



**Prof. Ashwini K. Phukan**  
Department of Chemical Sciences  
Tezpur University  
Tezpur 784 028, Assam, INDIA  
e-mail : [ashwini@tezu.ernet.in](mailto:ashwini@tezu.ernet.in)  
Ph : +91 (3712) 275060 (O)  
09435521437 (Mobile)  
Fax: +91 (3712) 267005

September 8, 2022

To  
Dr. C. Sivaji  
Scientist-F  
International Bilateral Cooperation Division  
Department of Science and Technology  
Technology Bhavan, New Mehrauli Road  
New-Delhi-110 016

Subject: Submission of Project completion Report, Utilization certificate and Statement of Expenditure

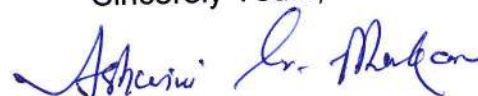
Ref. DST-DAAD Project No. **DST/INT/DAAD/P-12/2019**

Dear Sir,

Please find herewith the Project completion Report, signed Utilization certificate, Statement of Expenditure, Form GFR 12A and Form GFR19 of the above referenced project. Also, enclosed are two receipts of BharatKosh towards deposition of unspent balance (**Rs. 6,84,000/-**) and interest earned (**Rs. 17,000/-**).

I take this opportunity to express my sincere gratitude to DST for all the help and funding.

Sincerely Yours,

  
(Ashwini K. Phukan)

List of Enclosures:

1. Project Completion Report
2. Utilization certificate and Statement of Expenditure (02 copies)
3. Forms GFR12 A and GFR 19
4. BharatKosh Receipts (02 numbers)
5. Copy of the research publications

## Project Completion Report

1.	DST reference No.	<b>DST/INT/DAAD/P-12/2019</b>	
2.	Project title	<b>Synthesis, Reactivity and Bonding in Metal and Metal-free Borylenes</b>	
3.	Objectives	<p><b>(A)</b> Synthesis of boron(I) species with new substitution patterns and understand their bonding. This includes -</p> <p>(i) Derivatization of borylene complexes by using various stabilizing bases</p> <p>(ii) Development of new synthetic methods</p> <p>(iii) Formation of boron(I) compounds with other low-valent species (Al(I), Ga(I), etc.)</p> <p><b>(B)</b> Study of the reactivity of boron(I) species.</p> <p>(i) Reaction with small molecules and fixation of dinitrogen</p> <p>(ii) Reaction with organic moieties (carbodiimides, ketones, etc.)</p> <p>(iii) Understand the photophysics of the dissociation of carbonyl stabilized borylene species.</p> <p>(iv) Explore the possibility of catalytic transformations</p>	
4.	Field of S&T covered under the project	Chemistry	
5.	Project participants		
	Indian side	Foreign side	
	1. Prof. Ashwini K. Phukan 2. Miss Priyam Bharadwaz, M. Sc.	1. Dr. Conor Prancevicius 2. Dr. James Goettel 3. Benedikt Ritschel 4. Marcel Haerterich	
6.	Date of start of the project	25-09-2019	
	Date of completion	24-03-2022	

*Ashwini K. Phukan*

7 Visits undertaken (please include the number and duration of respective visits)		
	Name & Address of the visiting scientist	Duration of the visit
India to <u>Germany</u>	1. Prof. Ashwini K. Phukan Department of Chemical Sciences, Tezpur University, Napam – 784028, Assam	January 07-30, 2020 (24 days)
<u>Germany</u> to India	1. Dr. Conor Prancevicius Institute of Inorganic Chemistry Lehrstuhl II, Am Hubland, Julius- Maximilians-Universität Würzburg, 97074 Würzburg, Germany	November 05-20, 2019 (16 days)
	2. Mr. Benedikt Ritschel Institute of Inorganic Chemistry Lehrstuhl II, Am Hubland, Julius- Maximilians-Universität Würzburg, 97074 Würzburg, Germany	March 03-22, 2020 (20 days)
	3. Mr. Marcel Haerterich Institute of Inorganic Chemistry Lehrstuhl II, Am Hubland, Julius- Maximilians-Universität Würzburg, 97074 Würzburg, Germany	March 03-22, 2020 (20 days)

### 8. Yearly Project milestones

#### First Year

(i) Experimental work on thermal release of trimethylphosphine from phosphine-stabilized borylborylenes to generate reactive borylenes that effect metallomimetic transformations under mild conditions.

