



# Khatra Adibasi Mahavidyalaya

Govt. Aided General Degree College recognised under UGC  
2(f) & 12(B)

Khatra :: Bankura :: West Bengal

SSR

Data validation and Verification (DVV)

Assessment Period (2018-2023)

## 3.1.1

Grants received from Government and non-governmental agencies for research projects/endowments in the institution during the last five years (INR in Lakhs)

<b>Year</b>	<b>Name of the Funding Agency</b>	<b>Name of the Research Project/Endowments</b>	<b>Duration of the Project</b>	<b>Amount Sanctioned</b>
<b>2023</b>	<b>SCIENCE &amp; ENGINEERING RESEARCH BOARD (SERB)</b>	<b>Direct Plasmon-Enhanced Electrocatalysis by Plasmonic-Semiconductor@2-D Nanosheet for Biosensing of Crucial Molecules and Cancerous Cells</b>	<b>3 Years</b>	<b>22.55 Lakhs</b>

FILE NO. SUR/2022/000011  
**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: 13 October, 2023

**ORDER**

Subject: Financial Sanction of the research project titled **Direct Plasmon-Enhanced Electrocatalysis by Plasmonic-Semiconductor@2-D Nanosheet for Biosensing of Crucial Molecules and Cancerous Cells** under the guidance of Dr. Swarup Kumar Maji, Chemistry, KHATRA ADIBASI MAHAVIDYALAYA, P.o.: khatra, P.s.: khatra, District: bankura, Bankura, West bengal-722140 - 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. 2255000/- (Rs. Twenty Two Lakh Fifty Five Thousand Only) with break-up of Rs. 1270000/- under Capital (Non-recurring) head and Rs. 985000/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 2255000/- has been approved are given below:

The following budget may be considered for KHATRA ADIBASI MAHAVIDYALAYA, PO.: KHATRA ,PS.: KHATRA, DISTRICT: BANKURA

S. No	Head	Total (in Rs.)
<b>A</b>	<b>Non-recurring</b>	
1	Equipment -> Electrochemical Workstation -> IR DPSS LASER	1270000
A'	Total (Non-Recurring)	1270000
<b>B</b>	<b>Recurring Items</b>	
1	Recurring - I : (Research Personnel ) Recurring - II : ( Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	0 780000 0
2	Recurring - IV : (Overhead Charges)	205000
B'	Total (Recurring)	985000
<b>C</b>	<b>Total cost of the project (A' + B')</b>	<b>2255000</b>

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. 90,000 each should be spent for travel and contingency.

5. 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.

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

7. 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.

8. 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.

9. 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

10. 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.

11. The project File no. SUR/2022/000011 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. 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.

12. 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. V Ramesh)  
ms\_pac\_sure@serbonline.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. Swarup Kumar Maji Chemistry KHATRA ADIBASI MAHAVIDYALAYA, P.o.: khatra, P.s.: khatra, District: bankura, Bankura, West bengal-722140 Email: maji_swarup@yahoo.in Mobile: 919609077369 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in)

**NOTE:**

Please ensure to send acknowledgement of this Approval Letter.  
Click on [How To Acknowledge](#) to view the guidelines to send acknowledgement.

## Approval Letter

SCIENCE & ENGINEERING RESEARCH BOARD (SERB)  
(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

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

Approval Letter

File Number: SUR/2022/000011

Dated: 09-May-2023

Subject: Project titled "Direct Plasmon-Enhanced Electrocatalysis by Plasmonic-Semiconductor@2-D Nanosheet for Biosensing of Crucial Molecules and Cancerous Cells".

Dear Dr. Swarup Kumar Maji,

The project cited above has been recommended by the related **State University Research Excellence (SERB SURE)** to the Science and Engineering Research Board (SERB) for funding. The following are the items recommended for a period of 3 years. The final budget to be sanctioned would be based on quotations received, existing norms, funds availability etc.

