भारतीय अन्तरिक्ष अनुसंधान संगठन अन्तरिक्ष विभाग भारत सरकार अन्तरिक्ष भवन न्यू बी ई एल रोड, बेंगलूरु - 560 231, भारत दूरभाष : +91 80 2341 5474 फैक्स :



Indian Space Research Organisation Department of Space Government of India Antariksh Bhavan New BEL Road, Bengaluru - 560 231, INDIA Tel (Off) : +91 80 2341 5474 Fax :

Dr. M.A. Paul Assoc. Director, RESPOND& AI CBPO ☎: 080-23415269/22172269 FAX-080-23412471 respond@isro.gov.in

October 24, 2019

No. ISRO/RES/4/677/19-20

Dear Dr. Jeganathan,

Subject: RESPOND Project- "Quantifying the Spatio-Temporal rhythm of vegetation growth, health and its vulnerability due to climate change in different forest ecosystem in North-Eastern India using time-series satellite data"-reg.

This has reference to your submission of the above mentioned research proposal for funding under RESPOND Programme. The domain experts in Department of Space have reviewed the proposal. I wish to inform you that Chairman, ISRO / Secretary, DOS has approved the following:

- 1. Funding of the project under RESPOND Programme for a **period of Three years** at a total outlay of **₹29.49 Lakhs (Rupees Twenty Nine Lakh Forty Nine Thousand only)** towards meeting the expenditure of the project (budget details enclosed).
- 2. Release of grant of ₹ 12.61 Lakhs (Rupees Twelve Lakh Sixty One Thousand only) towards meeting the First Year expenditure of the project.

The approval is subject to fulfillment of the following:

- (a) You will have to submit Annual Progress Report (APR), at the end of the year, indicating the progress of the work accomplished during the first year (to enable renewal of the project for second year). However, on conclusion of the project, you will have to submit a comprehensive report covering total project activities. The copies of reports should be sent to Director, NE-SAC, Shillong (Attn: Dr. K K Sarma, Sci/Engr. SG, NE-SAC, Shillong) and two copies to the undersigned.
- (b) You will have to submit two copies of the Fund Utilization Certificate (FUC) and Audited Accounts Statement (AAS) on completion of the first year of the project (to enable renewal of the project for second year). On completion of

the project, you have to submit the final FUC and Audited Account Statement for the total expenditure incurred in the project.

The FUC and AAS should be sent to the Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru 560094 and Director, NE-SAC, Shillong (Attn: Dr. K K Sarma, Sci/Engr. SG, NE-SAC, Shillong) with a copy to the undersigned.

The Department of Space has already issued Financial sanction order for the approved grant (copy enclosed).

As per the revised fellowship norms, you have to appoint a person with PG Degree in Basic Science OR Graduate/Post Graduate Degree in Professional Course selected through a process described through any one of the following: (a) Scholars who are selected through **National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE** (b) The selection process through National level examinations conducted by Central Government Departments and their Agencies and institutions such as DST, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc. as JRF. You may kindly intimate us and send the details of JRF after appointment.

You are requested to submit the enclosed Grant-in-Aid bill and Electronic Transfer Mandate Form duly filled and signed in original to the Pay and Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru 560 094 with a copy to the undersigned for releasing the grants (to Registrar, BIT Mesra, Ranchi) at the earliest.

With Regards,

Yours sincerely,

Muipama Tiveri for (M.A. Paul)

Dr. C Jeganathan Professor Dept. of Remote Sensing Birla Institute of Technology (BIT) Mesra Ranchi: 835 215 Jharkhand

CC: Director, CBPO, ISRO HQ Director, NE-SAC, Shillong Director, BIT Mesra, Ranchi Registrar, BIT Mesra, Ranchi Ms. H Suchitra Devi, Sci/Engr., NESAC, Shillong Dr. K K Sarma, Sci/Engr. SG, NESAC, Shillong