(ii) Computational studies toward evaluating the relative thermodynamic stabilities of a range of ligand-stabilized borylenes.

#### Second Year

(i) Experimental work on thermally induced, hybrid inorganic-organic ene-yne cross-metathesis reactions between diborenes and acetylene.

(ii) Comprehensive Computational mechanistic studies to understand the formation of fully planar,  $\pi$ -delocalized 1,8-diaza-3,6-diboraocataetraenes via cross-metathesis between an organic alkyne and inorganic cyclic alkyl(amino)carbene (CAAC)-stabilized B=B double bonds.

*Ashwini K. Phukan*



9. Progress of the Project:

Accomplishment Status : (vis-à-vis the project objectives and milestones, highlighting the major/salient achievements): (Up-to 1 page)	Please see Annexure I
List of joint research publications (Please attach copies)	1. <i>Chem. Sci</i> , <b>2020</b> , <i>11</i> , 11055–11059. 2. <i>J. Am. Chem. Soc.</i> <b>2021</b> , <i>143</i> , 18339–18345.
Technology/ New Processes/ Patents generated	Not applicable as this project is fundamental in nature.
Scope for commercializing the new Scientific Knowledge	Since this project is based primarily on fundamental research, thus the discoveries made herein are unlikely to directly find practical or industrial use

10. Please elaborate with your remarks on the collaboration:

Specific advantages derived:

- Expertise
- Equipment & computational Facilities
- Exchange of Data/Samples
- Exposure to advanced technologies
- Opportunity for new interactions with any other research Organizations
- Participation in Conferences

This collaboration helped us to understand the expectations of an experimental group from their theory counterparts. We could use the state-of-the-art computational facilities that is available with Prof. Braunschweig's research group. We were also shown how sensitive experiments are being performed inside a Glove Box.

11. Application potential (immediate/long term)-

Since this project is based primarily on fundamental research, thus the discoveries made herein are unlikely to directly find practical or industrial use. However, any polymer or catalytic reaction discovered during this work may in the future find practical use after a period of development.

12. Financial details of the project-

Total project cost	Rs. 13,68,000/-
Money received	Rs. 10,01,570/- (this includes an amount of Rs. 17,100/- that was earned as bank interest)
Expenditure incurred	Rs. 3,00,470/-
Final SE/UC (in prescribed format attached)	Yes

*Ashwini In. Mukherjee*

### 13. Conclusion summarizing the achievements and indication of scope for future work-

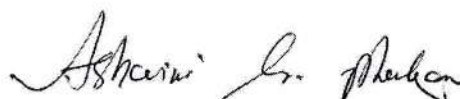
This highly successful collaborative research work involved experimental and theoretical work in the following areas as described in our original proposal:

(A) Synthesis of boron(I) species with new substitution patterns and understand their bonding.

(B) Study of the reactivity of boron(I) species.

Subproject A was furthered on the German side by experimentally demonstrating the thermal lability of phosphine- and DMAP-stabilised borylenes, and that such species can effectively behave as convenient and stable sources of reactive two-coordinate borylenes in exchange reactions with other nucleophiles and unsaturated substrates. It was revealed that  $\text{PMe}_3$ -stabilised borylenes can effectively behave as stable sources of the analogous fleeting dicoordinate species under mild conditions. On the Indian side, we performed computational studies to evaluate the relative thermodynamic stabilities of a range of ligand-stabilized borylenes. This work has recently led to the publication of a full paper in the high-impact general chemistry journal *Chemical Science* (Phosphinoborylenes as stable sources of fleeting borylenes, *Chem. Sci.* **2020**, *11*, 11055–11059).

