DVV Clarifications Metrics Level Deviations

1	Average perc funded by go the last five y 3.2.4.1. No funded by go the last five y HEI Input :	entage of de vernment an years umber of dep vernment an years	partments ha id non-govern partments hav id non-govern	aving Researd iment agenci ving Researc iment agenci	ch projects es during h projects es during	"Provide grant award letter of teachers along with the department affiliation, title of the funded project, the amount and the funding agency during the year 2016-17, 2017-18, 2018-19 and 2019-20, 2020-21."
	2020-21	2019-20	2018-19	2017-18	2016-17	
	4	4	3	4	4	
		<u> </u>	1			
	3.2.4.2. N programes HEI Input :	umber of dep	partments off	ering acaden	nic	
	3.2.4.2. N programes HEI Input : 2020-21	umber of dep 2019-20	2018-19	ering acaden 2017-18	iic 2016-17	
	3.2.4.2. No programes HEI Input : 2020-21	umber of dep 2019-20 10	2018-19	ering academ 2017-18 10	nic 2016-17 10	

Supporting Documents:

Grant award letter of teachers along with the department affiliation, title of the funded project, the amount and the funding agency during the year 2016-17, 2017-18, 2018-19 and 2019-20, 2020-21."



Professor, MIS Group

Dr. Somprakash Bandyopadhyay

e-mail: somprakash@iimcal.ac.in

Indian Institute of Management Calcutta Joka, Diamond Harbour Road Kolkata 700 104, India Tel: +91 33 2467 8300-06 M: 92316-83443 Project Director, Social Informatics Research Group web: www.iimcal.ac.in

To whom it may concern

This is to certify that Prof. (Dr.) Siuli Roy, Head, Department of Information Technology, Heritage Institute of Technology, Kolkata and Dr. Souvik Basu, Head, Department of Computer Applications, Heritage Institute of Technology, Kolkata are Technology Partners for execution of the Department of Science and Technology (DST), Govt. of India, funded research project "Creating a digitally enabled social knowledge management platform for rural SC community to bridge rural-urban knowledge, information and market divide' (sanction no. DST/SEED/SCSP/STI/2019/106, dated 25.2.20). The total sanctioned budget for the project is Rs. 29,76,116/- for a period of two years, of which the share of Heritage Institute of Technology, Kolkata is Rs. 14,81,840/-.

Somprakash Bandy pathya

Somprakash Bandyopadhyay

Principal Investigator Project: Creating a digitally enabled social knowledge management platform for rural SC community to bridge rural-urban knowledge, information and market divide

F.No. DST/SEED/SCSP/STI/2019/106 (G) Government of India Ministry of Science & Technology Department of Science & Technology (SEED Division)

Technology Bhavan, New Delhi Dated, the 13th March, 2020 P

ORDER

Sub:- Financial Assistance for the project titled "Creating a digitally enabled social knowledge management platform for rural SC community to bridge rural-urban knowledge, information and market divide' under the Guidance of Prof. Somprakash Bandyopadhyay, Management Information System Group, Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104- release of first General installment reg.

Sanction of the President is hereby accorded to the implementation of the above mentioned project at a total cost of Rs. 29,76,116/- (Rupees Twenty nine Lakh Seventy six Thousand one hundred sixteen only) to Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104, for a duration of two years. With the following bifurcation:

Name of Host Institute	Total cost of project	Fund under Capital	Fund under General	Initial release		
		Capital	General	Total	Capital	General
IIT, Kolkatta	14,94,276/-	2,95,974/-	11,98,302/-	8,73,495/-	2,95,974/-	5,77,521/-
HIT, Kolkatta	14,81,840/-	93,400/-	13,88,840/-	7,87,620/-	93,400/-	6,94,220/-
Grand Total	29,76,116/-			16,61,115/-		

Budget Summary

A. GENERAL COMPONENT

Budget Head	I Year (₹)	II Year (₹)	Total (₹)
1) MANPOWER			
For IIM Kolkata:			
(a) Project Assistant (1 nos.) @ Rs. 22,000/- per month.	2,64,000/-	2,64,000/-	5,28,000/-
(b) Field Worker (1 nos.) @ Rs. 15,000/- per month.	1,80,000/-	1,80,000/-	3,60,000/-
For HIT Kolkata:			
(a) ICT Expert (1 nos.) @ Rs. 30,000/- who will work as Senior software developer.	3,60,000/-	3,60,000/-	7,20,000/-
(b) Project Assistant (1 nos.) @ Rs. 22,000/- who will work as Junior software developer.	2,64,000/-	2,64,000/-	5,28,000/-
Sub-Total	10,68,000/-	10,68,000/-	21,36,000/-
2) CONSUMABLES			
No amount is quoted by the P.I under this head.	Nil	Nil	Nil

1. Color

3) TRAVEL			
For IIM Kolkata:			and the second second
(a) Project activity	50,000/-	50.000/-	1.00.000/-
(b) Field activities		0,000	1,00,000,-
(c) DST review meetings			
For HIT Kolkata:			
(a) Project activity	50,000/-	50.000/-	1.00.000/
(b) Field activities			1,00,000/-
(c) DST review meetings			
Sub-Total	1,00,000/-	1.00.000/-	2 00 000/-
4) FIELD TESTING/DEMO	TRAININGS	1100,000	2,00,000/-
For IIM Kolkata:			
(a) Community training and mobilization expenses	40,000/-	80,000/-	1,20,000/-
5) CONTINGENCY (@ 3%)	(The amount quo	ted for internet and	stationaries under
For IIM Kolkata:	red under this)	10.0004	
For HIT Kolkata	16,020/-	17,220/-	33,240/-
Sub Total	20,220/-	20,220/-	40,440/-
OVERHEADS (C SNO)	30,240/-	37,440/-	73,680/-
STOVERHEADS ((a) 5%)	1		
or IIM Kolkata:	27,501/-	29,561/-	57,062/-
Sub-Sub-Total		Long and the second	
or IIM Kolkata:	5,77,521/-	6,20,781/-	11,98,302/-
For HIT Kolkata:	6,94,220/-	6,94,220/-	13,88,440/-
Sub-Total (A)	12,71,741/-	13,15,001/-	25.86.742/-

B. CAPITAL COMPONENT

	I Year (₹)	II Year (₹)	Total (₹)
1) EQUIPMENT			
For IIM Kolkata:			
(a) Desktop P.C (3 nos.) @ Rs. 32,214/- per unit.	96,642/- (including 18% GST)	-	96,642/-
(b) Large T.V (3 nos.) @ Rs. 18,500/- per unit.	55,500/- (including 28% GST)		55,500/-
(c) Printer (1 nos.) @ Rs. 8,968/-	8,968/- (including 18% GST)	-	8,968/-
(d) Wi-Fi Router (3 nos.) @ Rs. 1,888/- per unit.	5,664/- (including 18% GST)		5,664/-
(e) 8" Samsung tablet (6 nos.) @ Rs. 11,000/- per unit.	66,000/- (including 18% GST)		66,000/-
(f) Smart phone (3 nos.) @ Rs. 11,000/- per unit.	33,000/- (including GST)		33,000/-
(g) Laptop (1 nos.) @ Rs. 30,200/-	30,200/- (including GST)	-	30,200/-
Sub-Sub-Total	2,95,974/-	-	2.95.974/-
For HIT Kolkata:			

Mache

(a) Smart phone (3 nos.) @ Rs. 11,000/- per unit.	33,000/- (including GST)	-	33,000/-
(b) Laptop (2 nos.) @ Rs. 30,200/- per unit.	60,400/- (including GST)	-	60,400/-
Sub-Sub-Total	93,400/-	-	93,400/-
Sub-Total (B)	3,89,374/-	-	3,89,374/-

	1 Year (₹)	II Year (₹)	Total (₹)
Grand Total for IIM Kolkata	8,73,495/-	6,20,781/-	14,94,276/-
Grand Total for HIT Kolkata	7,87,620/-	6,94,220/-	14,81,840/-
Grand Total (A+B)	16,61,115/-	13,15,001/-	29,76,116/-

2. Sanction of the President is also accorded to the payment of Rs.12,71,741/-(Rupees Twelve lakh Seventy one thousand Seven hundred forty one only) to Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104, with IIM Kolkatta shar of Rs. 5,77,521/- and HIT, Kolkatta share of Rs. 6,94,220/being the first installment of grant under general component head for implementation of the said project.

3. This sanction is subject to the condition that the grantee organisation will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

4. The grantee organisation will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

5. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.

6. The grant-in-aid being released is subject to the condition that

a. transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organisation under the appropriate rules of the grantee organisation while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organisation immediately on receipt of the grant:

b. While submitting Utilisation Certificate/Statement of Expenditure, the organisation has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

7. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings, against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax)

Receipt Portal (NTRP), i.e., www.Bharatkosh.gov.in), immediately after finalization of accounts, as it shall not be adjusted towards future release of grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/Utilization Certificate for considering subsequent release of grant/closure of project accounts. GI should also follow Rule 230(17) of GFR-2017 concerning reservation of SC/ST/OBC, if applicable.

8. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

9. In case the scheme provides for payment of honorarium / remuneration / fellowship / scholarship to the PI,a para may suitably be incorporated in the DSO to the effect that "PI is not drawing any emoluments/ salary/fellowship from any other project either supported by DST or by any other funding agency.

10. The account of the grantee organisation shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organisation is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

11. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organisation in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

12. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

13. The expenditure involved is debitable to Demand No.86, Department of Science & Technology for the year 2019-20:

3425	:	Other Scientific Research (Major Head)
60.		Others: (Sub-Major Head)
789	4	Scheduled Castes Component
15	:	Innovation, Technology Development and Deployment
15.00.31	:	Grants-in-aid General for the year 2019-20
		(Previous : SEED-SCSP-3425.60.789.01.01.31)

14. The amount of Rs. 12,71,741/-(Rupees Twelve lakh Seventy one thousand Seven hundred forty one only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104. The bank details for electronic transfer of funds through RTGS are given below:-

i)	Name of Account Holder	Indian Institute of Management Calcutta
ii)	Name of the Bank & Branch	State Bank of India, IIM Joka Branch (Kolkata - 700104)
iii)	Bank Account Number	39174912487
iv)	IFSC code	SBIN0006210
vi)	MICR Code	700002130

Michne

15. As per rule 149 of GFR, the procurement of Goods & Services is mandatory for Goods and/or Services available on GeM and the same may be followed as far as possible.

16. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 55 in the register of grants maintained in the Division for the scheme SEED Division (Scheduled Caste Sub Plan).

17. This issues with the concurrence of IFD Vide their Concurrence Dy.No.C/6243 /IFD/2019-20 dated the 13.3.20.

18. It is mandatory to use EAT module in PFMS since 15.6.18, failing which no further funds shall be released.

(Konga Gopikrishna) Scientist –E/011-26590298

To

The Pay and Accounts Officer, Department of Science & Technology, New Delhi.