SI. No	Item of Expenditure	I <sup>st</sup> Yr	ll <sup>nd</sup> Yr	lll <sup>rd</sup> Yr	Total
1	Manpower:1 JRF				
	@₹31000 + 16 % HRA pm for I <sup>st</sup> and 2 <sup>nd</sup> Yr @ ₹35000 + 16 % HRA pm for 3 <sup>rd</sup> Yr	4.31	4.31	4.87	13.49
2	Equipment				
	Workstation with good RAM,HDD for handling huge amount of data processing	2.00	0.00	0.00	2.00
3	Indian Satellite Data (multi-	3.00	2.00	0.00	5.00
	year)/meteorological data				0.00
4	Consumables and Supplies	0.20	0.20	0.20	0.60
5	Internal Travel	2.00	2.00	0.50	4.50
6	Contingencies	0.10	0.10	0.10	0.30
7	Others	0.00	0.20	0.40	0.60
Sub Total		11.61	8.81	6.07	26.49
8	Overheads @20% (limited to ₹ 3.00 Lakhs)	1.00	1.00	1.00	3.00
Total		12.61	9.81	7.07	29.49

## No.DS-2B-13012(2)/55/2019-Sec.II भारत सरकार/GOVERNMENT OF INDIA अंतरिक्ष विभाग/DEPARTMENT OF SPACE

Antariksh Bhavan, New BEL Road, Bengaluru - 560 094.

October 21, 2019

Registrar, Birla Institute of Technology (BIT), Mesra, Ranchi – 835 215, Jharkhand.

Sir,

Sub: Grant-in-aid - RESPOND- Release of grant for the new project entitled "Quantifying the Spatio-Temporal rhythm of vegetation growth, health and its vulnerability due to climate change in different forest ecosystem in North-Eastern India using time-series satellite data" - reg.

I am directed to convey the sanction of the President to a grant of ₹12,61,000/- (Rupees Twelve lakh sixty one thousand only) to meet the expenditure towards the new project entitled "Quantifying the Spatio-Temporal rhythm of vegetation growth, health and its vulnerability due to climate change in different forest ecosystem in North-Eastern India using time-series satellite data" (total project cost is ₹29.49 lakh for a period of three years) by Birla Institute of Technology (BITS) Mesra during first year of the project.

2. The amount of ₹12,61,000/- (Rupees Twelve lakh sixty one thousand only) will be paid to you by the Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru - 560 094 on receipt of the bill.

3. The grant-in-aid sanctioned shall be subject to the terms and conditions mentioned in the Annexure enclosed.

4. A separate account for the grant-in-aid sanctioned will have to be maintained which are subject to scrutiny by the Indian Audit and Accounts Department who will also have the right of access to the Book of Accounts.

5. Accounts of expenses incurred out of grant should be prepared, maintained and authenticated by approved auditors. The final accounts statement in duplicate duly audited along with Utilisation Certificate in GFR 12A format (GFR 2017) should be sent to the Pay & Accounts Officer, Department of Space, Bengaluru - 560 094 at the end of each financial year of support.

.....2/-

6. The expenditure involved is debitable to "Head: 3402.00.103.09.00.31- Space Research-Space Sciences-Respond- GIA-General" - under 'Grant No.93 - Department of Space' for the financial year 2019-2020.

Yours faithfully,

(पूर्णिमा मनोज/Poornima Manoj) (वरिष्ठ लेखा अधिकारी/Sr.Accounts Officer)

Copy for information and necessary action to:

- 1. The Director, CBPO, ISRO Hq., Bengaluru
- 2. Associate Director, RESPOND, ISRO Hq., Bengaluru (Ref No.ISRO/RES/4/677/19-20 dated 26.09.2019)
- 3. The Director General of Audit, Scientific Departments, DGACR Building, IP Estate, New Delhi 110 001.
- 4. The Director, O/o the Director General of Audit, Scientific Departments, Antariksh Bhavan, New BEL Road, Bengaluru 560 094
- 5. Chief Controller of Accounts, DOS
- 6. Senior Accounts Officer, ISRO Hq., Bengaluru
- 7. The Pay & Accounts Officer, Department of Space, Bengaluru With a request to make the payment of ₹12,61,000/- (Rupees Twelve lakh sixty one thousand only) in favour of "The Registrar, Birlal Institute of Technology (BITS) Mesra, Ranchi" on receipt of the Bill.
- 8. The Senior Head (Internal Audit), DOS, Bengaluru
- 9. Dr. C Jeganathan, Professor, Dept. of Remot Sensing, Birla Institute of Technology (BITS) Mesra, Ranchi 835 215, Jharkhand.

(पूर्णिमा मनोज/Poornima Manoj) (वरिष्ठ लेखा अधिकारी/Sr.Accounts Officer)