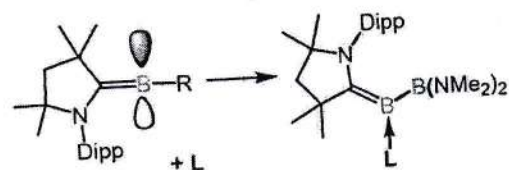
In Subproject B, research on the German side included synthesis of highly colored, fully planar, and  $\pi$ -delocalized B,N-doped analogues of (3E,5E)-octa-1,3,5,7-tetraene by the first inorganic-organic cross-metathesis of CAAC-stabilized dihydro- and dicyanodiborenes with acetylene. On the Indian side, we performed in-depth calculations to identify the ground states of these compounds as well as to understand the mechanism of their formation. The calculations reveal that these compounds have an open-shell singlet biradical ground state with a thermally accessible closed-shell singlet state and that their formation proceeds via a biradical cycloaddition mechanism, enabled by the  $\pi$ -accepting CAAC ligands. These combined experimental and computational studies led to the publication of a paper in the premier general chemistry journal *Journal of the American Chemical Society* (Hybrid Inorganic–Organic Cross-Metathesis between Diborenes and Acetylene, *J. Am. Chem. Soc.* **2021**, *143*, 18339–18345).





## Accomplishment Status

In our first work, we have evaluated the relative thermodynamic stabilities of a range of ligand-stabilized borylenes (Figure 1). It was found that both phosphorus and nitrogen bases feature weak interactions with the borylene center (ca.  $-10.0$  -  $-18.0$  kcal·mol $^{-1}$ ) and might be anticipated to form thermally labile complexes. More strongly donating NHCs and more strongly  $\pi$ -acidic bases such as CO and isocyanides feature stronger bonds with the borylene center, which would be anticipated to form robust complexes. It was found that the energy of formation of **1a** (L = PMe $_3$ ,  $-15.2$  kcal·mol $^{-1}$ ) and **2c** (L = 4-Dimethylaminopyridine,  $-18.0$  kcal·mol $^{-1}$ ) are similar with respect to the "free" unsaturated two-coordinate borylene, accounting for the partial conversion observed upon heating solutions of **1a**. The borylenes **2a** (L = 2,6-dimethylphenylisocyanide) and **2b** (L = CO) have significantly more exergonic formation energies ( $-40.4$  and  $-34.9$  kcal·mol $^{-1}$ ). This work has been published in *Chemical Science* (*Chem. Sci.* **2020**, *11*, 11055–11059).



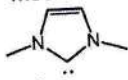
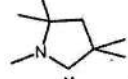
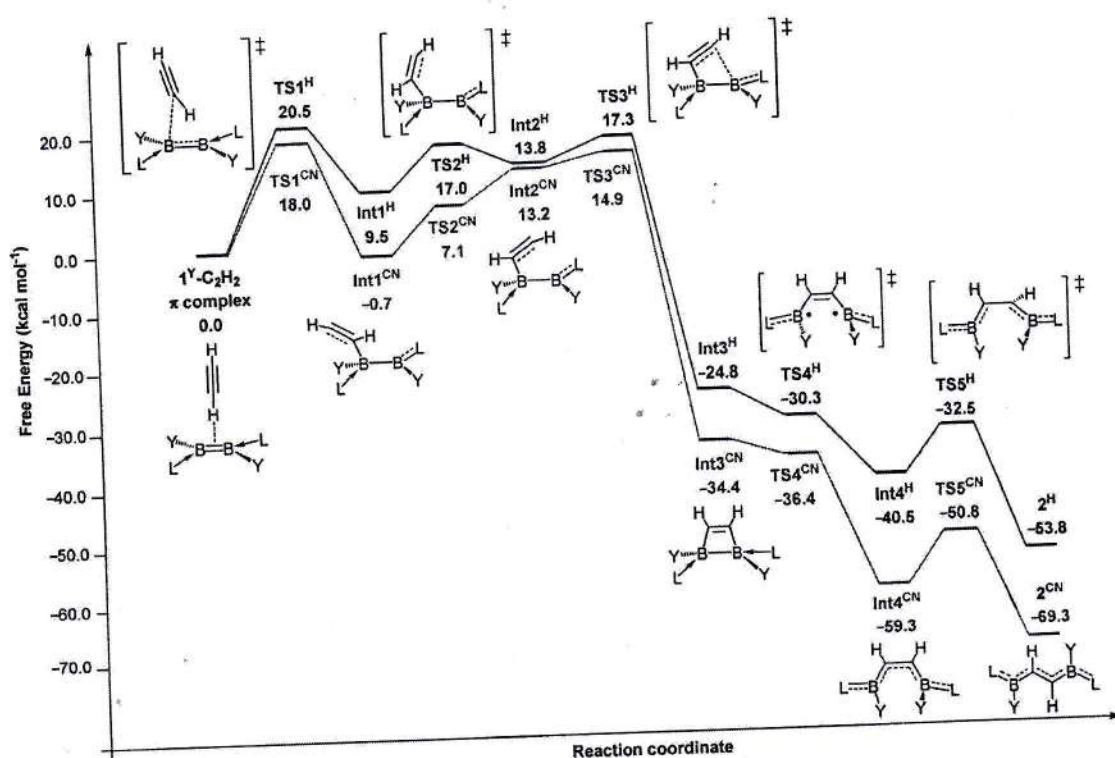
L =	$\Delta G$ (kcal·mol $^{-1}$ )
NMe $_3$	8.8
tetrahydrofuran	5.5
N $_2$	-10.0
PMe $_3$	-12.8
PMe $_2$ Ph	-13.3
pyridine	-13.3
imidazole	-13.5
PMe $_3$ (E isomer)	-15.2
4-Dimethylaminopyridine	-18.0
MeCN	-18.6
	-28.3
	-33.7
CO	-34.9
MeNC	-37.7
2,6-dimethylphenylisocyanide	-40.4