Copy for information and necessary action to:-

- 1. Cash Section (3 copies) for making the payment to the grantee, Account Section
- 2. Director of Audit, (Scientific Deptt.) AGCR Building, New Delhi 110 002.
- Registrar, Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104
- Prof. Somprakash Bandyopadhyay, Management Information System Group, Indian Institute of Management Calcutta, Joka, Diamond Harbour Road, Kolkata- 700 104
- Head, Heritage Institute of Technology(HIT), Chowbaga Road, Anandapur, East Kolkata Township, Kolkata- 700 107
- 6. Head(SEED)
- 7. Office copy

(Konga Gopikrishna) Scientist –E/011-26590298

FILE NO. SRG/2019/001119

SCIENCE & ENGINEERING RESEARCH BOARD(SERB) (A statutory body of the Department of Science & Technology, Government of India) 5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. 4. Community Control

Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 24-Dec-2019

ORDER

Subject: Financial Sanction of the research project titled **"Synthesis of New Thermoelectric Materials,** Exploring Cu-S Binary" under the guidance of Dr. Rítayan Chatterjee, Physics, Heritage Institute of Technology , East kolkatta township, chowbaga road, anandapur, kolkata, Kolkata, West bengal-700107 - 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. 3157000/- (Rs. Thirty One Lakh Fifty Seven Thousand Only) with break-up of Rs. 2200000/- under Capital (Non-recurring) head and Rs.957000/- under General (Recurring) head for a duration of 24 months. The items of expenditure for which the total allocation of Rs. 3157000/- has been approved are given below:

S. No	Head	Total (in Rs.)
Α	Non-recurring	
1	Equipment -> High temperature muffle furnace -> Thermogravimetry cum Differential Scanning Calorimetry (TGDSC) with oxidizing+reducing atmosphere	2200000
A'	Total (Non-Recurring)	2200000
B	Recurring Items	
ĩ	Recurring - I : (Manpower) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	360000 300000 10000
2	Recurring - IV : (Overhead Charges)	287000
B'	Total (Recurring)	957000
С	Total cost of the project (A' + B')	3157000

2. Sanction of the SERB is also accorded to the payment of Rs. 2200000/- (Rupees Twenty Two Lakh only) under 'Grants for creation of capital assets' and Rs. 483500/- (Rupees Four Lakh Eighty Three Thousand Five Hundred only) under 'Grants-in-aid General' to Principal, Heritage Institute Of Technology, East Kolkatta Township, Chowbaga Road, Anandapur, Kolkata being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Start-up Research Grant. (EC Engineering Sciences)

4. The Sanction has been issued to Heritage Institute Of Technology, East Kolkatta Township, Chowbaga Road, Anandapur, Kolkata with the approval of the competent authority under delegated powers on **20 December**, **2019** and vide Diary No. SERB/F/8003/2019-2020 dated **21 December**, **2019**

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

6. 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.

7. 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 activites enlisted under SSR norms and under no circumstances it can be reappropriated.

9. 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.

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

11. The release amount of **Rs. 2683500/-** (Rupees Twenty Six Lakh Eighty Three Thousand Five Hundred 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	WBPS00008689
Account Name	Heritage Institute of Technology
Account Number	142601010000038
Bank Name & Branch	Punjab National Bank The Heritage KBT Anandapur 994 Madurdaha, Chowbaga Road Kolkata 700107
IFSC/RTGS Code	PUNB0632300
Email id of A/C Holder	cfo@heritageit.edu
Email id of PI	ritayanchatterjee@gmail.com

12.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.

13. 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.

14. The project File no. SRG/2019/001119 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

15. The manpower 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

16. As this is the first grant being released for the project, no previous U/C is required.

17. 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.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. 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 the Science & Engineering Research Board.

Figur (Dr. Ramesh Vijayan) SCIENTIST-C drvramesh@serb.gov.in

To, Under Secretary

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. Ritayan Chatterjee Physics Heritage Institute of Technology, East kolkatta township, chowbaga road, anandapur, kolkata, Kolkata, West bengal-700107 Email: ritayanchatterjee@gmail.com Mobile: 919433470572 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <u>www.serb.gov.in</u> .)
5.	Principal, Heritage Institute Of Technology, East Kolkatta Township, Chowbaga Road, Anandapur, Kolkata (Receipt of Grant may be intimated by name to the undersigned)

(Dr. Ramesh Vijayan)

SCIENTIST-Ć drvramesh@serb.gov.in

ब.No.DS-2B-13012(2)/3/2018 भारतसरकार/GOVERNMENT OF INDIA अंतरिक्षविभाग/DEPARTMENT OF SPACE

Antariksh Bhavan New BEL Road Bengaluru - 560 231

December 19, 2018

Principal,

Heritage Insitute of Technology, Chowbaga Road, Anandapur, P.O East Kolkata Township, Kolkata – 700 107, West Bengal.

Sir,

Subject: Grant-in-aid – RESPOND - Release of grant for the project titled "Geofencing of data on NavIC/IRNSS Signal" - reg.

I am directed to convey the sanction of the President to a grant of ₹3,00,000/- (Rupees Three lakh only) to meet the expenditure towards the project titled "Geofencing of data on NavIC/IRNSS Signal" activities by Heritage Institute of Technology, Kolkata as part of post Hackathon–2018 activities.

2. The amount of ₹3,00,000/- (Rupees Three lakh only) will be paid to you by the Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru - 560 231 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 the 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 should be sent to the Pay & Accounts Officer, Department of Space, Bengaluru-560 231 at the end of each financial year of support

....2/-

6. The expenditure involved is debitable to the Head "3402.00.103.09.00.31- Space Research- Space Sciences-Respond- GIA-General" - under 'Grant No.91 - Department of Space' for the financial year 2018-2019.

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. The Dy.Director, RESPOND, ISRO Hq., Bengaluru (Ref No.ISRO/RES/Hackathon/18-19 dated 06.11.2018)
- 3. The Director General of Audit, Scientific Departments, DGACR Building, IP Estate, New Delhi
- 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 ₹3,00,000/- (Rupees Three lakh only) in favour of "The Principal, Heritage Insitute f Technology, Kolkata" on receipt of the Bill
- 8. The Senior Head (Internal Audit), DOS, Bengaluru
- 9. Accounts Officer, Special Projects, ISRO Hq, Bengaluru
- 10. Dr. Rajat Acharya, Space Applications Centre, Ambawadi Vistar PO, Jodhpur Tekra, Ahmedabad
- Mr. Mohit Goyal, Department of Computer Science, Birla Insitute of Technology and Science, Shamirpet-Keesara Road, Jawahar Nagar, Shameerpet, Hyderabad, Telengana – 500 078.

(पूर्णिमा मनोज/Poormina Manoj) (वरिषठ लेखा अधिकारी/Sr.Accounts Officer)



Team Name: The Ciphers Institute's Name: Heritage Institute of Technology

Proposal Format

Application for Grant of Funds

		Heritage Institute of Technology ,		
		Chowbaga Road, Anandapur,		
	Name of the Institution with Full Address	P.O.: East Kolkata Township, Kolkata 700 107		
1.		Ph. : +91 33 6627 0600/ 0609/ 0614/ 0622		
		Fax: +91 33 2443 0455 / 1794		
		E-mail: admin@heritageit.edu		
2.	Title of the Research Proposal	Location Based Disaster Management System using IRNSS/NAVIC satellites		
		Reshma Roychoudhuri		
3.	Name of the Principal Investigator (Address/Phone/E-mail)	Assistant Professor, Department of CSE Heritage Institute of Technology Kolkata, West Bengal – 700 107		
		(reshma.roychoudhuri@heritageit.edu)		
4.	Name(s) of other investigator(s) with the name(s) of their Institution	N/A		
5.	Proposed duration of Research Project	6 months		
	Amount of grant requested (in Rs.) 1 st Year 2 nd Year 3 rd Year Total	Rs. 3 Lakhs		
	Manpower	Rs. 1.2 Lakhs (Stipend)		
	Manpower Equipment	Rs. 1.2 Lakhs (Stipend) N/A		
6.	Manpower Equipment Satellite Data/Data	Rs. 1.2 Lakhs (Stipend) N/A N/A		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel Contingency	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs N/A		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel Contingency Others	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs N/A N/A		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel Contingency Others Overheads	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs N/A N/A N/A		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel Contingency Others Overheads Total	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs N/A N/A N/A Rs. 3 Lakhs		
6.	Manpower Equipment Satellite Data/Data Consumables & Supplies Internal Travel Contingency Others Overheads Total a) Bio-data of all the Investigators (For b) Brief description of the Research Price c) Declaration (Format-C).	Rs. 1.2 Lakhs (Stipend) N/A N/A Rs. 0.6 Lakhs Rs 1.2 Lakhs N/A N/A N/A Rs. 3 Lakhs mat-A). oposal with details of budget (Format-B).		



Name	Institution	Designation				
Principal Investigator						
Reshma Roychoudhuri	Heritage Institute Of Technology ,Kolkata, West Bengal	Assistant Professor				
Head of the Department/Area						
Subhashis Majumder	Heritage Institute Of Technology,Kolkata,West Bengal	Professor & HoD,CSE,Dean UG				
Head of the Institution						
Pranay Chaudhuri	Heritage Institute Of Technology,Kolkata,West Bengal	Principal				



Proposal Format

1.	Title of the research proposal	Location Based Disaster Management System using IRNSS/NAVIC signals
2.	Summary of the proposed research A Simple concise statement about the investigation, its conduct and the anticipated results in no more than 200 words	The project will send disaster warnings and signals to people residing where a disaster will or has struck. It will also let the governmental departments / military or private institutions communicate among themselves by sending encrypted messages targeted for select group of people or a single person. It will be enabled on mobile devices and will alert users if any message/alerts has come through.
3.	Objectives A brief definition of the objectives and their scientific, technical and techno-economic importance.	 Geofence the IRNSS/NavIC signals. Creating a data structure for the messages. Create encrypting-decrypting engine Authentication of users. Disaster Management by Location Targeting. Target messages/alerts to concerned departments.
4.	Major Scientific fields of Interest A brief history and basis for the proposal and a demonstration of the need for such an investigation preferably with reference to the possible application of the results to ISRO's activities. A reference should also be made to the latest work being carried out in the field and the present state-of-art of the subject.	 Mobile signals cannot reach to every part of the country and cannot travel to areas lying in the sea. Moreover, they can't be trusted when a disaster has struck. The signals from satellite will come into play where the mobile signals cannot reach and guide people against the warnings for disasters. The major scientific fields of interest are handling satellite data, encryption, decryption, mobile technology and data structures. Currently ISRO is able to send short messages using the IRNSS receiver box. We aim to bring that technology in the modern smartphones and feature phones.
5.	Linkages to Space Programme/Deliverables to ISRO on successful completion of the project	It will help ISRO send messages over vast area and nearly 100% delivery rate through their satellites.
6.	Approach A clear description of the concepts to be used in the investigation should be given. Details of the method and procedures for carrying out the investigation with necessary instrumentation and expected time schedules should be included. All supporting studies necessary for the investigation should be identified. The necessary	Data Structure:Design a data structure for the messages thatwill have certain fields corresponding to the data that will besent by the satellite.Geofence Algorithm:The algorithm will be able to create ageofence with the help of given coordinates and check if a givepoint is in the geofence or not.Encryption – decryption engine:AES algorithm will be used toencrypt the public messages regarding Disaster Management.RSA will be used for military, governmental and privatepurposes.RSA will let every department assign a particularkey and that can be used to send messages within thatdepartment or even cross-department.



