

FILE NO. CRG/2023/002925

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: 15 March, 2024

ORDER

Subject: Financial Sanction of the research project titled **Embedding Ferroelectric Hafnium-Zirconium oxide (HZO) in gate stack of GaN based Junctionless Transistor** under the guidance of Dr. Kajal Jindal, Physics, Kirori Mal College, University of Delhi, University enclave, delhi, Delhi, Delhi-110007 and by Dr. Abhinav Kranti, Professor, Electrical Engineering, Indian Institute Of Technology Indore and by Dr. Monika Tomar, Professor, Physics Department, Miranda House, Miranda House and by Prof. Arijit Chowdhuri, Professor, Physics, Acharya Narendra Dev College - 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. 3193102/- (Rs. Thirty One Lakh Ninety Three Thousand One Hundred and Two Only)** with break-up of **Rs. 999460/- under Capital (Non-recurring) head** and **Rs. 2193642/- under General (Recurring) head** for a duration of 36 months. The items of expenditure for which the total allocation of **Rs. 3193102/-** has been approved are given below:

The following budget may be considered for **Kirori Mal College (University Of Delhi), University Enclave**

| S. No | Head | Total (in Rs.) |
|----------|--|----------------|
| A | Non-recurring | |
| 1 | Equipment -> Dual channel high precision digital source meter | 999460 |
| A' | Total (Non-Recurring) | 999460 |
| B | Recurring Items | |
| 1 | Recurring - I : (Research Personnel) | 1443360 |
| | Recurring - II : (Consumables, Travel, Contingencies) | 450000 |
| | Recurring - III : Scientific Social Responsibility | 10000 |
| 2 | Recurring - IV : (Overhead Charges) | 290282 |
| B' | Total (Recurring) | 2193642 |
| C | Total cost of the project (A' + B') | 3193102 |

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

3. 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.

4. 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.
5. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.
6. 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.
7. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.
8. 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.
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. 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
11. 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.
12. The project File no. CRG/2023/002925 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 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. Nilotpal Ghosh)

MS

nilotpal@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, IIIrd Floor I.P. Estate, Delhi-110002 |
|----|---|

| | |
|----|---|
| 2. | Sanction Folder, SERB , New Delhi. |
| 3. | File Copy |
| 4. | <p>Dr. Kajal Jindal Physics Kirori Mal College, University of Delhi , University enclave, delhi, Delhi, Delhi-110007 Email: kajalmh18@kmc.du.ac.in Mobile: 919999504948</p> <p>Dr. Abhinav Kranti Electrical Engineering Indian Institute Of Technology Indore</p> <p>Dr. Monika Tomar Physics Department, Miranda House Miranda House</p> <p>Prof. Arijit Chowdhuri Physics Acharya Narendra Dev College (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in.)</p> |
| 5. | <p>PRINCIPAL, Kirori Mal College (University Of Delhi), University Enclave</p> <p>(Receipt of Grant may be intimated by name to the undersigned)</p> |

(Dr. Nilotpal Ghosh)

MS

nilotpal@serb.gov.in