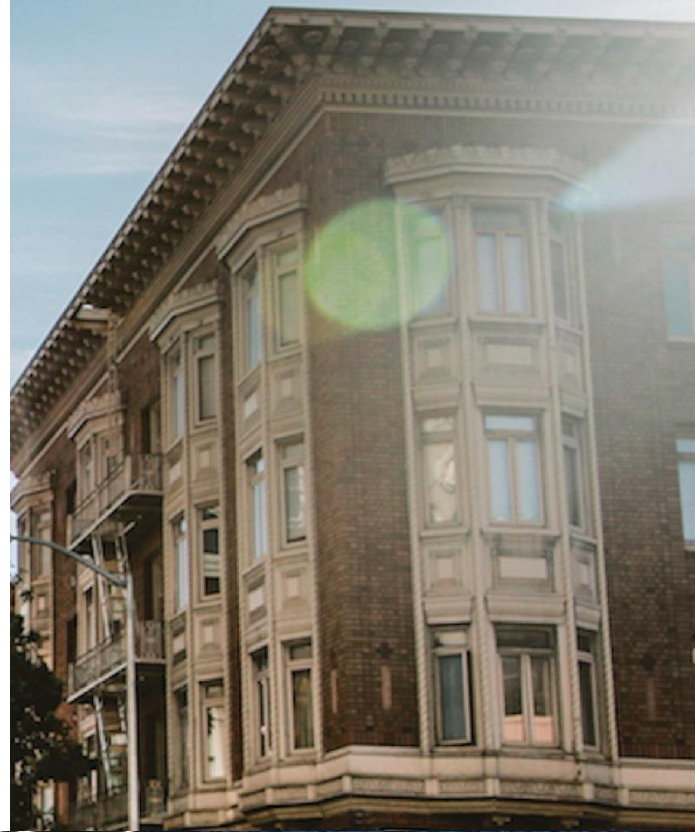


RESOURCE MOBILIZATION



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: 22 February, 2023

ORDER

Subject: Financial Sanction of the research project titled **ESTIMATION OF ABOVE GROUND BIOMASS USING MULTI-FREQUENCY SAR POLARIMETRIC TECHNIQUES IN A TROPICAL FOREST ECOSYSTEM IN THE WESTERN GHATS** under the guidance of Dr. Smitha Asok V. RESEARCH DEPARTMENT OF ENVIRONMENTAL SCIENCES, ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM, University of Kerala, University of Kerala Senate House campus, Palayam, Thiruvananthapuram, Kerala-695034 - 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. 2519240/- (Rs. Twenty Five Lakh Nineteen Thousand Two Hundred and Forty Only)** with break-up of **Rs. 250000/- under Capital (Non-recurring)** head and **Rs. 2269240/- under General (Recurring)** head for a duration of 36 months. The items of expenditure for which the total allocation of **Rs. 2519240/-** has been approved are given below:

The following budget may be considered for **University Of Kerala, University Of Kerala Senate House Campus, Palayam**

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Protimeter BLD5365 Soil Moisture Meter -> Leica Disto D810 Touch Laser Distance Meter (Red - 200 metres) -> Workstation Computer	250000
A'	Total (Non-Recurring)	250000
B	Recurring Items	
1	Recurring - I : (Research Personnel) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1350240 630000 60000
2	Recurring - IV : (Overhead Charges)	229000
B'	Total (Recurring)	2269240
C	Total cost of the project (A' + B')	2519240

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.

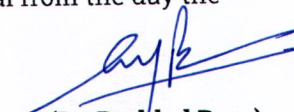
10. The research personnel sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project

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/2022/005916 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. Prahlad Ram)
Scientist D
prahlad@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.	Dr. Smitha Asok V RESEARCH DEPARTMENT OF ENVIRONMENTAL SCIENCES, ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM University of Kerala , University of kerala senate house campus, palayam, Thiruvananthapuram, Kerala-695034 Email: smithaasok@gmail.com Mobile: 919745525355 (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.	Principal, University Of Kerala, University Of Kerala Senate House Campus, Palayam (Receipt of Grant may be intimated by name to the undersigned)


(Dr. Prahlad Ram)
Scientist D
prahlad@serb.gov.in

FILE NO. CRG/2022/005916-G
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: 22 February, 2023

ORDER

Subject: Research project entitled **ESTIMATION OF ABOVE GROUND BIOMASS USING MULTI-FREQUENCY SAR POLARIMETRIC TECHNIQUES IN A TROPICAL FOREST ECOSYSTEM IN THE WESTERN GHATS** under the guidance of Dr. Smitha Asok V, RESEARCH DEPARTMENT OF ENVIRONMENTAL SCIENCES, ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM, University of Kerala, University of Kerala senate house campus, palayam, Thiruvananthapuram, Kerala-695034.