informatic collabora if existi investigat studies, furnished Investigat have w collabora himself. developm rocket ar payloads necessar relevant design. IS be inform Institution facilities developm depender some oth this purpo	on of any tive arrangement, ng with other ors for such should be . The principal for is expected to orked out his tive arrangement For the tent of balloon, nd satellite-borne it will be y to provide details of their SRO should also hed whether the has adequate for such payload tent or will be nt on ISRO or her Institution for ose.	Optimization and Stability of the project: Optimizing the data structure and the algorithms to ensure better performance on mobile devices. Developing Android App: Develop the Android app that will receive the data from IRNSS Receiver Module and alert users with the messages. The demo can be ready within 5 months and further improvement can be done accordingly. This is a new idea and has no collaboration with any other department. An IRNSS receiver module is needed to receive the signals and connect to a smartphone to render the messages. The data structure, geofence algorithm, encrypting – decrypting engine and authentication have been developed. We had shown a demo to the judges for the above during the Smart India Hackathon 2018. System Architecture : Message received in Phone System by IRNSS Receiver Module Message model Ibirary Message Intervation Ibirary Message Intervati
7. Data bas A brief d	e and analysis	We need to plan the development according to the data of the signals sent through the satellites. We will be utilizing the
data bas plan shou any assis from IS analysis should clearly	and analysis and be included. If tance is required and for data purposes, it be indicated	messaging block in the signals, analyze how much is the bandwidth of the data and plan our encryption, decryption and message length according to that. We need an access to send test messages through the satellites to our devices after the demo project is implemented during the pilot phase of the project.
8. Available	Institutional	
facilities Facilities equipmer at the par	such as it, etc., available ent Institution for	 Equipment Access to send test messages through the satellite to our devices.



the proposed in should be listed	vestigation			
9. Fund Requiren Detailed year w	nent ise break-up for the Proj	ect budget sho	ould be given as follows:	
Fellowships*	l st Yr	2 nd Yr	3 rd Y	r
Research Scientist	N/A	N/A	N/A	L .
Research Associate	N/A	N/A	N/A	1
Stipend for students	1,20,000	N/A	N/A	
Total	N/A	N/A	N/A	
*Note: please specify	the designation, qualification	ation and rate	of salary per month for	each category
	l st Yr	2 nd Yr	3 rd Yr	Total
Equipment**	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A
Please specify the var requirement, if any	ious individual items of e	quipment and	indicate foreign exchan	ge
	l st Yr	2 nd Yr	3 rd Yr	Total
Satellite data/data	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A
	l st Yr	2 nd Yr	3 rd Yr	Total
Consumables & Supplies	60,000	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A
	l st Yr	2 nd Yr	3 rd Yr	Total
Internal Travel	1,20,000	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A
	lstÅr	2 nd Yr	3 rd Yr	Total
Contingencies	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A
	lstÅt	2 nd Yr	3 rd Yr	Total
Others	N/A	N/A	N/A	N/A



	Total	N/A		N/A	N/A	N/A
		Ist	Yr	2 nd Yr	3 rd Yr	Total
Overheads(Overhea d Expenses of 20% of Total Project Cost not exceeding 3.00 lakhs)		N/A		N/A	N/A	N/A
	Total 3,00		,000	N/A	N/A	N/A
10. Whether the same or No similar proposal has been submitted to other funding agencies of Government of India. If Yes please provide details of the institution & status of the proposal.		No				

**Justify each equipment. If computer is proposed, only desktop has to be purchased not laptop

	Particu	ulars	Time (months)					
#	Tasks	Team	1 st	2 nd	3 rd Month	4 th	5 th Month	6 th
		Member's	Month	Month		Month		Month
		Name						
1	Requirement Analysis and design	All Members	Get and upgrade requirements to fine tune and add extended feature based on instructions from ISRO. Design of the produt and SRS.					
2	Backend Implementati on	All Members		Setup the base for the system and add depende ncies.	Setup Data structure, Encryptio n and data encoding.	Setup libraries for various natural events.	Setup Advanced feature and encryption for military use.	
3	Frontend Implementati on	Sagar Sangam, Pritam Raj			Develop portal to encode, create,se nd message for Admin.	Choose encrypti on type and area for messag es.	Feature to choose natural disaster from library, advanced encryption.	

• Time-Line and responsibility of participating team



4	UI Design	Deepak Prasad, Aman Aadersh			Design UI p model for va and addition	rototype using the Agile arious desired changes n of features.	
5	Testing	All Members		Rigorous te	esting of the p	product	
6	Integration and Maintenance	All Members				Merge and implement the project.	Support and deploym ent.
7	Documentati on	Deepak Prasad, Sagar Sangam	Documen	ting the man	ual and proje	ct whenever necessary.	

<u>Funding</u>

The institute will be provided with a onetime grant of INR 3 Lakhs. This money will be spent on stipends of the participants, their travel and logistics cost and satisfying any other technical or budgetary expenditure, which they may incur.

Note: The stipend amount for the teams (having 6 members) for the duration of 6 months @ INR 5,000/per months per student, amounts to INR 1.8 Lakhs. The remaining INR 1.2 Lakhs has been provisioned for travel and logistics cost; for project related purposes and satisfying any other technical or budgetary expenditures of the concerned team. The Project Investigator/Mentor from the institution will be the approving authority for the disbursement of funds. The Project Investigator/Mentor will have to submit a detailed expenditure utilisation report along with the technical details of the project and it's status, at the end of 6 months (starting from 1st September 2017).

The INR 3 Lakh grant will be utilised for the following:

• **Stipend:** Each team member will receive a consolidated stipend of INR 5,000/- per month. The students will start receiving their stipend from the date of starting of the project, for the duration of next 6 months.

Note: Maximum of 6 students will get the above mentioned stipend. If a team has more students (we have given each team a provision to add one more team member), then the stipend per student will be reduced to accommodate extra members.

- Long Distance Travel: Each student will be entitled to AC-III tier train ticket fare for long distance travel. If the individual travels by any other mode, then he/she will have to bear the difference amount from his/her pocket. The amount will be reimbursed on producing the tickets.
- Short Distance Travel: Each student will be entitled for reimbursement of amount upto INR 500/- per day for local travel. The individual will have to justify his/her travel and provided relevant bills and receipts. If the bills/receipts are not produced, he/she won't be reimbursed the said amount. In that case, the individual will have to bear the cost from his/her pocket. Any distance within the radius of 100 Km will be considered short distance.



The central point of reference will be the individual's college. Any travel within the radius of 30 km from the college won't be considered for reimbursement.

- **Stay:** Each student will be entitled to an amount of upto INR 700/- per day for stay in case of long distance travel. The amount will be considered for reimbursement on producing relevant bills and receipts.
- **Food:** Each student will be entitled to an amount of upto INR 300/- per day for food in case of long distance travel. The amount will be considered for reimbursement on producing relevant bills and receipts.
- **Cost Incurred during Field Visits:** Other than travel and stay, if any other cost is incurred during any field visit to collect data/field survey or to undertake user testing etc (wherever required), each person will be entitled to an allowance of 500/- per day. To claim this amount, a prior approval will have to be taken from AICTE/Hackathon Team for conducting the field visit.
- **Development Cost:** Any cost incurred while development of the prototype into a deployable product, like buying any form of hardware component to complement the software product, or buying user licence to use a proprietary software, etc. the cost will be borne form the grant money.



I / We hereby agree to abide by the rules and regulations of ISRO research grants and accept to be governed by all the terms and conditions laid down for this purpose.

I / We certify that I / We have not received any grant-in-aid for the same purpose from any other Department of the Central Government / State Government / Public Sector Enterprise during the period to which the grant relates.

	Signature & Name	Designation
Principal Investigator	Rechma Roychoudhusi RECHMA Roychoudhuri	ASSISTANT PROFESSOR
Head of the Department / Area	SUBHASHIS MAJUMDER	Professor & FIDD, CSE, Dean UGI.
Head of the Institution	FCL cult Dr. Pranay Chaudhuri Principal	Principal Heritage Institute of Technolog

AWARD LETTER AGREEMENT

THIS AGREEMENT made on this 5th day of May, 2016, between SRISTI, Society for **Research and Initiatives for Sustainable Technologies and Institutions** (hereinafter called as SRISTI), a non-profit organization having its office at AES Boys Hostel Campus, Near Gujarat University Library & SBI, Navrangpura, Ahmedabad-380009, Gujarat, India; of the ONE PART and **Heritage Institute of Technology**, Anandapur, Kolkata-700107; hereinafter called AWARDEE of the OTHER PART:

Whereas, SRISTI is an organization set up with the objective of strengthening the capacity of grassroots and student, inventors, innovators and ecopreneurs in the area of conserving biodiversity and developing eco-friendly solution to local problems; is engaged *inter alia* in the area search, documentation, experimentation, development, diffusion of sustainable technologies and Techpedia, a Sristi initiative aims at putting the problems of micro, small and medium enterprises, informal sector, grassroots innovators and other social sectors on the agenda of the young technology students across the country.

Whereas to promote the culture of innovation amongst the young minds of the country, SRISTI established three national awards for innovative student/faculty projects in engineering, pharmacy, science and applied technologies since 2012 in the name of Gandhian Young Technological Innovation Award (GYTI). Realising the need of the hour and looking at the innovation potential of awardees, Biotechnology Industry Research Assistance Council (BIRAC) a Government of India Enterprise of Department of Biotechnology (DBT), New Delhi has decided to give BIRAC-SRISTI GYTI Awards and BIRAC-SRISTI GYTI Appreciation Awards (hereinafter referred to as "Program" jointly or severally) administered through the Project Management Unit (PMU-BIRAC- SRISTI) at SRISTI.

WHEREAS **Debjyoti Chowdhury** R/o **Heritage Institute of Technology**, working at **Heritage Institute of Technology** (Institute) has been selected for BIRAC-SRISTI GYTI Award/ BIRAC-SRISTI GYTI Appreciation Award for the research Project entitled **"Cost Effective Self-stabilizing Smart Hand Held Platform (spoon/pen) For Elderly Or Parkinson's Disease Patients**", hereinafter referred to as PROJECT and Appended herein as Annexure-I WHEREAS all the Annexures to this Agreement shall be read as integral part of the Agreement.

AND WHEREAS both SRISTI and the Awardee together shall be referred to as Parties.

NOW THEREFORE the Parties on valid consideration and mutual covenants enter into this AWARD LETTER AGREEMENT, hereinafter referred to as "ALA" as provided hereunder:

- I. The Awardee will communicate with Coordinator, Project Management Unit (PMU-BIRAC-SRISTI) on pmugyti@sristi.org
- II. The Awardee shall undertake the activities as set out in the Project and shall conform to the detailed plan of work, specified objectives, outputs, milestones, and targets as detailed in *Annexure-I*.
- III. The sanction of the Award fund is subject to due submission of the expected time period of completion (months), details of expenses under suitable heads, with no objection of Supervisor/Guide along with the bank account details for remitting instalments of award money.
- IV. SRISTI will transfer the award fund to the account details provided by the Awardee. To ensure proper utilization of the fund, it will be necessary to send the utilization certificate yearly and after the completion of the project duly signed by team member as and when required. Team member may not include faculty supervisor.
- V. The Awardee will maintain a logbook of activities based upon the standard good laboratory practice (GLP). A timeline of work plan will also have to be provided in the logbook.
- VI. Where ever required the Supervisor/Guide of the awardee will be informed about the decisions made during the project. Since the team members of the project may vary within a time frame of two years, Supervisor/Guide will ensure to give suitable credits to each contributor during or after the period of the research/project.
- VII. The Awardee may induct their colleagues and juniors interested in the project to take the innovation forward. However, if desired the Supervisor / Guide should be informed before such induction.
- VIII. The Awardee will be responsible to ensure that the best ethical practices are followed during the project implementation.
- IX. The Awardee is allowed to take the help (*pro-bono* or on payment basis) of external agencies/ laboratories/ scientific experts during the course of their research / project support. However, complete outsourcing of work will not be allowed. This should be clearly mentioned in the details of expenses under the head 'Outsourcing'.
- X. There will be an online monitoring of the project progress; the Awardee will be required to upload the progress on regularbasis. However, the review of the progress will be on half yearly / yearly basis.

