahitya Sabha; and Dulal Roy, eminent theatre personality and former President, Asam Natya Sanmilan, ceremonially unveiled the three busts.

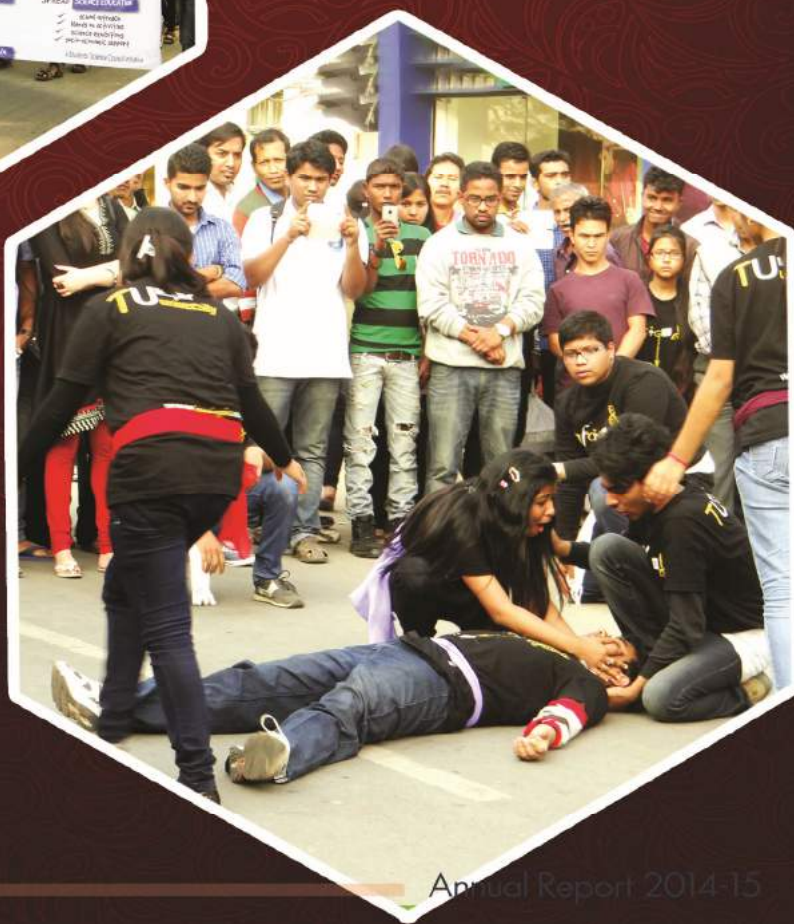




INSCIGNIS

InSCIgnis is the annual mega science fest of Tezpur University and it is organized by its Students' Science Council. The fest is celebrated on the occasion of the National Science Day, commemorating the contributions of Sir C V Raman to the field of Physics. One of the leading and the biggest science festivals in North-East India, InSCIgnis rejoices the spirit of science and innovation, fostering scientific temper among the masses. The term InSCIgnis derived from the Latin word insignis, which means ushering in distinguished, remarkable or rapid mark-making development in a particular field.

Unveiling a mosaic of exhilarating and thrilling events, the Students' Science Council of the University celebrated InSCIgnis 2015 with a two-day programme on 28 February (National Science Day) and 1 March. As part of the celebration, competitions were held amongst school and college/university students on both days. It provided a unique platform for intensive workshops, quizzes, webinars, experimentation and designing, fun events and fiction writing. Related activities were organized during January- February 2015. School outreach programmes were organized during 21 February and 1 March 2015.



TECHXETRA 2014

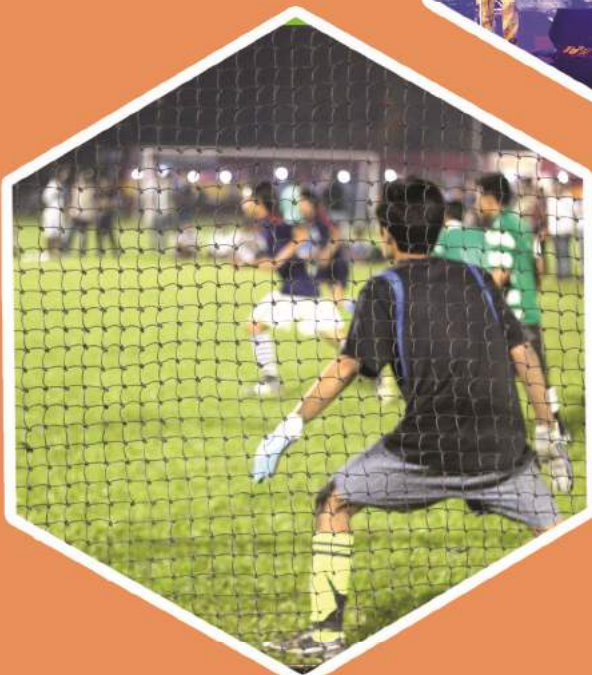


TechXetra is the annual technical festival of Tezpur University. A national-level festival, TechXetra celebrates modern technology and the spirit of technical innovation.

