

(50)

INFORMATION OF SANCTIONED PROJECT AND APPROVAL FOR IMPLEMENTATION
(REQUEST FOR VICE CHANCELLOR'S APPROVAL)

1. Project Title.: **Tuning the Thermal and Electrical Conductivity of of BaZrS₃ Chalcogenide Perovskite as Electrode Material for High Power Generation in Thermogalvanic Cells**
2. Sanction letter no. : **SRG/2022/002191**
3. Funding agency: **Science & Engineering Research Board (SERB), DST**
4. Department: **School of Chemical Sciences**
5. Principal Investigator: **Dr. Anjani P. Nagvenkar**
6. Co-Investigator (if any): **N/A**
7. Duration of Project: **Two years**
8. Total amount of the project: **Rs. 32,31,712/-**
9. Sanctioned Sub Heads and amount:
 - a) Equipments: **Rs. 16,00,000/-**
 - b) Manpower: **Rs. 8,77,920**
 - c) Chemicals/Consumables: **Rs. 3,00,000/-**
 - d) Travel: **Rs. 50,000/-**
 - e) Contingency: **Rs. 1,00,000/-**
 - c) Scientific Social Responsibility: **Rs. 10,000/-**
10. Overhead: **Rs. 2,93,792/-**
11. Number and Designation of research staff: **One Project Associate**
12. Terms and Conditions
 - a) Dates of submission of Report: **After the end of financial year**
 - b) Dates for submission of utilization certificate: **After the end of financial year**
13. Yearwise break-up of sanctioned amount: **Detailed sheet enclosed (C/42)**
14. Plan of utilization of sanctioned grant over the year: **Detailed sheet enclosed (C/40)**

Project Investigator

Anjani P. Nagvenkar
27/09/22

Date: 27/09/22

Dean, SCS

[Signature]

Date: 27/09/2022

Yearwise break-up of sanctioned amount:

Year 1		
Sr. No.	Head	Amount
1.	Equipments	Rs. 16,00,000/-
2.	Manpower	Rs. 4,38,960/-
3.	Consumable	Rs. 1,50,000/-
4.	Travel	Rs. 25,000/-
5.	Contingency	Rs. 50,000/-
6.	Scientific Social Responsibility	Rs. 10,000/-
7.	Overhead Charges	Rs. 1,46,896/-
Total (Year 1)		Rs. 24,20,856/-
Year 2		
1.	Manpower	Rs. 4,38,960/-
2.	Consumable	Rs. 1,50,000/-
3.	Travel	Rs. 25,000/-
4.	Contingency	Rs. 50,000/-
5.	Overhead Charges	Rs. 1,46,896/-
Total (Year 2)		Rs. 8,10,856/-
Total Budget Approved		Rs. 32,31,712/-

Plan of Utilization of sanctioned grant over the years

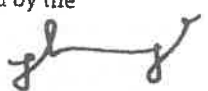
S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Minor Equipments -> Thermal Conductivity Meter	1600000
A'	Total (Non-Recurring)	1600000
B	Recurring Items	
1	Recurring - I : (Research Personnel) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	877920 450000 10000
2	Recurring - IV : (Overhead Charges)	293792
B'	Total (Recurring)	1631712
C	Total cost of the project (A' + B')	3231712

The non-recurring equipment budget will be used to purchase a major instrument Thermal Conductivity meter and minor equipment, a probe sonicator. Research personnel, one project associate will be appointed with approved salary as per the DST norms and thus will be paid Rs. 31,000 + Rs. 5,580 (18% HRA) per month for the duration of two years. Consumable and contingency budget will be used for purchase of chemicals, minor equipments and other lab accessories. A certain amount of overhead charges will be used for building/renovating the lab space provided.

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SERB should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

13. 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 SERB.

14. Sanction order for release of funds under a) Non-recurring and b) Recurring will be issued separately depending on the availability of funds. The project become operational from the day the first release of grant received by the implementing Institute.



(Dr. S. V. Prasanna)
Scientist

prasanna@serb.gov.in

To,
Under Secretary
SERB, New Delhi

Copy forwarded for information and necessary action to: -

1.	The Principal Director of Audit, A.G.C.R. Building, 11th Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB, New Delhi.
3.	File Copy
4.	Dr. Anjani Pandurang Nagvenkar School of Chemical Sciences Goa University, Taleigao, North goa, Goa-403206 Email: anjani@unigoa.ac.in Mobile: 919049244139 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in .)
5.	Registrar, Goa University, Goa University, Taleigao (Receipt of Grant may be intimated by name to the undersigned)


(Dr. S. V. Prasanna)
Scientist
prasanna@serb.gov.in

Dated: 19 September, 2022

ORDER
Subject: Financial Sanction of the research project titled **Tuning the Thermal and Electrical Conductivity of BaZrS₃ Chalcogenide Perovskite as Electrode Material for High Power Generation in Thermogalvanic Cells** under the guidance of Dr. Anjani Pandurang Nagvenkar, School of Chemical Sciences, Goa University, Taleigao, North Goa, Goa-403206 -
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. 3231712/- (Rs. Thirty Two Lakh Thirty One Thousand Seven Hundred and Twelve Only) with break-up of Rs. 1600000/- under Capital (Non-recurring) head and Rs. 1631712/- under General (Recurring) head for a duration of 24 months. The items of expenditure for which the total allocation of Rs. 3231712/- has been approved are given below:

The following budget may be considered for Goa University, Taleigao

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Minor Equipments -> Thermal Conductivity Meter	1600000
A'	Total (Non-Recurring)	
B	Recurring Items	1600000
1	Recurring - I : (Research Personnel) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	877920 450000 10000
2	Recurring - IV : (Overhead Charges)	293792
B'	Total (Recurring)	1631712
C	Total cost of the project (A' + B')	3231712

- Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).
- 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 employed in the project.
- While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1 lakh each should be spent for travel and contingency.
- Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.
- 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.
- The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.
- 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.
- 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.
- The research personnel 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.
- 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.
- The project File no. SRG/2022/002191 should be mentioned in all communications arising from the above project. The organization/institute/university should ensure that the technical support/financial assistance provided to them by

2022-23-5148

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FILE NO. SRG/2022/002191-C
SCIENCE & ENGINEERING RESEARCH BOARD(SERB)
(A statutory body of the Department of Science & Technology, Government of India)

Science and Engineering Research Board
3rd & 4th Floor, Block II
Technology Bhavan, New Mehrauli Road
New Delhi - 110016


Dated: 19 September, 2022

ORDER

Subject: Research project entitled **Tuning the Thermal and Electrical Conductivity of BaZrS₃ Chalcogenide Perovskite as Electrode Material for High Power Generation in Thermogalvanic Cells** under the guidance of Dr. Anjani Pandurang Nagvenkar, School of Chemical Sciences, Goa University, Taleigao, North Goa, Goa-403206.

1. In continuation of SERB's sanction order No. SRG/2022/002191 dated 19 September, 2022, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs.1600000/-** under 'Grants-in-aid Capital' to Goa University, Taleigao, North Goa, Goa-403206 being the grant for the financial year 2022-2023 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website (www.serb.gov.in) and as mentioned in the sanction order of even number dated 19 September, 2022.
3. As this is the first grant being released under 'Grants-in-aid Capital' for the project, no previous U/C is required.
4. The expenditure involved is debit to Fund for Science & Engineering Research (FSER) This release is being made under Start-up Research Grant (Capital).(EC Chemical Sciences)
5. The Sanction has been issued with the approval of the competent authority on **16 September, 2022** and vide Diary No. SERB/F/4854/2022-2023 dated **16 September, 2022**.
6. The release amount of **Rs. 1600000/-** (Rupees Sixteen Lakh 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:


PFMS Unique Code	UNIGOA
Account Name	Goa University
Account Number	10664493609
Bank Name & Branch	State Bank of India State Bank of India University Branch, Goa University Complex, Taleigao Plateau, Goa 403206
IFSC/RTGS Code	SBIN0004311
Email id of A/C Holder	registrar@unigoa.ac.in
Email id of PI	anjani@unigoa.ac.in


(Dr. S. V. Prasanna)
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To,
Under Secretary
SERB, New Delhi

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5.	Registrar, Goa University, Goa University, Taleigao (Receipt of Grant may be intimated by name to the undersigned)


(Dr. S. V. Prasanna)
Scientist
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Dated: 19 September, 2022

ORDER

Subject: Research project entitled **Tuning the Thermal and Electrical Conductivity of BaZrS₃ Chalcogenide Perovskite as Electrode Material for High Power Generation in Thermogalvanic Cells** under the guidance of **Dr. Anjani Pandurang Nagvenkar**, School of Chemical Sciences, Goa University, Taleigao, North Goa, Goa-403206.

1. In continuation of SERB's sanction order No. SRG/2022/002191 dated 19 September, 2022, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs. 820856/-** under 'Grants-in-aid General' to Goa University, Taleigao, North Goa, Goa-403206 being the grant for the financial year 2022-2023 for implementation of the above said project.
2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website (www.serb.gov.in) and as mentioned in the sanction order of even number dated 19 September, 2022.
3. As this is the first grant being released under 'Grants-in-aid General' for the project, no previous U/C is required.
4. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Start-up Research Grant (General)(EC Chemical Sciences).
5. The Sanction has been issued with the approval of the competent authority on 16 September, 2022 and vide Diary No. SERB/F/4855/2022-2023 dated 16 September, 2022..
6. The release amount of **Rs. 820856/-** (Rupees Eight Lakh Twenty Thousand Eight Hundred and Fifty Six 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:

PFMS Unique Code	UNIGOA
Account Name	Goa University
Account Number	10664493609
Bank Name & Branch	State Bank of India State Bank of India University Branch, Goa University Complex, Taleigao Plateau, Goa 403206
IFSC/RTGS Code	SBIN0004311
Email id of A/C Holder	registrar@unigoa.ac.in
Email id of PI	anjani@unigoa.ac.in

(Dr. S. V. Prasanna)
Scientist
prasanna@serb.gov.in

To,
Under Secretary
SERB, New Delhi

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5.	Registrar, Goa University, Goa University, Taleigao (Receipt of Grant may be intimated by name to the undersigned)

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