- XI. The Awardee will submit a 15-20 page final report about the achievements at the end of the Project period.
- XII. The Awardee should comply with the Institutional IP Policy if required by the institution concerned.
- XIII. If any Intellectual Property (IP) is generated during the course of Project (Project IP), it should be duly informed to SRISTI and BIRAC without any delay.
- XIV. BIRAC and SRISTI will not seek any financial benefit from the outcome of the projects in licensing/technology transfer. However, it will be obligatory to acknowledge the BIRAC SRISTI GYTI Award, 2015 in any publications or IP generated from this support.
- XV. If the Awardee is applying forlicensing of their Project IP, it will be necessary for themto inform SRISTI.
- XVI. The Awardee may apply for funding support to other agencies including BIRAC, under intimation to the Supervisor/Guide, SRISTI and BIRAC.
- XVII. If the Awardee has any parallel funding support, or they are in collaboration with any other funding agency-the terms and conditions of the collaboration will have to be shared clearly with SRISTI before execution of this ALA. The Awardee cannot avail support from two funding agencies for the same task/project at the same time. The BIRAC-SRISTI GYTI Award/Appreciation Awards hall has exclusive deliverable though it may be part of a longterm research work.

Settlement of disputes:

Any difference or dispute between the parties or Awardee & Supervisior/Guide concerning the interpretation and/or implementation and/or application of any of the provisions of this agreement shall first be settled amicably through mutual consultation and/or negotiations between the parties; else President SRISTI/MD BIRAC / CIO-NIF may be invited as an arbitrator.

Revision, variation and amendment

Awardee may request in writing a revision, variation or amendment of this agreement.

In witness where of, the undersigned, being duly authorised by their respective organisations, to sign this agreement on the date as above-written.

SEAL OF THE PARTIES

Awardee Sebjyoti Chowdlwry Name: Mr. Debjyoti Chowdhury SRISTI Name:

Supervisor / Guide Modhuin Chettypethyp Name: Dr. Madhurima Chattopadhyay

In the presence of

In the presence of

Witness 1: Shorai

Dr. Santánu Ghorai Associate Professor, AEIE Dept., Heritage Inst. of technology, Kolkata-107

Witness 2

Mr. Manoj Saraogi CFO, Kalyan Bharati Trust, Kolkata-107

Witness 2

Seal of the Institute with Name

Principal Heritage Institute of Technology Signature of Head of the Institute



Witness 1

Annexure I

1. Name of the Innovation/Project:

Cost effective self-stabilizing smart hand held platform (spoon/pen) for elderly or Parkinson's disease patients

2. Specific Objective of the activities to be supported by BIRAC-SRISTI GYTI Grant:

Sr			Time Line in Months		Time Line in Months		e in s		
No	Activities	1- 3	4- 6	7- 9	10- 12	Milestone	Remarks		
1	Development of low power spoon actuator	•				Reduction in power consumption			
2	Redesign the spoon PCB with SMD components		•			Reduction in size			
3	Retuning of the Kalman Filter			•		Increase in stability			
4	Test with patients					User feedback			
5	Development of a 3D printed enclosure								
6	Test with patients				•	User feedback			

3. Plan of Work: Activities, Time Periods & Milestones:

4. Outputs:

Patients having Parkinson's disease suffer a lot in holding spoon for having food/medicine or for writing due to hand tremors. Sometimes this type of tremor is also a common problem for people at old age, this work emphasizes the development of a cost effective self-stabilizing platform that can counteract such limb tremors and ensure a normal living for people with such difficulties.

1. Detail of Expenses:

Head	1st Year
1. Scholarship	NIL
2. Consumable & Materials	40,000/-
3. Internal Travel	60,000/-
4. Outsourcing	NIL

2. Bank Detail:

Name of Beneficiary:	Heritage Institute of Technology
Name of Bank:	Punjab National Bank
Account Number:	1426010100000038
IFSC Code:	PUNB0632300
City:	Kolkata

3. No objection Certificate (NOC) of Supervisor/Guide:

GOVERNMENT OF WEST BENGAL

cience & Technology and Biotechnology DEPARTMENT

			Science & Techno	logy and biotechnology De	PARIMENT	Tel:	
						Fax:	
Me	mo No :	979(Sanc.)	/ST/P/S&T/9G-38/201	3		Date: 27/12/2018	
			Sa	nction Order for Grant-in-A	lid		
De	mand No. :	70	Department Co	de : BS Finar	ncial Year : 2	018 - 2019	
- 1.	Sanctionin	g Authority:	Science & Technolog	y and Biotechnology			
2.	Name of th	ne Grantee I	nstitution: Heritage ins	stitute of Technology.			
3.	Address of	f the Grante	e Institution: 994, Mad	urdaha, Chowbaga Road,	Anandapur, Kol-10	07.	
4.	Category of	of Grantee Ir	stitution: Education In	stitution			
5.	Amount Sa	anctioned: <mark>3</mark>	81900 (in words Rs. Th	hree Lakh Eighty One Tho	usand Nine Hundr	red Only.) 🧃	
6.	Name of th	he DDO: Re	gistrar, Science & Tec	hnology & Biotechnology [Dept.		
7.	Departmer	nt Code: BS-	-Science & Technology	y and Biotechnology			
8.	Name of th	ne Treasury/	PAO:Pay & Accounts	Officer-III, PAO-III			
9.	Nature of 0	Grant	(a) Recu	urring or Non-recurring: Re	curring		
			(b) Capir	tal or Revenue: Revenue			
10.	Condition of	of Grant	Utilisatio	on Certificate required: Yes	5		
11.	Category o	of Grant : Ed	ucation Institution				
12. killir	Purpose of ng kinetics by	Grant : Scre y application	eening of potential biof of some herbal agent	film producer isolates from is with known anti-inflamma	clinical samples a atory action and a	nd in vitro determination of pplication in animal model.	
13.	An amount Biotechnolo	t of Rs 381 ogy Dept. Fr	900 is hereby allotte om the head of accou	ed for this period in favo 101 3425-60-200-00-010-3	ur of the Registr 1-02-V from the b	ar, Science & Technology	& ial

Biotechnology Dept. From the head of account 3425-60-200-00-010-31-02-V from the budget provision of the financial year, 2018 - 2019 under Demand No.70 Department Code BS and payable to Grantee Institution or by A/c payee cheque/By-Transfer Credit / ECS.

14. Head of Account Code :3425-60-200-00-010-31-02-V

15. Name of the Scheme :Financial Assistance to other Scientific Bodies for undertaking Scientific Projects/Surveys/Research/Training and Science Awareness & Science Popularisation programme 16. The amount will be drawn in T.R. from No.31.

17. The sanctioned amount will be payable to Heritage institute of Technology. by Transfer Credit to the Head of Account of the LF/PL/Deposit Account of the Grantee Institution or by A/C payee Cheque / ECS as applicable.

18. Remarks: Present release is the 3rd & final installment of the total project cost of Rs. 10,00,500/- (revised) sanctioned for 3 year (s) work. Rs. 3,81,900/- will be transferred through e-Pradan system to Heritage institute of Technology. A/C No.-65016964704 (SB), IFSC CODE-STBP0000271, Mobile No.-9830292330.

19. Total released amount is within the Budget Provision of the above mentioned head of account during 2018 - 2019

20. This order issues in exercise of the power delegated under Finance Department Memo. No. 1872-F.B dated-26.03.2018 1259-F.B. dated-29.11.2018 & 1260-F.B dated-29.11.2018 with the concurrence of Finance Deptt. vide Gr. F.A. Branch U.O No. 107 F.A./Education Date 28/11/2018

Sd/

DEPUTY SECRETARY

Science & Technology and Biotechnology

Memo No: 979(Sanc.)/ST/P/S&T/9G-38/2013

Memo Date:27/12/2018

Copy forwarded for information and necessary action to:-

- 1. The Principal Accountant General (A&E), Treasury Buildings, Kolkata-700001
- 2. The Principal Accountant General (Audit), Treasury Buildings, Kolkata-700001
- 3. The Principal Accountant General (Receipt, Works & Local Bodies Audit), CGO Complex at Salt Lake, Kolkata-700091
- 4. Registrar, Science & Technology & Biotechnology Dept.
- 5. Pay & Accounts Officer-III, PAO-III
- 6. PSO.
- 7. Shri S. Roy, SSO.
- 8. Principal, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.

Dr. Soma Banerjee, P.I. of the project, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.

10. Shri Soumyajit Mukherjee, SSO. 11) Guard File.

DEPUTY SECRETARY

BUDGET ESTIMATION OF THE PROJECT

Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti-inflammatory action and application in animal model

File No.: ST/P/S&T/9G-38/13

SUMMARY (in Rupees)

S 1	Item		BUI	OGET	
no		1 st year	2 nd year	3rd year	Total
A.	Recurring				
1.	Remuneration of one JRF: 12,000/- per month + 15% HRA= 1,800/- per month + medical allowance Rs. 100/- per month = Rs. 13,900/- per month for				
	11 months, and Remuneration of one JRF: @ Rs. 16,000/- per month + 15% HRA= Rs. 2,400/- per month + medical allowance Rs. 300/- per month = Rs. 18,700/- per month for remaining period of the 2 years, and one SRF on the third year @ Rs. 18,000/- per month + 15% HRA= Rs. 2,700/- per month + medical allowance Rs. 300/- per month = Rs. 21,000/- per month, if the same JRF continues or for a JRF who has completed two years	199100	224400	252000	675500
2.	Consumables (Glass wares, Chemicals etc.)	70000	55000	55000	180000
3.	Travel & TA	10000	10000	10000	30000
4.	Cost for AFM, SEM, Animal handling and tissue processing (HE)	25000	45000	30000	100000
5.	Miscellaneous charges	5000	5000	5000	15000
	TOTAL	309100	339400	352000	1000500
	Rs. 10,00,500/- only	for 3 years	339400	332000	1000500

The budget may please be reapproved due to enhancement of salary As per **Order 1657/ST/P/S&T/Misc-2/2006(Pt-I) dated 31.01.2017.

The project is on its 2nd year.

Except remuneration component all other components are as per previous approved budget (NSP - 20). Present release will be [Rs. 3,52,000/- (3^{rd} year's fund) + Rs. 29,900/- (remuneration of JRF to be drawn as arrear for the 1^{st} year and 2^{nd} year = Rs. 2,300/- and Rs. 27,600/- respectively after revision of the budget from 01.02.2017)] = Rs. 3,81,900/-

Sovan Lop (Semir Seienbfil Office DSTBT.



GOVERNMENT OF WEST BENGAL

Department of Science & Technology

Bikash Bhawan, 4th floor

Tel: 25693717 Fax: Date: 08/06/2017

Memo No: 53(Sanc.)/ST/P/S&T/9G-38/2013 Sanction Order for Grant-in-Aid

Demand No.: 70 Department Code: ST Financial Year :

2017 - 2018

1. Sanctioning Authority: Science & Technology

2. Name of the Grantee Institution: Heritage institute of Technology.

3. Address of the Grantee Institution: 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.

Category of Grantee Institution: Education Institution.