1. In continuation of SERB's sanction order No. CRG/2022/005916 dated 22 February, 2023, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs.100000/-** under 'Grants-in-aid General' to University Of Kerala, University Of Kerala Senate House Campus, Palayam, Thiruvananthapuram, Kerala-695034 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 22 February, 2023.

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 Core Research Grant (**PAC Earth & Atmospheric Sciences**) (General) .

5. The Sanction has been issued with the approval of the competent authority on **21 February, 2023** and vide Diary No. **SERB/F/10867/2022-2023** dated **22 February, 2023**..

6. The release amount of **Rs. 100000/-** (Rupees One 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	KLTV00003404
Account Name	Principal Project
Account Number	3262560360
Bank Name & Branch	Central Bank of India All Saints College Branch Sithara Veli Road. All Saints College Junction Thiruvananthapuram
IFSC/RTGS Code	CBIN0284159
Email id of A/C Holder	allsaintscollegeasc@gmail.com
Email id of PI	smithaasok@gmail.com

(Dr. Prahlad Ram)

Scientist D

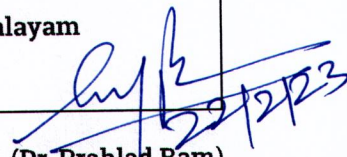
prahlad@serb.gov.in

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
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3.	File Copy

4.	<p>Dr. Smitha Asok V RESEARCH DEPARTMENT OF ENVIRONMENTAL SCIENCES, ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM University of Kerala , University of kerala senate house campus, palayam, Thiruvananthapuram, Kerala-695034 Email: smithaasok@gmail.com Mobile: 919745525355</p> <p>(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, University Of Kerala, University Of Kerala Senate House Campus, Palayam</p> <p>(Receipt of Grant may be intimated by name to the undersigned)</p>


(Dr. Prahlad Ram)
 Scientist D
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FILE NO. CRG/2022/005916-C
SCIENCE & ENGINEERING RESEARCH BOARD(SERB)
(A statutory body of the Department of Science & Technology, Government of India)
Science and Engineering Research Board
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New Delhi - 110016

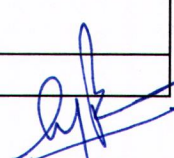
Dated: 22 February, 2023

ORDER

Subject: Research project entitled **ESTIMATION OF ABOVE GROUND BIOMASS USING MULTI-FREQUENCY SAR POLARIMETRIC TECHNIQUES IN A TROPICAL FOREST ECOSYSTEM IN THE WESTERN GHATS** under the guidance of Dr. Smitha Asok V, RESEARCH DEPARTMENT OF ENVIRONMENTAL SCIENCES, ALL SAINTS' COLLEGE, THIRUVANANTHAPURAM, University of Kerala, University of Kerala senate house campus, palayam, Thiruvananthapuram, Kerala-695034.

1. In continuation of SERB's sanction order No. CRG/2022/005916 dated 22 February, 2023, sanction of the competent authority is hereby accorded to the payment of a sum of **Rs.250000/-** under 'Grants-in-aid Capital' to University Of Kerala, University Of Kerala Senate House Campus, Palayam, Thiruvananthapuram, Kerala-695034 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 22 February, 2023.
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 debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant (**PAC Earth & Atmospheric Sciences**) (Capital).
5. The Sanction has been issued with the approval of the competent authority on **21 February, 2023** and vide Diary No. **SERB/F/10866/2022-2023** dated **22 February, 2023**.
6. The release amount of **Rs. 250000/-** (Rupees Two Lakh Fifty 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:


PFMS Unique Code	KLTV00003404
Account Name	Principal Project
Account Number	3262560360
Bank Name & Branch	Central Bank of India All Saints College Branch Sithara Veli Road. All Saints College Junction Thiruvananthapuram
IFSC/RTGS Code	CBIN0284159
Email id of A/C Holder	allsaintscollegeasc@gmail.com
Email id of PI	smithaasok@gmail.com


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To,
Under Secretary
SERB, New Delhi
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