The digital gap is the gap between different strata of society in terms of their access to modern technology, something without which a nation can make no progress in the present-day world. Yet India has been slow in accepting it, or the rural India has very limited access to technology so far. TechXetra is a modest but sincere effort to bridge the digital gap by helping people realize how technology can make their life easy.

The last TechXetra was observed from 17 October to 19 October 2014 with an array of events ranging from robotics, technical workshops, gaming, innovative construction, a lecture series delivered by eminent personalities, and an enrapturing cultural night, which together attracted a large number of people. More than 1000 participated in various events.

Sarbananda Sonowal, Honourable Union Minister of State for Sports and Youth Affairs, inaugurated the last TechXetra.





NATION-WIDE REPRESENTATION OF STUDENTS FOR THE ACADEMIC SESSION 2014-15

State	No. of students				International students
	UG/ Diploma/ Certificate	PG	PhD	Post-Doc	
Andhra Pradesh	31	02	01	-	Thailand - 02 (PG) Sri Lanka - 01 (PhD)
Arunachal Pradesh	03	07	09	-	
Assam	817	1470	470	-	
Bihar	143	23	04	-	
Chhattisgarh	-	-	-	-	
Goa	02	-	-	-	
Gujarat	-	01	-	-	
Haryana	-	01	-	-	
Himachal Pradesh	01	02	-	-	
Jammu & Kashmir	-	01	02	-	
Jharkhand	12	02	02	-	
Karnataka	-	-	-	-	
Kerala	02	-	-	-	
Madhya Pradesh	06	01	-	-	
Maharashtra	01	-	01	-	
Manipur	02	04	06	-	
Meghalaya	10	11	07	-	
Mizoram	-	-	-	-	
Nagaland	-	04	04	-	
Odisha	-	04	02	-	
Punjab	-	01	-	-	
Rajasthan	23	01	-	-	
Sikkim	-	-	-	-	
Tamil Nadu	-	01	-	-	
Telangana	03	-	-	-	
Tripura	-	06	03	-	
Uttar Pradesh	74	29	06	-	
Uttarakhand	03	01	-	-	
West Bengal	08	40	10	-	
UTs (Delhi)	06	10	1	-	
TOTAL	1147	1622	528		03

STATISTICS: EMPLOYEES**TEACHING**

Employees	As on 31.3.14	Joined during 2014-15	Left during 2014-15	As on 31.3.15
Professor	52	05	0	57
Associate professor	47	05	06	46
Assistant professor	115	15	07	123
Total	214	25	3	226

NON-TEACHING

Employees	As on 31.3.14	Joined during 2014-15	Left during 2014-15	As on 31.3.15
Group-A	38	01	05	34
Group-B	55	0	02	53
Group-C	96	08	03	101
Group-D	73	0	01	72
Total	262	9	11	260

STATISTICS: SC/ST EMPLOYEES, FEMALE/MALE EMPLOYEES

(as on 31 March 2015)

TEACHING

Employees	SC	OBC	ST	Gen	Female	Male	Total
Professor	01	09	03	44	10	47	57
Associate professor	07	13	02	24	03	43	46
Assistant professor	21	32	12	58	37	86	123
Total=	29	54	17	126	50	176	226

NON-TEACHING

Employees	SC	OBC	ST	Gen	Female	Male	Total
Group-A	02	09	02	21	03	31	34
Group-B	09	20	04	20	11	42	53
Group-C	15	40	12	34	09	92	101
Group-D	12	25	05	30	05	67	72
Total	38	94	23	105	28	232	260

STATISTICS: STUDENTS

(as on 31 March 2015)

Total	Male		Female		General		SC		ST		OBC/MOBC		PWD		SSS	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
3300	1917	1383	913	699	243	140	126	114	554	357	16	06	65	67		







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