5. Amount Sanctioned: 299730 (in words Rs. Two Lakh Ninety Nine Thousand Seven Hundred Thirty Only.)

6. Name of the DDO: Officer on Special Duty, Higher Education Department

7. Department Code: ST-Higher Education, Science & Technology and Biotechnology(Sci. & Tech.)

8. Name of the Treasury/PAO:Pay & Accounts Officer-III, PAO-III

Nature of Grant 9.

(b) Capital or Revenue: Revenue

(a) Recurring or Non-recurring: Recurring

10. Condition of Grant Utilisation Certificate required: Yes

11. Category of Grant : Education Institution

12. Purpose of Grant : Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti-inflammatory action and application in animal model.

13. An amount of Rs 299730 is hereby allotted for this period in favour of the Officer on Special Duty, Higher Education Department From the head of account 3425-60-200-SP-001-31-02-V from the budget provision of the financial year, 2017 - 2018 under Demand No.70 Department Code ST and payable to Grantee Institution or by A/c payee cheque/by transfer credit.

14. Head of Account Code :3425-60-200-SP-001-31-02-V

15. Name of the Scheme : Financial Assistance to other Scientific Bodies for undertaking Scientific Projects/Surveys/Research/Training and Science Awareness & Science Popularisation programme (State Share) 16. The amount will be drawn in T.R. from No.31/32/43

17. The sanctioned amount will be payable to Heritage institute of Technology. by Transfer Credit to the Head of Account of the LF/PL/Deposit Account of the Grantee Institution or by A/C payee Cheque as applicable

Present release is the 2nd installment of the total project cost of Rs. 9,43,000/- sanctioned for 3 year (s) 18. Remarks: work. Rs. 2,99,730/- will be transferred through e-Pradan system to Heritage institute of Technology. A/C No.-65016964704 (SB), IFSC CODE-STBP0000271, Mobile No.-9830292330.

19. Total released amount is within the Budget Provision of the above mentioned head of account during 2017 - 2018

20. This order issues in exercise of the power delegated under Finance Department Memo. No. 1836-F.B. dated-31.03.2017 with the concurrence of Finance Deptt. vide Gr. F.A. Branch U.O. No. 38 F.A./Education Date 07/06/2017

Sd/-

OSD & E.O. DEPUTY SECRETARY

Science & Technology

Memo No:53(Sanc.)/ST/P/S&T/9G-38/2013

Memo Date:08/06/2017

Copy forwarded for information and necessary action to:-

- 1. The Principal Accountant General (A&E), Treasury Buildings, Kolkata-700001
- 2. The Principal Accountant General (Audit), Treasury Buildings, Kolkata-700001
- 3. The Principal Accountant General (Receipt, Works &Local Bodies Audit), CGO Complex at Salt Lake, Kolkata-700091
- 4. Officer on Special Duty, Higher Education Department
- 5. Pay & Accounts Officer-III, PAO-III
- 6. J.S. (Budget), Deptt. Of HE, S&T and BT.
- 7. PSO, Science & Technology.

10

- 8. Shri S. Roy, SSO, Science & Technology.
- 9. Principal, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107. 11) Shri Soumyajit Mukherjee, JSO, Science & Technology.

Dr. Soma Banerjee, P.I. of the project, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107. 12) Guard File.

OSD & E.O. DEPUTY SECRETARY .

Department of Science & Technology Bikash Bhawan, 4th floor

Memo No: 774(Sanc.)/ST/P/S&T/9G-38/2013

Sanction Order for Grant-in-Aid

Tel: 25693717 Fax: Date: 22/12/2015

Demand No.: 48

Department Code: ST Financial Year: 2015 - 2016

1. Sanctioning Authority: Science & Technology

2. Name of the Grantee Institution: Heritage institute of Technology.

- 3. Address of the Grantee Institution: 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.
- 4. Category of Grantee Institution: Education Institution
- 5. Amount Sanctioned: 306800 (in words Rs. Three Lakh Six Thousand Eight Hundred Only.)
- 6. Name of the DDO: OSD AND DDO, DEPTT.OF SCIENCE AND TECH.
- 7. Department Code: ST-Science & Technology
- 8. Name of the Treasury/PAO:Pay & Accounts Officer-III, PAO-III

9. Nature of Grant (a) Recurring or Non-recurring: Recurring

(b) Capital or Revenue: Revenue

- 10. Condition of Grant Utilisation Certificate required: Yes
- 11. Category of Grant : Education Institution

12. Purpose of Grant : Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti-inflammatory action and application in animal model.

- 13. An amount of Rs 306800 is hereby allotted for this period in favour of the OSD AND DDO, DEPTT.OF SCIENCE AND TECH. From the head of account 3425-60-200-SP-002-31-02-V from the budget provision of the financial year,2015 -2016 under Demand No.48 Department Code ST and payable to Grantee Institution or by A/c payee cheque/by transfer credit.
- 14. Head of Account Code :3425-60-200-SP-002-31-02-V
- 15. Name of the Scheme :West Bengal State Council of Science & Technology (State Share)
- 16. The amount will be drawn in T.R. from No.31/32/43

17. The sanctioned amount will be payable to Heritage institute of Technology. by Transfer Credit to the Head of Account of the LF/PL/Deposit Account of the Grantee Institution or by A/C payee Cheque as applicable

18. Remarks: Present release is the 1st installment of the total project cost of Rs. 9,43,000/- sanctioned for 3 year (s) work. Rs. 3,06,800/- will be transferred through e-Pradan system to Heritage institute of Technology. A/C No. 65016964704 (SB), IFSC CODE STBP0000271, Mobile No. 9830292330. Strict observation of G.O. No. 5400-F(Y), Dtd. 25/06/2012 in case of any procurement and maintain accepted norms in JRF recruitment process.

19. Total released amount is within the Budget Provision of the above mentioned head of account during 2015 - 2016

20. This order issues in exercise of the power delegated under Finance Department Memo. No. 460-F.B. dated 21.07.2015 with the concurrence of Finance Deptt. vide Gr. F.A. Branch U.O. No. 671 F.A./Education Date 30/09/2015

Science & Technology

Copy forwarded for information and necessary action to:-

1. The Principal Accountant General (A&E), Treasury Buildings, Kolkata-700001

2. The Principal Accountant General (Audit), Treasury Buildings, Kolkata-700001

- 3. The Principal Accountant General (Receipt, Works & Local Bodies Audit), CGO Complex at Salt Lake, Kolkata-700091
- 4. OSD AND DDO, DEPTT.OF SCIENCE AND TECH.

5. Pay & Accounts Officer-III, PAO-III

- 6 Dr. Amal Satpathi, PSO, DST.
- 7. Shri S. Roy, SSO, DST.
- 8. Principal, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.

Dr. Soma Banerjee, P.I. of the project, Heritage institute of Technology, 994, Madurdaha, Chowbaga Road, Anandapur, Kol-107.

10. H.A. DST 11) Guard File. 12) Shri Soumyajit Mukherjee, JSO, DST.

15 OSD

REGISTERED



COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH EXTRAMURAL RESEARCH DIVISION

CSIR COMPLEX, PUSA, NEW DELHI - 110 012

Dated: 12-05-16

No. 01(2847)/16/EMR-II From : Head, Human Resources Development Group

To

PROF(MS) JAYATI DATTA DEPT OF CHEMISTRY I I E S T, SHIBPUR HOWRAH 711103 W B

Subject : Grants-in-aid for your scheme entitled :DESIGN AND FABRICATION OF PLFREE/LOW LEVEL PL NANO CATALYSTS FOR OXYGEN REDUCTION REACTION (ORR) IN LOW TEMPERATURE FUEL CELL

Sir,

I am directed to refer to your proposal for sanction of CSIR Scheme titled above and to convey the approval of DG CSIR as per the details given below, Subject to FTR & OI (2582);

1-	Duration of the Scheme (from the date of Commencement)	36 Months				
11	Staff		1-RA /SR	F/JRF		
111	Contingency (per annum in ₹)	1st Year: 1,50,000	2 nd Year : 1,50,000	3rd Year :1,50,000		
IV	Equipment (lumpsum in ₹)		0			

2. The above sanction is subject to review of periodical progress of the project by expert committee.

3. DG CSIR has also approved the release of the following grants for the period 01/06/2016 to 31/03/2017

No	Grants	Amount (in ₹)
I	Staff	3,60,000
II	Contingency	1,25,000
III	Equipment	0
	Total :	4,85,000

4. Sanction of grants is subject to strict compliance of the terms and conditions enclosed or as may be modified from time to time. Please go through the instructions carefully with regard to subsequent release of grants and your obligations under this sanction. <u>The grant for the lst installment will be sent through EFT (Electronic Funds Transfer)</u>, to the concerned authority of your institution on receipt of undertaking (form-A), non-funding certificate and EFT Transaction Request Form.

The expenditure is debitable to budget head P81102.

Yours faithfully,

SECTION OFFICER (EMR-II)

Encl : As above

Copy to :- v

- 1. Registrar/Principal/Director <u>11EST</u>, <u>Shibpur</u>, <u>Howah</u> -711103(wB) The utilisation of grant is subject to compliance of para-1 of the terms and conditions stated overleaf.
- 2. Sr F&AO(EMR) alongwith FVC for first year's grant.



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

मानव संसाधन विकास समूह Human Resource Development Group

सी.एस.आई.आर. कॉम्पलैक्स

इंस्टीट्यूट ऑफ होटल मैनेजमेंट के सामने लाइब्रेरी एवेन्यू, पूसा, नई दिल्ली-110012

C.S.I.R. Complex

Opp. Institute of Hotel Management Library Avenue, Pusa, New Delhi-110012

Dt: 05.09.2017

No.01/(2847)/16/EMR-II

Dr. Kalyan Kumar Bhar, Dean, Research & Development, I.I.E.S.T. Shibpur, Howrah – 711103(W.B.).

Sir,

With reference to your letter dated 27.07.2017, I am directed to inform you that the Competent Authority has acceded to your request to transfer of the project from IIEST Shibpur to Heritage Institute of Technology, Kolkata.

Yours Faithfully,

Sunte

Section Officer (EMR-II)

Copy to : Dr. Jayati Datta. Department of Chemistry, I.I.E.S.T. Shibpur, Howrah – 711103(W.B.).

SR/NM/NS-1385/2014 (G) Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 7th September, 2018

ORDER

Financial assistance & Transfer of research project entitled "Formulation and Fabrication of composite Titania Matrix with Surface Plasmon and Quantum dots for use in Dye Sensitized Solar Cell and Sensor system" under the guidance Subject: of Dr. (Mrs.) Jayati Datta, now at D/o Chemistry, Heritage Institute of Technology, Kolkata - regarding release of Grant-in-aid General.

In continuation of this Department's sanction order of even number dated 20.11.2015, sanction of the President is hereby accorded for the transfer of the above mentioned project from Indian Institute of Engineering Science and Technology (IIEST), Howrah to Heritage Institute of Technology, Kolkata.

The above mentioned project will be executed for the remaining duration of 13 months & 10 days from the day, the project is resumed at Heritage Institute of Technology (HIT), Kolkata which should be within 7 days of the grant reaching the Institute.

It is certified that IIEST has transferred the equipment acquired from the project to HIT, Kolkata and the accounts till 20.11.2017 have been settled with IIEST, Howrah by depositing in Government account the DD No 074701 dated 08.12.2017 for an amount of Rs 5,03,798/-, received by this Department as unspent grant from IIEST, Shibpur, Howrah.