Figure 1

In the second work, we have computationally investigated the hybrid inorganic-organic ene-yne cross-metathesis reactions between diborenes and acetylene yielding fully planar,  $\pi$ -delocalized 1,8-diaza-3,6-diboraoctatetraenes **2H** and **2CN** (Figure 2). The mechanism of formation of **2H** and **2CN** was investigated computationally at the UPBE0(BS)-D3(benzene)/Def2-SVP level of theory (Figure 2). Starting from a diborene-acetylene  $\pi$  complex, the first and rate-limiting step of the reaction is the formation of the first B–C bond between **1<sup>Y</sup>** and acetylene, with a barrier of 20.5 kcal mol $^{-1}$  for **1<sup>H</sup>** and 18.0 kcal mol $^{-1}$  for **1<sup>CN</sup>**. Subsequent rotation of the C $_2$ H $_2$  fragment brings it nearly parallel to the B–B bond, thus enabling the highly exergonic formation of the second B–C bond, which yields the intermediate 1,2-dihydro-1,2-diborete **Int3<sup>Y</sup>**. The formation of **Int3<sup>Y</sup>** via **TS3<sup>Y</sup>** is hugely exergonic ( $\Delta G_3 = -42.1$  (Y = H),  $-49.3$  (Y = CN) kcal mol $^{-1}$ ) and involves only a minor barrier ( $\Delta G_3^\ddagger = 3.5$  (Y = H), 1.7 (Y = CN) kcal mol $^{-1}$ ). With **Int1<sup>Y</sup>**, **TS2<sup>Y</sup>** and **Int2<sup>Y</sup>** all showing significant singlet biradical character, the mechanism of formation of **Int3<sup>Y</sup>** differs from that computed for the cycloaddition of terminal alkynes to doubly NHC- or phosphine-

Ashwin Sankaran

stabilised diborenes, which proceeds via a zwitterionic closed-shell intermediate. In the present case the biradical intermediates and transition states are stabilised by the presence of the  $\pi$ -accepting CAAC ligands. In order to relieve ring strain,  $\text{Int3}^{\text{Y}}$  undergoes homolytic B-B bond cleavage to yield the  $\pi$ -delocalized intermediate  $\text{Int4}^{\text{Y}}$ , which is the *cis* conformer of the final product  $2^{\text{Y}}$  and also displays some singlet biradical character. Finally, rotation of the central C-C bond of  $\text{Int4}^{\text{Y}}$  yields the more stable *trans* isomer  $2^{\text{Y}}$ . Overall the formation of  $2^{\text{Y}}$  from the  $1^{\text{Y}}$ -acetylene  $\pi$  complex is highly exergonic with  $\Delta G_{\text{R}} = -53.8$  (Y = H), 69.3 (Y = CN) kcal mol<sup>-1</sup>. It is noteworthy that all intermediates, transition states and final product are lower in energy for Y = CN than for Y = H, suggesting an electronic stabilization by the electron-withdrawing cyano substituents. This work has been published in Journal of the American Chemical Society (*J. Am. Chem. Soc.* **2021**, *143*, 18339–18345).



