FILE NO. CRG/2018/000009 SCIENCE & ENGINEERING RESEARCH BOARD(SERB) (A statutory body of the Department of Science & Technology, Government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 07-May-2019

Subject: Financial Sanction of the research project titled "Designing and investigation of alkali metal decorated graphene and boron nitride (BN) nanostructure for hydrogen storage: A firstprinciples study" under the guidance of Dr. Dibya Prakash Rai, Physics, Pachhunga University College , College veng, aizawl, Aizawl, Mizoram-796001 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 3491400/- (Rs. Thirty Four Lakh Ninety One Thousand Four Hundred Only) with break-up of Rs. 1500000/- under Capital (Non-recurring) head and Rs.1991400/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 3491400/- has been approved are given below:

S. No	Head	
A	Non-recurring	Total (in D.)
1	Equipment	Total (in Rs.)
A'	-> Computer, Software and Accessories Total (Non-Recurring)	150000
В	Recurring Items	1500000
1	Recurring - L: (Monney)	100000
	Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1164000
2	Recurring - IV : (Overhead Charges)	450000
B'	Total (Recurring)	60000
c	Total cost of the project (A' + B')	317400
	tor or the project (A' + B')	1991400
		3491400

2. Sanction of the SERB is also accorded to the payment of Rs. 1500000/- (Rupees Fifteen Lakh only) under 'Grants for creation of capital assets' and Rs. 704000/- (Rupees Seven Lakh Four Thousand only) under 'Grants-in-aid General' to Principal, Pachhunga University College, College Veng, Aizawl being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (PAC Condensed Matter Physics and

4. The Sanction has been issued to Pachhunga University College, College Veng, Aizawl with the approval of the competent authority under delegated powers on 02 May, 2019 and vide Diary No. SERB/F/178/2019-2020 dated 06 May, 2019

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

6. Overhead expenses are meant for the host Institute towards the cost for providing

infrastructural facilities and general administrative support etc. including benefits to the staff

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

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9. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

10. The release amount of Rs. 2204000/- (Rupees Twenty Two Lakh Four Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	Pachhunga University College
Account Number	30812792852
Bank Name & Branch	State Bandk of India (SBI) Mission Veng Branch Aizawl 796001 Mzoram
IFSC/RTGS Code	SBIN0007058
Email id of A/C Holder	principal@pucollege.edu.in
Email id of PI	dibyaprakashrai@gmail.com

11. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

12. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

13. The project File no. CRG/2018/000009 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

14. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project

15. As this is the first grant being released for the project, no previous U/C is required.

16. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

17. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

18. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

(Dr. Nilotpal Ghosh)

(Dr. Nilotpal Ghosh) MS nilotpal@serb.gov.in

To, Under Secretary SERB, New Delhi

copy forwarded for information and necessary actio	n to: -	
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1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi- 110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	Dr. Dibya Prakash Rai Physics Pachhunga University College, College veng, aizawl, Aizawl, Mizoram-796001 Email: dibyaprakashrai@gmail.com Mobile: 918132832252 Chart date of the project may be infimated by name to the undersigned. For guidance, terms & Conditions dc. Please visit www.serb.gov.in.)

Coordinator Internal Quality Assurance Cell Pachhunga University College (A constituent college of Mizoram University)

Principal Pachhunga University College Aizawl : Mizoram

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FILE NO. CRG/2018/000009 SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(a statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj. New Delhi-110070

Dated: 01-Jun-2020

ORDER

Subject: Research project entitled "Designing and investigation of alkali metal decorated graphene and boron nitride (BN) nanostructure for hydrogen storage: A first-principles study" under the guidance of Dr. Dibya Prakash Rai, Physics, Pachhunga University College, College veng, aizawl, Aizawl, Mizoram-796001.

1. "This is in continuation of SERB's sanction order No. "CRG/2018/000009" dated" 07 May, 2019 * of Science and Engineering Research Board (SERB).

2. ISanction of the competent authority is hereby accorded to the payment of a sum of Rs. 600000/- (Rupees Six Lakh only) under 'Grants-in-aid General' to Principal, Pachhunga University College, College Veng, Aizawl being the 2nd grant for the financial year[2020-2021]for implementation of the above said project.

3. ISanction of the©competent authoritylis also accorded to the carry forward of unspent balance of Rs. 74669/-(Rupees Seventy Four Thousand Six Hundred and Sixty Nine only) (Recurring Rs. 74669 and Non-Recurring Rs. 0) to Pachhunga University College, College Veng, Aizawl@rom@FY 2019-2020 to FY 2020-2021 for the same purpose for which it was sanctioned.