Sanction of the President is also accorded for the continuation of the project at HIT, Kolkata at a total cost of Rs. 17,38,017/- (Rupees seventeen lakh thirty-eight thousand seventeen only) for a duration of he detailed break-up of the grant is given below: -

12 months	40 days	Total
10,40,400	71,732	11,12,132
	3,887	3,63,887
40,000	3,666	43,666
50,000	4,582	54,582
1.60.000	3,750	1,63,750
16,50,400	87,617	17,38,017
	12 months 10,40,400 40,000 50,000 1,60,000 16,50,400	12 months 40 days 10,40,400 71,732 -3,60,000 -3,887 40,000 3,666 50,000 4,582 1,60,000 3,750 16,50,400 87,617

The approval of the President is also accorded for payment of Rs. 16,50,000/- (Rupees Sixteen lakh fifty thousand only) under 'General' expenditure to the "Heritage Institute of Technology, Kolkata" as first installment of the grant for implementation of the above project.

This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final instalment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in

the PFMS.

8

9.

The Institute/University is registered on NGO DARPAN Portal Vide Reg. No. WB/2017/0180212.

The grant-in-aid being released is subject to the condition that:

- A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of the grantee organisation while procuring capital assets sanctioned for a the above mentioned project and a certificate to this effect will be submitted by the Grantee organization on receipt of the
- While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. b Subsequent release of grants under the project shall be considered only on receipt of the said documents.

Failure to comply with the terms and conditions of the Order will entail full refund with interest in 10. terms of Rule 231 (2) of GFR 2017.

: atd/-

1. in

The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. The interest earned / accrued should be reported to DST (financial year wise) while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the grantee organization, which will be adjusted

towards future release of grant.

DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially 12. out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

In case the scheme provides for payment of honorarium / remuneration / fellowship / scholarship to 13 the PI, a para may suitably be incorporated in the DSO to the effect that "PI is not drawing any emoluments/ salary/fellowship from any other project either supported by DST or by any other funding agency.

The account of the grantee organization shall be open to inspection by the sanctioning authority and 14 audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

Due acknowledgement of technical support / financial assistance resulting from this project grant 15. should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

The expenditure involved is debitable to: 11445 16.

Colo e & Technology for the year 2018-19:

Demanu	Ho.04, Department of energy (Marian Hand)
3425	Other Scientific Research (Major Head)
60	Others
60.200	Assistance to Other Scientific Bodes (Minor Head
69 -	Research and Development
69.00.31	Grants-In-aid General for the year 2018-19
	(Nano Mission 3425.60.200.36.00.31)

The amount of Rs. 16,50,000/- (Rupees Sixteen lakh fifty thousand only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to "Heritage Institute of Technology, Kolkata". The bank details for electronic transfer of funds through RTGS are given below: 11

s Dai		Lite item hetitute of Technology, Kolkata"
1.	Name of the Account Holder	Heritage Institute of Fechnology, Reanch, Anandapur
2	Name of the Bank	Punjab National Bank, The Hentage Branch, The Sector
3	Bank Account Number	1426010100000038
1	IFSC Code	PUNB0632300

As per Rule 234 of GFR 2017, this sanction has been entered at S. No.49 NMD the register of grants maintained in the Division for the scheme Nano Mission.

This issues with the concurrence of IFD Vide their Concurrence Dy.No. C/2441/IFD 2018-19 dated 19.

31.08.2018.

(Milind R Kulkarni) Scientist-G

The Pay & Accounts Officer, DST, New Delhi.

Copy forwarded for information and necessary action to: 1. Drawing and Disbursing Officer, DST, Cash Section. (Copy with two spare copies)

2. Integrated Finance Division, DST

4. The Director 3. Dr. (Mrs.) Jayati Datta Heritage Institute of Technology 994,Madhurdaha, Chowbaga Road, Anandpur Heritage Institute of Technology 994 Madhurdaha, Chowbaga Road, Anandpur Kolkata, West Bengal- 700 107.

5. The Principal Director of Audit, Scientific Departments, Illrd floor, AGCR Building, I.P. Estate, New Delhi- 110 002."

6. Sanction folder (Nano Mission)

File copy

(Milind R Kulkarni) Scientist-G

-2-



Corporate & Registered Office : Samruddhi Venture Park No.2, 4th Floor Central M.I.D.C. Road Andheri (East), Mumbai - 400093 Tel.: +91(22) 28312931 / 28327505 Fax: +91(22) 28379158

A Section 8 Company of Ministry of Electronics and Information Technology Government of India CIN : U72900MH2001NPL133410 ISO 9001 - 2008 Certified Organisation

Information Technology Research Academy (ITRA)

Sanction of the Release of Funds

Ref. No.: ITRA/15(58)/Mobile/DISARM/2017-18/08

Date : January 05, 2018

To,

Prof. (Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107

Subject: Release of funds to Heritage Institute of Technology, Kolkata (HIT) for the project, "Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)"

Reference: Administrative Approval No. ITRA/15(58)/Mobile/DISARM/01/Rev/2015 dated July 23, 2015

Implementing Agency: Heritage Institute of Technology, Kolkata (HIT)

Dear Sir,

I am, now, directed to convey the sanction of the Competent Authority for the release of funds pertaining for the year-3 amounting to **Rs. 12.97 Lakhs** (Rupees Twelve Lakhs and Ninety Seven Thousand Only) to Heritage Institute of Technology, Kolkata.

2. The terms mentioned in para 2 & 3 of the Administrative Order no. MLA/GLA/OM-001/ITRA/2017 dated 20/04/2017 (copy enclosed) shall be strictly applicable to funds being released through this Release Order. This Release Order may be read in conjunction with Administrative Order mentioned above.

3. With this release the total funds released by Media Lab Asia amounts to Rs. 42.59 Lakhs (Rs. 5.50 lakhs + Rs. 11.48 lakhs + Rs. 5.57 lakhs + Rs. 4.00 lakhs + Rs. 3.07 lakhs + Rs. 12.97 lakhs)





4. The amount of **Rs. 12.97 Lakhs** (Rupees Twelve Lakhs and Ninety Seven Thousand Only) shall be transferred electronically to Heritage Institute of Technology – ITRA Project, Kolkata, as per details given below:-

a) Name of the Bankb) Branch Namec) Account No.d) IFS Codee) Account Type

Punjab National Bank The Heritage Branch 6323000100004201 PUNB0632300 Savings A/c

sia Isiu **George Arakal** Med Director (Admin. & Finance)

cc:

- Prof.(Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107
- 2. Prof. Narendra Ahuja, Director, ITRA New Delhi

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- 3. Mr. K.P. Sivadas, Chief Manager (Finance), Media Lab Asia Mumbai
- 4. Project File
- 5. O/o Director (Admin. & Finance)



(A Section 25 Company of Department of Electronics and Information Technology. Ministry of Electronics and Information Technology, Govt. of India) CIN: U72900MH2001NPL133410 ISO 9001 - 2008 Certified Organisation Corporate & Registered Office : Samruddhi Venture Park No.2, 4th Floor Central M.I.D.C. Road Andheri (East), Mumbai - 400093 Tel.: +91(22) 28312931 / 28327505 Fax: +91(22) 28379158

Information Technology Research Academy (ITRA)

Sanction of the Release of Funds

Ref. No.: ITRA/15(58)/Mobile/DISARM/2017-18/03

Date: May 24, 2017

То

Prof. (Dr.) Pranay Chaudhuri,

Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107

Subject: Release of funds to Heritage Institute of Technology, Kolkata (HIT) for the project, "Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)"

Reference: Administrative Approval No. ITRA/15(58)/Mobile/DISARM/01/Rev/2015 dated July 23, 2015

Implementing Agency: Heritage Institute of Technology, Kolkata (HIT)

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Dear Sir,

I am, now, directed to convey the sanction of the Competent Authority for the release of 5th instalment of funds amounting to **Rs. 3.07 Lakhs** (Rupees Three Lakhs and Seven Thousand Only) to Heritage Institute of Technology, Kolkata, as an interim release for supporting Manpower expenses upto July-2017.

2. With this release the total funds released by Media Lab Asia to Heritage Institute of Technology, Kolkata, amounts to Rs. 29.62 Lakhs (Rs. 5.57 lakhs + Rs. 16.98 lakhs + Rs. 4.00 lakhs + Rs. 3.07 lakhs)

3. The amount of **Rs. 3.07 Lakhs** (Rupees Three Lakhs and Seven Thousand Only) shall be transferred electronically to Heritage Institute of Technology – ITRA Project, Kolkata, as per details given below:-

a) Name of the Bankb) Branch Namec) Account No.d) IFS Codee) Account Type

Punjab National Bank The Heritage Branch 6323000100004201 PUNB0632300 Savings A/c



George Arakal Director (Admin. & Finance)

Delhi Office : Devika Towers. 708-723, 7th Floor, 6, Nehru Place, New Dethi 110 019, India. Tel.: +91 (11) 26443266 / 26288190 - 93 Fax: +91 (11) 26288189 Website : www.medialabasia.in • Email : contact@medialabasia.in



cc:

- 1. Prof.(Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107
- 2. Shri. Sanjay Kumar Rakesh, MD & CEO, Media Lab Asia New Delhi
- 3. Prof. Narendra Ahuja, Director, ITRA New Delhi
- 4. Mr. K.P. Sivadas, Manager Accounts, Media Lab Asia Mumbai
- 5. Project File
- 6. O/o Director (Admin. & Finance)



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ISO-9001-2008 CERTIFIED

Ref: MLA/GLA/OM-001/ITRA/2017

Date: 20/04/2017

OFFFICE MEMORANDUM NO. ITRA/001/2017

Sub: Utilisation of the unspent funds under ITRA projects during the extended duration of the project

This is further to our Office Memoranda Ref. nos. GLA/MLAM/OM/006/2016 dated 17th October, 2016 & GLA/MLAM/OM/007/2016 dated 17th October, 2016, extending the duration of the projects under ITRA-Mobile & ITRA-Water until 31st July, 2017, without any enhancement in the approved total budget outlay of the Institutions executing the projects.

Based on the requests being received from various institutions and after scrutiny of utilisation of funds by the institutions as on 31.03.2017, it has been decided to permit the institutions executing projects under ITRA (Mobile & Water) to utilise the unutilised funds lying with the institutions as on 31.03.2017, for meeting the project expenditure of the extended period, but limited to the existing approved budget heads, provisions and limits for the project, and ensuring no overspending on any of the budget provisions under any head from the initial budget outlay of the project Approvals.

However, this approval is on the condition that the institutions carrying out the projects shall refrain from incurring any expenditure under SFCE (Capital expenditure) budget head during the extended period of the project by way of fresh commitments or purchases. If in any unavoidable circumstances, such an expenditure is to be inevitably incurred, this should be taken up with ITRA, on case to case basis, and explicit prior written permission taken.