**Figure 2.** Calculated mechanism of diborene-acetylene cross-metathesis. Energy profile calculated at the UPBE0(BS)-D3(benzene)/Def2-SVP level for the reaction of acetylene with  $1^{\text{H}}$  (in blue) or  $1^{\text{CN}}$  (in red) in benzene.

Ashwin S. Mukherjee



**GFR 12 – A**  
**[(SEE RULE 238 (1))**  
**FORM OF UTILIZATION CERTIFICATE FOR THE GRANTEE ORGANIZATION INCLUDING**  
**AUTONOMOUS ORGANIZATIONS**

UTILIZATION CERTIFICATE FOR THE YEAR April 01, 2021- March 31, 2022

In respect of recurring GRANT-IN-AID

1. Name of the scheme: Indo-German (DST-DAAD) joint research project entitled "**Synthesis, Reactivity and Bonding in Metal and Metal-free Borylenes**"
2. Whether recurring or non-recurring grants: Recurring
3. Grants position at the beginning of the financial year
  - (i) Cash in Hand/Bank Rs. 6,84,000/-
  - (ii) Unadjusted advances Nil
  - (iii) Total Rs. 6,84,000/-

4. Details of grants received, expenditure incurred and closing balances: (Actuals)

Unspent Balances of Grants received year [figure as at SI No 3(iii)]	Interest earned thereon	Interest deposited back to the government	Grant received during the year			Total Available funds (Rs.) (1+2-3+4) including interest	Expenditure incurred (Rs.)	Closing Balance (5-6)
			Sanction no. (i)	Date (ii)	Amount (Rs.) (iii)			
1	2	3	4			5	6	7
Rs. 6,84,000/-	17,100/-	Nil	Nil			7,01,100/-	Nil	7,01,100/-

5. Component wise utilization of grants:

Grants-in-aid-General	Grant-in-aid -Salary	Grants-in-aid-creation of capital	Total
Nil	Nil	Nil	Nil

6. Details of grants position at end of the year
  - (i) Cash in Hand /Bank : Rs. 7,01,100/-
  - (ii) Unadjusted Advance : Nil
  - (iii) Total : Rs. 7,01,100/-

7. Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled /are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (i) The main accounts and other subsidiary accounts and registers (including assets register) are maintained as prescribed in the relevant Act/Rules/standing instructions (mention the Act/Rules)



- and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (ii) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
  - (iii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
  - (iv) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
  - (v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
  - (vi) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
  - (vii) It has been ensured that the physical and financial performance under Indo-German (DST-DAAD) joint research project scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure- I duly enclosed.
  - (viii) The utilization of the fund resulted in outcomes given at Annexure - II duly enclosed (to be formulated by the Ministry /Department concerned as per their requirements/specifications.)
  - (ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure—II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date:

Place:

Signature

Name

Chief Finance Officer  
(Head of the Finance)

**Finance Officer**  
**Tezpur University**

Signature

Name

Head of the Organisation

**Registrar**  
**Tezpur University**

**(TO BE FILLED IN BY DST)**

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned:

Kinds of checks exercised.

- 1.
- 2.
- 3.
- 4.
- 5.