**The committee recommended the following budget**

**Manpower : NIL**

**Equipment Details : Rs. 1270000**

-> IR DPSS LASER - 1

-> Electrochemical Workstation - 1

**Consumables : Rs. 600000 (Subject to submission of documents)**

**Travel Cost : As per norms**

**Contingencies : As per norms**

**Overhead : As per norms**

You need to accept the above budgetary allocation before proceeding further. To accept the budgetary recommendations, you may follow the following steps :

1. Go to [www.serbonline.in](http://www.serbonline.in) through your credentials
2. Go to Menu --> Proposal submission --> View submitted proposals
3. Click on the link under Status column "Proposal Approved, Acknowledgment pending from PI"

**You are requested to upload the following documents of the approved budget strictly within one month from the date of this letter.**

Upload the lowest quotation for equipment/s (including freight, insurance, customs charges etc., if any).

Salary structure for the project staff (including HRA, Medical Benefits, if applicable etc.).

A certificate stating that any visit abroad for a period more than eight weeks would be undertaken after due permission from SERB, may also be submitted.

RTGS details of the implementing institute to facilitate transfer of the fund as per the template.

Any other documents (as detailed below specific the programme concerned).

SERB has adopted the Scientific Social Responsibility (SSR) Policy which mandates SERB Grantees to undertake some SSR activities during their project period. You are requested to read the SSR guidelines available under SSR menu and choose the activities according to your preference. Please note that choosing the SSR activities is mandatory for issue of financial sanction subject to submission and acceptance of other necessary documents

Kindly upload the documents related viz., animal ethical clearance certificate, institutional bio safety clearance certificate, etc., matching with exact approved title of project submitted to SERB.

If the project does not require (viz., animal ethical clearance certificate, institutional bio safety clearance certificate, etc.) please confirm with a self-certification saying that it does not involve any animal/human studies or genetic modification in any organisms or bio safety issues.

**(Kindly note that during the issue of sanction order or during the implementation of this project, if SERB come across/found that the project work involves/requires animal/human studies or genetic modification in any organisms or bio safety issues, RCGM approval/ approval from Biodiversity Management Committee Environmental clearance, the project may be terminated without any notice.)**

Please note that release of grant is subject to availability of funds under the scheme. Kindly quote the reference number in all future correspondence. The project's reference no. **SUR/2022/000011** may also be mentioned in all research communications arising from the above project.

Yours sincerely,

(Dr. V Ramesh)

Email: [ms\\_pac\\_sure@serbonline.in](mailto:ms_pac_sure@serbonline.in)

Dr. Swarup Kumar Maji

Chemistry

KHATRA ADIBASI MAHAVIDYALAYA , P.o.: Khatra ,P.s.: Khatra, District: Bankura, Bankura, West Bengal-722140

## SERB-Notification

From: serb\_administrator@serbonline.in

To: serbinfo1@gmail.com

Date: Tuesday, 9 May, 2023 at 09:31 am IST



**Science and Engineering Research Board**  
(Statutory Body Established Through an Act of Parliament : SERB Act 2008)  
Department of Science and Technology, Government of India

SCIENCE & ENGINEERING RESEARCH BOARD (SERB)

(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

Science and Engineering Research Board  
3rd & 4th Floor, Block II  
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**You are requested to upload the following documents of the approved budget strictly within one month from the date of this letter.**

1. Upload the lowest quotation for equipment/s (including freight, insurance, customs charges etc., if any).
2. Salary structure for the project staff (including HRA, Medical Benefits, if applicable etc.).
3. A certificate stating that any visit abroad for a period more than eight weeks would be undertaken after due permission from SERB, may also be submitted.
4. RTGS details of the implementing institute to facilitate transfer of the fund as per the template.
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Yours sincerely,

(Dr. V Ramesh)

Email: ms\_pac\_sure@serbonline.in

Dr. Swarup Kumar Maji

Chemistry

KHATRA ADIBASI MAHAVIDYALAYA , P.o.: Khatra ,P.s.: Khatra,District: Bankura, Bankura, West Bengal-722140

\*\*\*\*\* LEGAL DISCLAIMER \*\*\*\*\*

**Please do not reply to this mail !!**

[ SERB is now on Social-Media. Kindly follow us on Twitter: @serbonline <https://www.twitter.com/serbonline>]

This is a system generated information and does not require any signature. This E-Mail may contain Confidential and/or legally privileged Information and is meant for the intended recipient(s) only. If you have received this e-mail in error and are not the intended recipient/s, kindly notify us at [info@serbonline.in](mailto:info@serbonline.in) and then delete this e-mail immediately from your system. Any unauthorized review, use, disclosure, dissemination, forwarding, printing or copying of this email or any action taken in reliance on this e-mail is strictly prohibited and may be unlawful. Internet communications cannot be guaranteed to be timely, secure, error or virus-free. The sender does not accept any liability for any errors, omissions, viruses or computer problems experienced by any recipient as a result of this e-mail.