George Arakal Director (Admin. & Finance)

To: Project PIs/Co-ordinators Senior Level Consultant (Techno-Commercial) / Programme Director, ITRA

Prof. N. Ahuja, Director, ITRA Senior Research Scientist, ITRA Principal Scientific Officer, ITRA Manager Accounts, Media Lab Asia ITRA-Admin.

cc: MD & CEO, Media Lab Asia Senior Director (Research), Media Lab Asia O/o. Director (Admin. & Finance), Media Lab Asia File Copy

GA/ps



(A Section 25 Company of Department of Electronics and Information Technology, Ministry of Communications and Information Technology, Govt. of India) CIN: U72900MH2001NPL133410 ISO 9001 - 2008 Certified Organisation Corporate & Registered Office : Samruddhi Venture Park No.2, 4th Floor Central M.I.D.C. Road Andheri (East), Mumbai - 400093 Tel.: +91(22) 28312931 / 28327505 Fax: +91(22) 28379158

Information Technology Research Academy (ITRA)

Sanction of the Release of Funds

Ref. No.: ITRA/15(58)/Mobile/DISARM/2016-17/04

Date: November 24, 2016

To

Prof. (Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107

Subject: Release of funds to Heritage Institute of Technology, Kolkata (HIT) for the project, "Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)"

Reference: Administrative Approval No. ITRA/15(58)/Mobile/DISARM/01/Rev/2015 dated July 23, 2015

Implementing Agency: Heritage Institute of Technology, Kolkata (HIT)

:

:

Dear Sir,

I am, now, directed to convey the sanction of the Competent Authority for the release of funds pertaining for the year-3 amounting to **Rs. 4.00 Lakhs** (Rupees Four Lakhs Only) to Heritage Institute of Technology, Kolkata. With this release the total funds released by Media Lab Asia amounts to Rs. 26.55 Lakhs (Rs. 5.57 lakhs + Rs. 16.98 lakhs + Rs. 4.00 lakhs)

2. The amount of **Rs. 4.00 Lakhs** (Rupees Four Lakhs Only) shall be transferred electronically to Heritage Institute of Technology – ITRA Project, Kolkata, as per details given below:-

a) Name of the Bankb) Branch Namec) Account No.d) IFS Code

Punjab National Bank The Heritage Branch 6323000100004201 PUNB0632300



George Arakal Director (Admin. & Finance)



cc:

- 1. Dr. Partha Pratim Chakrabarti , Director, Indian Institute of Technology, Kharagpur 721302.
- 2. Prof.(Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107
- 3. Dr. M. R. Ananad, MD & CEO, Media Lab Asia New Delhi
- 4. Prof. Narendra Ahuja, Director, ITRA New Delhi
- 5. Mr. K.P. Sivadas, Manager Accounts, Media Lab Asia Mumbai
- 6. Project File
- 7. O/o Director (Admin. & Finance)





(A Section 25 Company of Department of Electronics and Information Technology, Ministry of Communications and Information Technology, Govt. of India) Corporate & Registered Office : No.2, 4th Floor, Samruddhi Venture Park, Central M.I.D.C. Road Andheri (East), Mumbai - 400093 Tel.: +91-22-28312930 / 28312931 Fax: +91-22-28379158

Information Technology Research Academy (ITRA)

Administrative Approval (Revised)

Ref. No.: ITRA/15(58)/Mobile/DISARM/01 /Rev/2015

(i)

Date: July 23, 2015

Subject: Revised Administrative Approval to incorporate the enhanced budgetary provisions for the 2nd & 3rd year of the project : "Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)".

Implementing Agencies:

- Indian Institute of Technology, Kharagpur (IITKGP) – Lead Institution
- (ii) Indian Institute of Management, Kolkata (IIMC) – Lead Institution
- (iii) Indian Institute of Engineering Science and Technology, Shibpur (IIEST BESU)
- (iv) National Institute of Technology, Durgapur (NITD)
- (v) Kalyani Government Engineering College, Kalyani (KGEC)
- (vi) Heritage Institute of Technology, Kolkata (HIT)

Dear Sirs,

This refers to the Administrative Approval No. ITRA/15(58)/Mobile/DISARM/01 dated Sept 19, 2013. The total project cost of Rs. 316.24 Lakhs (Rupees Three Crores Sixteen Lakhs and Twenty Four Thousand Only) mentioned in the Administrative approval above stands revised. The revision shall be for the years 2 and 3 of the project period. There shall be no increase in the allocated budget for year 1. The revision of the budget shall be for all the institutions mentioned above.

2. I am, now, directed to convey the Administrative Approval of the Competent Authority for the revision of the budgetary allocations of the above named project implemented by the team of the aforesaid 6 institutions with Indian Institute of Technology, Kharagpur and Indian Institute of Management, Kolkata as lead institutions. The revised project cost shall be Rs. 427.58 Lakhs (Rupees Four Crores Twenty Seven Lakhs and Fifty Eight Thousand Only) as total grant from ITRA, Media Lab Asia (herein after mentioned as "ITRA").

3. ITRA, shall provide funds for the project through the revised total grant of Rs. 427.58 Lakhs (Rupees Four Crores Twenty Seven Lakhs and Fifty Eight Thousand Only) for the implementation of the above project. The revised budgetary provisions and the details of the project are given in Annexure-I (enclosed).



George Arakal Director (Admin. & Finance)



To:

- Dr. Partha Pratim Chakrabarti , Director, Indian Institute of Technology, Kharagpur -721302
- Prof. Shekhar Chaudhuri, Director, Indian Institute of Management, Kolkata, Joka, Kolkata (Calcutta) - 700104
- Prof. Ajoy Kumar Ray, Vice- Chancellor, Indian Institute of Engineering Science and Technology, Shibpur, PO: Botanic Garden, Dist: Howrah, West Bengal, India – 711103
- Prof. Tarkeshwar Kumar, Director, National Institute of Technology, Durgapur, West Bengal - India - 713209
- 5. Dr. Krishnendu Chakrabarty, Principal, Kalyani Government Engineering College, Kalyani, Nadia, WestBengal, INDIA - 741325
- 6. Prof.(Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107

cc:

- 1. Dr. Niloy Ganguly, Associate Professor, Indian Institute of Technology, Kharagpur 721302
- Prof Somprakash Bandyopadhay, Professor, Indian Institute of Management, Kolkata, Joka, Kolkata (Calcutta) - 700104
- Prof Sipra Dasbit, Professor, Indian Institute of Engineering Science and Technology, Shibpur, PO: Botanic Garden, Dist: Howrah, West Bengal, India – 711103
- Dr Subrata Nandi, Associate Professor, National Institute of Technology, Durgapur, West Bengal - India – 713209
- Prof.(Dr.) Pranay Chaudhuri, Principal, Heritage Institute of Technology, Kolkata, Chowbaga Road, Anandapur, P.O: East Kolkata Township, Kolkata, West Bengal-700107
- Shri. Indrajit Bhattacharya, Lecturer, Kalyani Government Engineering College, Kalyani, Nadia, WestBengal, INDIA – 741325
- 7. Dr. M. R. Anand, MD & CEO, Media Lab Asia, New Delhi
- 8. Prof. Narendra Ahuja, Director, ITRA New Delhi
- 9. Mr. K.P. Sivadas, Manager Accounts, Media Lab Asia Mumbai
- 10. Project File
- 11. O/o Director (Admin. & Finance)





Annexure-I to the Administrative Approval No.: ITRA/15(58)/Mobile/DISARM/01/Rev/2015

Dated : July 23, 2015

1.	Name of the Project	:	Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer
2.	Objective	:	To develop (i) A wireless communication infrastructure using the disruption –prone network with the help of smart phone and allied rapidly deployable device based peer-to-peer Delay Tolerant Network; (ii) A robust Framework that will lead to a global need assessment from the piecewise localized views of the rescue teams and victims; and, (iii) A coordination system to guide the resource distribution process to provide core disaster management services to the victims.
3.	Area of Coverage	:	ITRA-Mobile Mobile Communications, Networking and Applications
4.	Names of the Implementing Agencies and Status	:	 (i) Indian Institute of Technology, Kharagpur (IITKGP) – Govt academic institution (ii) Indian Institute of Management, Kolkata (IIMC) – Govt academic institution (iii) Indian Institute of Engineering Science and Technology, Shibpur (IIEST BESU) – Govt academic institution (iv) National Institute of Technology, Durgapur (NITD) – Govt academic institution (v) Kalyani Government Engineering College, Kalyani (KGEC) – Govt academic institution (vi) Heritage Institute of Technology, Kolkata (HIT) – Private Institution
5.	Locations	:	 (i) IITKGP – Kharagpur (ii) IIMC – Kolkata (iii) IIEST BESU– Shibpur, Kolkata (iv) NITD– Durgapur (v) KGEC – Kalyani (vi) HIT – Kolkata
6.	Principal Investigators	:	 (i) Dr Niloy Ganguly, Associate Professor, IIT KGP (ii) Prof Somprakash Bandyopadhay, Professor, IIMC (iii) Prof Sipra Dasbit, Professor, IIEST BESU (iv) Dr Subrata Nandi, Associate Professor, NITD (v) Prof.(Dr.) Pranay Chaudhuri, Principal, HIT Sri Indrajit Bhattacharya, Lecturer, KGEC
7.	Total project duration	:	36 Months
	DEXpected date of commencement	;	Sep 20, 2013
	ii) Expected date of completion	:	Sep 19, 2016