Signature  
Designation  
Date

**REQUEST FOR ANNUAL INSTALLMENT WITH  
UP-TO-DATE STATEMENT OF EXPENDITURE**

*(1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022)*

- |  |                                 |
|--|---------------------------------|
| 1. Sanction Letter No.: DST/INT/DAAD/P-12/2019                   | 6. Grant Received in each year: |
| 2. Total Project Cost Rs. 13,68,000/-                            | a. I year Rs. 6,84,000/-        |
| 3. Sanctioned/Revised<br>project cost<br>(if applicable) Rs. N/A | b. II year Rs. 3,00,470/-       |
| 4. Date of commencement<br>of Project : 27-09-2019               | c. III year Rs. N/A             |
| 5. Statement of Expenditure                                      | d. Interest, Rs. 17,100/-       |
|  | e. Total Rs. 10,01,570/-        |

**Month**

**Year**

**Note:**

1. Expenditure under the sanctioned heads, at any point of time, should not exceed funds allocated under the head, without prior approval of DST i.e. Figures in Column (vii) should not exceed corresponding figures in Column (iii)
2. Utilisation Certificate for each financial year ending 31st March has to be enclosed, along with request for carry-forward permission to next year



Annexure IIInd Continued

Sl. No.	Sanctioned Heads**	Funds Allocated	Expenditure Incurred			Balance as on date (Col. iii - vii)	Required Funds till 31 March, 2022	Remarks (if any)
			I Yr.	II Yr.	III Yr.			
i.	ii.	iii.	iv.	v.	vi.	vii.	ix.	x.
1.	Salaries	-	-	-	-	-	-	-
2.	Permanent Equipments	-	-	-	-	-	-	-
3.	Supplies & Materials/consumables	-	-	-	-	-	-	-
4.	Travel of Indian Scientists Abroad	7,24,470/-	1,51,251/-	Nil	Nil	1,51,251/-	Nil	-
5.	Hospitality of Foreign Scientists - Per diem @ Rs.2,500 - Accommodation @ Rs.4,000/- per day	2,60,000/-	1,49,219/-	Nil	Nil	1,49,219/-	Nil	-
6.	Contingencies	-	-	-	-	-	-	-
7.	Overhead Expenses	17,100/-	-	-	-	-	17,100/-	-
8.	Interest earned	10,01,570/-	3,00,470/-	Nil	Nil	3,00,470/-	7,01,100/-*	Nil
	Total							

\* The balance amount of Rs. 7,01,000/- (Rupees Seven Lakh One Thousand One Hundred only) is deposited to BharatKosh vide transaction Ref. Nos. (i) 1107220007062 for Rs. 6,84,000/- (unspent balance) and (ii) 1107220006217 for Rs. 17,100 (interest earned).

PROF. ASHWINI K. PHUKAN

Name & Signature  
Principal Investigator: *Ashwini K. Phukan*  
Date: 08/08/2022

*M. S. G. P. M.*  
Signature of Competent financial authority  
Date: **Finance Officer**  
**Tatyasaheb Mahavidyalaya**

**FORM GFR 12 A**

UC ID: 18254096

**FORM GFR 12-A**  
[See Rule 238(1)]

**Form of Utilization Certificate FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION**

UTILIZATION CERTIFICATE FOR THE YEAR 2021-2022 in respect  
of Recurring/non-recurring  
GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS

1.Name of the Scheme : **RESEARCH AND DEVELOPMENT(s&t)-3237**

2. Whether recurring pr non-recurring grants :N/A

3.Grants positions of the beginning of the Financial year :

- (i.) Cash in Hand/Bank : **0.00**
- (ii.) Unadjusted advances : **0.00**
- (iii.) Total: **0.00**

4. Details of grants received,expenditure incurred and closing balances:(Actuals) :

Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid	Grant-in-aid
0.00	17100.00	684000.00	DST/INT/DAAD/P-12/2019	11-01-2021	684000.00	17100.00	0.00	17100.00

Grant-in-aid-General	Grant-in-aid-Salary	Grant-in-aid-creation of capital assets	Total
0.00	0.00	0.00	0.00

Details of grants position of the end of the year

3.Grants positions of the End of the Financial year :

- (i.) Cash in Hand/Bank : **17100.00**
- (ii.) Unadjusted advances : **0.00**
- (iii.) Total : **17100.00**

Certified that I have satisfied myself that the condition on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.