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## Budget Details

### Institution wise Budget Breakup :

Budget Head	KHATRA ADIBASI MAHAVIDYALAYA	Total
Consumables	6,00,000	<b>6,00,000</b>
Travel	75,000	<b>75,000</b>
Equipment	16,15,000	<b>16,15,000</b>
Contingencies	4,37,000	<b>4,37,000</b>
Overhead	2,72,700	<b>2,72,700</b>
<b>Total</b>	<b>29,99,700</b>	<b>29,99,700</b>

Institute Name : **KHATRA ADIBASI MAHAVIDYALAYA**

Year Wise Budget Summary (Amount in INR) :

Budget Head	Year-1	Year-2	Year-3	Total
Consumables	2,00,000	2,00,000	2,00,000	<b>6,00,000</b>
Travel	25,000	25,000	25,000	<b>75,000</b>
Equipments	16,15,000	0	0	<b>16,15,000</b>
Contingencies	1,50,000	1,50,000	1,37,000	<b>4,37,000</b>
Overhead	1,99,000	37,500	36,200	<b>2,72,700</b>
<b>Grand Total</b>	<b>21,89,000</b>	<b>4,12,500</b>	<b>3,98,200</b>	<b>29,99,700</b>

Consumable Budget Detail (Amount in INR) :

Justification	Year-1	Year-2	Year-3	Total
<i>Several chemicals, reagents, solvents, glasswares, and other required items need to be purchased. The project will also involve to study extensive electrochemical experiments, which also requires additional cost for purchase of buffer solution, electrodes, etc. Additionally, cell culture experiments will involve added costs. Hence, keeping in mind the requirements, the proposed budget for consumables is just sufficient to meet the requirements for three years.</i>	2,00,000	2,00,000	2,00,000	<b>6,00,000</b>

Travel Budget Detail (Amount in INR) :

Justification (Inland Travel)	Year-1	Year-2	Year-3	Total
<i>The outcome of the project will be shared with the Indian scientific community at various conferences/symposia/workshops. Additionally, some may need to be carried out by collaboration outside our campus. The costs involved in travelling are under this budget.</i>	25,000	25,000	25,000	<b>75,000</b>

Equipment Budget Detail (Amount in INR) :

Generic Name ,Model No. , (Make)/ Justification	Quantity	Spare time	Estimated Cost
<b>Electrochemical Workstation</b> AUTOLAB 204 (Aut204.FRA32M.S) (Metrohm India Ltd) <i>The project involves the application of LSPR based nanohybrids for electrocatalysis. Extensive electrochemical experiments need to be conducted in our laboratory to successfully complete the work, thus, an electrochemical work station (potentiostat/galvanostat) with all required accessories, like FRA module and software for EIS, NOVA software, BEC 50 mL complete cell set up, glassy carbon electrode, rotating disc electrode, suitable i5 PC need to be purchased.</i>	1	30 %	<b>13,44,000</b>
<b>IR DPSS LASER</b> 8515 (Adlabs Instruments) <i>Several light source or laser source need to be purchased to establish the plasmon enhanced phenomenon in our proposal</i>	1	30 %	<b>2,71,000</b>

Contingency Budget Detail (Amount in INR) :

Justification	Year-1	Year-2	Year-3	Total
<i>The budget under the Contingency head will primarily be used for service charges for structural characterization, charges for journal publication, etc. Additionally, it will be used for maintenance of the equipment's as proposed herein. The amount proposed is just sufficient to take care of these requirements for a period of three years.</i>	1,50,000	1,50,000	1,37,000	<b>4,37,000</b>

Overhead Budget Detail (Amount in INR) :

Justification	Year-1	Year-2	Year-3	Total
<i>The proposed budget under the Overheads section will be used for maintenance, infrastructural and administrative costs at Khatra adibasi Mahavidyalaya.</i>	1,99,000	37,500	36,200	<b>2,72,700</b>