4. Exaction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website (www.serb.gov.in).

5. It is certified that provision of GFR 212 relating to Utilization Certificates (Ucs) for the funds released under the grant have been satisfied and the UC/s is/are enclosed herewith:

6. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (PAC Physics-1 (Condensed Matter Physics and Material Sciences))

7 The Sanction has been issued to Pachhunga University College, College Veng, Aizawl with the approval of the competent authority under delegated powers on 31 May, 2020 and vide Diary No. SERB/F/232/2020-2021 dated 01 June, 2020

8 The release amount of Rs. 600000/- (Rupees Six Lakh only) (Recurring Rs. 600000 and Non-Recurring Rs. 0) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

PFMS Unique Code	PUCMZU
Account Name	PRINCIPAL PUC COMMUNITY COLLEGE SCHEME
Account Number	35384427402
Bank Name & Branch	State Bandk of India (SBI) College Veng Branch Aizawl 796001 Mzoram India
IFSC/RTGS Code	ISBIN0018500
Email id of A/C Holder	principal@pucollege.edu.in
Email id of PI	[dibyaprakashrai@gmail.com

9.0The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

10. As per rule 211 of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority / audit whenever the institute is called upon to do so.

11. The institute will furnish to the SERB, Utilization certificate(separate for Recurring & Non-Recurring) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

12. After completion of the project unspent balance if any should be returned as Demand Draft drawn in favour of "Fund for Science and Engineering Research" payable at New Delhi.

13. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST). Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

14.In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

Nilopal Short GU. (Dr. Nilotpal Ghosh) MS nilotpal@serb.gov.in

To, Under Secretary SERB, New Delhi

1.	Copy forwarded for information and necessary action to: - The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB, New Delhi.
3.	File Copy
4	Dr. Dibya Prakash Rai Physics Pachhunga University College, College veng, aizawl, Aizawl, Mizoram-796001 Email: dibyaprakashrai@gmail.com Mobile: 918132832252
5.	Principal, Pachhunga University College, College Veng, Aizawl

Nila Shorth (Dr. Nilotpal Ghosh) MS nilotpal@serb.gov.in

FILE NO. CRG/2018/000009 SCIENCE & ENGINEERING RESEARCH BOARD(SERB) (a statutory body of the Department of Science & Technology, government of India)

vernment of India) 5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 14-Jul-2021

ORDER

Subject: Research project entitled "Designing and investigation of alkali metal decorated graphene and boron nitride (BN) nanostructure for hydrogen storage: A first-principles study" under the guidance of Dr. Dibya Prakash Rai, Physics, Pachhunga University College , College veng, aizawl, Aizawl, Mizoram-796001.

1. This is in continuation of SERB's sanction order No. "CRG/2018/000009" dated "07 May, 2019 " of Science and Engineering Research Board (SERB).

2. Sanction of the competent authority is hereby accorded to the payment of a sum of **Rs. 550000/-** (Rupees Five Lakh Fifty Thousand only) under 'Grants-in-aid General' to **Principal**, **Pachhunga University College**, **College Veng**, **Aizawl** being the 3rd grant for the financial year 2021-2022 for implementation of the above said project.

3. Sanction of the competent authority is also accorded to the carry forward of unspent balance of **Rs. 62000/-**(Rupees Sixty Two Thousand only) (Recurring Rs. 62000 and Non-Recurring Rs. 0) to Pachhunga University College, College Veng, Aizawl from FY 2020-2021 to FY 2021-2022 for the same purpose for which it was sanctioned.

4. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website (www.serb.gov.in).

5. It is certified that provision of GFR 212 relating to Utilization Certificates (Ucs) for the funds released under the grant have been satisfied and the UC/s is/are enclosed herewith.

6. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (PAC Physics-1 (Condensed Matter Physics and Material Sciences))

7. The Sanction has been issued to Pachhunga University College, College Veng, Aizawl with the approval of the competent authority under delegated powers on 12 July, 2021 and vide Diary No. SERB/F/1275/2021-2022 dated 13 July, 2021

8. The release amount of Rs. 550000/- (Rupees Five Lakh Fifty Thousand only) (Recurring Rs. 550000 and Non-Recurring Rs. 0) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

PFMS Unique Code	PUCMZU
Account Name	PRINCIPAL PUC COMMUNITY COLLEGE SCHEME
Account Number	35384427402
Bank Name & Branch	State Bandk of India (SBI) College Veng Branch Aizawl 796001 Mzoram India
IFSC/RTGS Code	SBIN0018500
Email id of A/C Holder	principal@pucollege.edu.in
Email id of PI	dibyaprakashrai@gmail.com

9. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

10. As per rule 211 of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority / audit whenever the institute is called upon to do so.

11. The institute will furnish to the SERB, Utilization certificate(separate for Recurring & Non-Recurring) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

12. After completion of the project unspent balance if any should be returned as Demand Draft drawn in favour of "Fund for Science and Engineering Research" payable at New Delhi.

13. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

14. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

Milopal Shook, (Dr. Nilotpal Glosh) MS nilotpal@serb.gov.in

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To, Under Secretary SERB, New Delhi

1.	The Principal Director of Audit, A.G.C.R.Building, Illrd Floor I.P. Estate, Delhi-110002
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5.	Principal, Pachhunga University College, College Veng, Aizawl

Milot (Dr. Nilotpal Chosh) MS nilotpal@serb.gov.in thogh