1. The main accounts and other subsidiary accounts and registers(including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors.  
The figures depicted above tally with the audited figures mentioned in financial statements/accouns.
2. There exist internal controls for safeguarding public funds/assets , watching outcomes and achivevemnets of physical targets against the financial inputs.ensuring quality in asset creation etc. & the periodic evaluation internal controls is exercised to ensure their effectiveness.
3. To the best or our knowledge and belief , no transactions have been entered that are in violation of relevant Act/Rules/Standing instructions and scheme guidelines.
4. The responsibites among the key functionaries for execution of the schema have been assigned in clear terms and are not general in nature.
5. The benefits were extended to the intended beneficiaries and only such areas/districts were guidelines and terms and conditios of the gaints-in-aid.
6. It has been ensured that the physical and financial performance under **RESEARCH AND DEVELOPMENT(s&t)-3237** (name of the scheme has been according to the requirements , as prescribed in the guidelines issued by Govt. of india and the performane/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure- I duly enclosed.



7. The utilization of the fund received in categories given at Annexure-2, may enclosed to be formulated by the Ministry/Department concerned as per their requirements/specifications.)

8. Details of various schemes executed by the agency through grants-in-aid received from the some Ministry or from other Ministries is enclosed at Annexure-2 (to be formulated by the Ministry/Departments concerned as per their requirements/specifications).

Date :

Place :

Signature

Name.....

Chief Finance Officer  
(Head of the Finance)

Signature

Name.....

Head of the Organisation

(Strike out in inapplicable terms)

**FORM GFR 19**

UC ID: 18254096

**FORM GFR 19-A**

[See Rule 212(1)]

**Form of Utilization Certificate**

S.No.	Sanction Number	Sanction Date	Original Grant Amount
1	DST/INT/DAAD/P-12/2019	11-01-2021	684000.00

Certified that Out Of Rs. **Nil** Grants-in-aid Sanctioned during the year **2021-2022** in Favour Of **Tezpur University** under this Ministry/Department Letter No. given in the margin and Rs. **684000.00** on account of unspent balance of the previous year, a sum of Rs. **0.00** has been utilized for the purpose of for which it was sanctioned and that the balance of Rs **684000.0000** remaining unutilized at the end of year has been surrendered to Government (vide No dated )/ will be adjusted towards the grants-in-aid payable during the next year **2022-2023** Interest earned is **17100.00** and Additional expenditure of Rs **0.00** has been incurred from internal resources and will be adjusted against next release.

2. Certified that I have satisfied myself that the condition on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.

*Kinds Of checks exercised*

- Cash book verified regularly
- Bank Pass Book verified
- Stock Register verified
- Chartered Accountant checked the expenses and certified
- Ledger
- Payment vouchers
- Bank Reconciliation
- Inventory
- Vouchers
- Account audited by competent authority

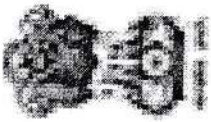
Signature.....

Designation.....

Date.....

*Finance Officer  
Tezpur University*





**bharatkosh.gov.in**  
Government of India Receipt Portal

**RECEIPT**

Transaction Ref.No. 1107220007062

Dated: Jul 18 2022 11:07PM

Received from M/S. TEZPURUNIVERSITY with Transaction Ref.No.  
1107220007062

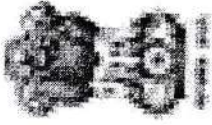
Dated Jul 18 2022 11:07PM the sum of INR 684000 (Six Lakhs Eighty-Four  
Thousand Only) through Internet based Online payment in the account of

REFUND OF UNSPENT BALANCES DST, , DST-A K PHUKAN.

**Disclaimer:- This is a system generated electronic receipt, hence no physical signature  
is required for the purpose of authentication**

Printed On: 30-07-2022 03:40:02

Courtesy - Controller General of Accounts



**bharatkosh.gov.in**  
Government of India Receipt Portal

**RECEIPT**

Transaction Ref.No. 1107220006217

Dated: Jul 18 2022 11:07PM

Received from M/S. TEZPURUNIVERSITY with Transaction Ref.No. 1107220006217

Dated Jul 18 2022 11:07PM the sum of INR 17100 (Seventeen Thousand One Hundred Only) through Internet based Online payment in the account of interest receipt on unspent balances DST, , DST-INTT A K PHUKAN.

**Disclaimer:- This is a system generated electronic receipt, hence no physical signature is required for the purpose of authentication**

Printed On: 30-07-2022 04:5:41

Courtesy :- Controller General of Accounts