		1st Year	2 nd Year	3rd Yea	r	Tota
Manpower Expenses		23.42	67.08	93.1	6	183.60
Capital Equipment		15.50	30.34	7.0	0	52.84
Training & Development		0.00	23.00	18.5		41.50
Workshop / Conference /	Seminar	0.00	14.00	14.00	0	28.00
Travel		6.50	31.00	45.50	0	83.00
Miscellaneous/Contingen	cies	0.95	3.31	3.5	7	7.8
Overheads		4.12	12.18	14.4	5	20.7
Total		50.49	180.01	106.18	3	427.5
Institute Name		1st yr	2nd yr	310	d yr	Tota
IIT Kharagpur		12.77	52.99	5	9.98	125.7
IIM Kelliste		6.05	31.37	4	0.05	77.4
IIM Kolkata IIEST BESU Shibpur			07.78	2	4.03	58.6
IIM KOIKata IIEST BESU Shibpur		5.95	14.02 20.05		25.60	
IIEST BESU Shibpur		5.95 14.02	30.05	2	5.60	69.6
IIEST BESU Shibpur NIT Durgapur KGEC Kalvani		5.95 14.02 6.20	30.05	2:	5.60	69.6
III Kolkata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata		5.95 14.02 6.20	27.76 30.05 21.67	2	5.60 4.62	69.6 52.4
IIIM Kolkata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total	Dutley D	5.95 14.02 6.20 5.50 50.49	27.76 30.05 21.67 17.05 180.91	2: 2: 2: 2: 19(5.60 4.62 1.00 5.18	69.6 52.4 43.5 427.5
III Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C	Dutlay – D	5.95 14.02 6.20 5.50 50.49 eetailed	27.76 30.05 21.67 17.05 180.91	2: 2: 2: 2: 2: 19(5.60 4.62 1.00 5.18	69.6 52.4 43.5 427.5
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H	Dutlay – D	5.95 14.02 6.20 5.50 50.49 eetailed	27.76 30.05 21.67 17.05 180.91	20 20 20 190	(Rs. in 3rd yr	69.6 52.4 43.5 427.5
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses	Dutlay – D Iead	5.95 14.02 6.20 5.50 50.49 vetailed	27.76 30.05 21.67 17.05 180.91	20.03	(Rs. in 3 rd yr 28.09	69.6 52.4 43.5 427.5 Lakhs) Tot
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses	Dutlay – D Iead Salary PIP	5.95 14.02 6.20 5.50 50.49 vetailed	15 st yr 7.70 0.00	20.03 0.00	(Rs. in 3 rd yr 28.09	69.6 52.4 43.5 427.5 Lakhs) Tot 55.8
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment	Dutlay – D Iead Salary PIP SFCE	5.95 14.02 6.20 5.50 50.49 etailed	27.76 30.05 21.67 17.05 180.91 1st yr 7.70 0.00 2.00	21 22 22 190 2003 0.00 9.00	(Rs. in 3 rd yr 28.09 0.00 3.00	69.6 52.4 43.5 427.5 Lakhs) Tot 55.8 0.0
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development	Dutlay – D Iead Salary PIP SFCE RMC	5.95 14.02 6.20 5.50 50.49	17.70 30.05 21.67 17.05 180.91 180.91 180.91 7.70 0.00 2.00 0.00	20.03 0.00 9.00 1.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00	69.6 52.4 43.5 427.5 Lakhs) Tot 55.3 0.0 14.0
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development	Dutlay – D Iead Salary PIP SFCE RMC Entrepre	5.95 14.02 6.20 5.50 50.49 eetailed	15 ^t yr 7.70 0.00 2.00 0.00	20.03 0.00 9.00 1.00 3.00	(Rs. in 3 rd yr 28.09 0.00 3.00 3.00	69.6 52.4 43.5 427.5 427.5 55.8 55.8 0.0 14.0 1.0 0 6.0
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development	Dutlay – D lead Salary PIP SFCE RMC Entrepre ORA	5.95 14.02 6.20 5.50 50.49 etailed	15t yr 7.70 0.00 2.00 0.00 0.00 0.00 0.00	2nd yr 20.03 0.00 9.00 1.00 3.00 1.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00	69.6 52.4 43.5 427.5 427.5 55.8 55.8 0.0 14.0 1.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development Workshop/Conference /Sominar	Dutlay – D lead Salary PIP SFCE RMC Entrepre ORA SSD SPAP M	5.95 14.02 6.20 5.50 50.49 etailed	15 st yr 7.70 0.00 2.00 0.00 0.00 0.00 0.00	2nd yr 20.03 0.00 9.00 1.00 3.00 1.00 2.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00 0.00 0.00	69.6 52.4 43.5 427.5 Lakhs) Tot 55.8 0.0 14.0 1.0 0 0.2 0 2.5
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget O c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development Workshop/Conference /Seminar Travel	Dutlay – D Tead Salary PIP SFCE RMC Entrepre ORA SSD SPAB, M Domesti	5.95 14.02 6.20 5.50 50.49 eetailed eneurship	15 ^t yr 7.70 0.00 2.00 0.00 0.00 0.00 0.00 0.00	20.03 0.00 9.00 1.00 3.00 1.00 2.00 4.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00	69.6 52.4 43.5 427.5 427.5 55.8 0.0 14.0 0 1.0 0 0.0 0 2.0 0 2.5 0 8.0
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget C c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development Workshop/Conference /Seminar Travel	Dutlay – D fead Salary PIP SFCE RMC Entrepre ORA SSD SPAB, M Domestic Internati	5.95 14.02 6.20 5.50 50.49 etailed eneurship	27.76 30.05 21.67 17.05 180.91 180.91 180.91 180.91 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	20.03 0.00 9.00 1.00 2.00 4.00 3.00 3.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00 1.00 0.50 4.00 0.00 9.00	69.6 52.4 43.5 427.5 427.5 55.6 55.6 0.0.0 14.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.000000
IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget O c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development Workshop/Conference /Seminar Travel Miscellaneous &	Dutlay – D lead Salary PIP SFCE RMC Entrepre ORA SSD SPAB, M Domestic Internati MISC. &	5.95 14.02 6.20 5.50 50.49 eetailed eneurship (S, PhD) c ional Contg,	27.76 30.05 21.67 17.05 180.91 180.91 180.91 0.00 2.00 0.00	2nd yr 20.03 0.00 9.00 1.00 3.00 1.00 2.00 4.00 5.00 3.00 0.96	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 3.00 0.00 1.00 0.50 4.00 0.00 1.00 0.50 4.00 0.00 1.00 0.50 1.00	69.6 52.4 43.5 427.5 427.5 55.8 55.8 0.0 14.0 0 14.0 0 0.0 0 2.5 0 8.0 0 12.0 0 12.0 0 2.4
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IIIM Kokata IIEST BESU Shibpur NIT Durgapur KGEC Kalyani HIT Kolkata Total c. Institute wise Budget O c.1 IIT, Kharagpur Budget H Manpower Expenses Capital Equipment Training & Development Workshop/Conference /Seminar Travel Miscellaneous & Contingency Overhead	Dutlay – D Tead Salary PIP SFCE RMC Entrepre ORA SSD SPAB, M Domestic Internati MISC. & Any Othe Overhead	5.95 14.02 6.20 5.50 50.49 eetailed eneurship c contg. er d	130.05 30.05 21.67 17.05 180.91 180.91 180.91 0.00 2.00 0.000 0.00	20.03 0.00 9.00 1.00 3.00 1.00 2.00 4.00 5.00 3.00 0.96 0.00 4.00	(Rs. in 3 rd yr 28.09 0.00 3.00 0.00 3.00 0.00 3.00 0.00 1.00 0.50 4.00 6.00 9.00 1.09 0.00 4.30	69.6 52.4 43.5 427.5 427.5 55.8 55.8 0.0 14.0 10.0 0 2.3 0 0 2.4 0 0 2.4 0 0 2.4 0 0 2.4 0 0 2.4 0 0.0 0 0 0 2.4 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0



Budge	t Head	1 st yr	2nd yr	3rd yr	Total
Manpower	Salary	3.00	8.27	11.70	22.97
Expenses	PIP	0.00	0.00	0.00	0.00
Capital Equipment	SFCE	0.75	3.50	0.00	4.25
Training &	RMC	0.00	0.00	0.00	0.00
Development	Entrepreneurship	0.00	1.00	1.00	2.00
Development	ORA	0.00	6.00	6.00	12.00
Workshop/Confere	SSD	0.00	0.50	2.00	2.50
nce /Seminar	SPAB, MS, PhD	0.00	2.00	2.00	4.00
Travel	Domestic	1.50	4.00	4.00	9.50
	International	0.00	3.00	9.00	12.00
Miscellaneous &	MISC. & Contg.	0.14	0.57	0.71	1.42
Contingency	Any Other	0.00	0.00	0.00	0.00
Overhead	Overhead	0.66	2.53	3.64	6.83
	GRAND TOTAL	6.05	31.37	40.05	77.47

c.3 IIEST BESU, Shibpur (Rs. in Lakhs) **Budget Head** 1st yr 2nd yr 3rd yr Total Manpower Salary 3.00 9.06 13.58 25.64 PIP Expenses 0.00 0.00 0.00 0.00 **Capital Equipment** SFCE 9.00 1.25 11.50 1.25 Training & RMC 0.00 0.00 0.00 0.00 Development Entrepreneurship 0.00 1.00 1.00 2.00 ORA 0.00 1.00 1.00 2.00 Workshop/Confere SSD 0.00 0.50 0.50 1.00 nce /Seminar SPAB, MS, PhD 2.00 0.00 1.00 1.00 Travel Domestic 9.00 1.00 4.00 4.00 International 0.00 0.00 0.00 0.00 Miscellaneous & MISC. & Contg. 0.14 0.51 0.45 1.10 Contingency Any Other 0.00 0.00 0.00 0.00 Overhead Overhead 0.56 1.71 2.15 4.42 GRAND TOTAL 58.66 5.95 27.78 24.93

Budge	t Head	1st yr	2nd yr	3rd yr	Total
Manpower	Salary	3.72	11.96	13.63	29.31
Expenses	PIP	0.00	0.00	0.00	0.00
Capital Equipment	SFCE	8.50	5.84	0.75	15.09
Training &	RMC	0.00	1.00	0.00	1.00
Development	Entrepreneurship	0.00	2.00	1.50	3.50
	ORA	0.00	1.00	1.00	2.00
Workshop/Confere	SSD	0.00	0.50	0.50	1.00
nce /Seminar	SPAB, MS, PhD	0.00	1.00	1.00	2.00
Travel	Domestic	1.00	4.00	4.50	9.50
	International	0.00	0.00	0.00	0.00
Miscellaneous &	MISC. & Contg.	0.16	0.55	0.46	1.17
Contingency	Any Other	0.00	0.00	0.00	0.00
Overhead	Overhead	0.64	2.20	2.26	5.10
	GRAND TOTAL	14.02	30.05	25.60	69.67



16			
21	Media	Lab	Asia

Budget	Head	1st yr	2nd yr	3rd yr	Total
Manpower Expenses	Salary	3.00	8.54	12.58	24.12
	PIP	0.00	0.00	0.00	0.00
Capital Equipment	SFCE	1.50	2.50	1.50	5.50
Training &	RMC	0.00	0.00	0.00	0.00
Development	Entrepreneurship	0.00	1.00	1.00	2.00
	ORA	0.00	2.00	1.00	3.00
Workshop/Conferen	SSD	0.00	0.50	0.50	1.00
ce /Seminar	SPAB, MS, PhD	0.00	1.00	1.00	2.00
Travel	Domestic	1.00	4.00	4.50	9.50
	International	0.00	0.00	0.00	0.00
Miscellaneous &	MISC. & Contg.	0.14	0.39	0.44	0.97
Contingency	Any Other	0.00	0.00	0.00	0.00
Overhead	Overhead	0.56	1.74	2.10	4.40
	GRAND TOTAL	6.20	21.67	24.62	52.49
.6 HIT Kolkata				(R	s. in Lakhs)
Budget	Head	1 st yr	2nd yr	3rd yr	Total
Manpower Expenses	Salary	3.00	9.22	13.58	25.80
0 1 I B	PIP	0.00	0.00	0.00	0.00
Capital Equipment	SFCE	1.50	0.50	0.50	2.50
Training &	RMC Esternalia	0.00	1.00	0.00	1.00
Development	Entrepreneursnip	0.00	1.00	1.00	2.00
Wester / Conference	ORA	0.00	0.00	0.00	0.00
workshop/Conferen	SSD	0.00	0.50	0.50	1.00
ce / Seminar	SPAB, MS, PhD	0.00	0.50	0.50	1.00
Travel	Domestic	1.00	4.00	4.50	9.50
Minorllon cours 0	MICC & Contra	0.00	0.00	0.00	0.00
Contingonau	MISC. & Contg. 0.00 0.3	Contg. 0.00	0.33	0.42	0.75
Overhead	Any Ouler	0.00	0.00	0.00	0.00
Overneau	CRAND TOTAL	5.50	17.05	0.00	40.55
	GRAND IOTAL	5.50	1/.05	21.00	43.33
ode and extent of fund	ing				Amount (F
					3
Financial support f	rom ITRA-MLAsia			:	
(a) Grant					427.5
(b) Loan					NIL
Internal generation	1			:	NIL
Other funding Ager	ncies			:	NIL
(a) Internal					
				1	





10) Stage for release of Grants

Release No.	Stages of implementation	Documentation to be submitted by implementation Agency	Amount to be released (Rupees in Lakhs)
1	First Installment	 Acceptance of the terms and conditions governing Grants and surety bond, as applicable. 	50.49
2	Second Installment on recommendation of the Project Review and Steering Group (PRSG)	 Technical progress report Statement of Account Utilization Certificate for the previous Grants Request letter for next release 	180.91
3	Third Installment on recommendation of the Project Review and Steering Group (PRSG)	 Technical progress report Statement of Account Utilization Certificate for the previous Grants Request letter for next release 	196.18
		Total	427.58

11) Notes:

General to all teams:

(i) ITRA would evaluate the work done by the institutions at the end of each year, and use the results of the evaluation to determine the funding level for the following year.

(ii)

- a) The revised budget includes provision for international travel of ITRA Researchers (faculty & students).
- b) The earmarked funds meant for the team are being released to Lead Institution. The proposed travel abroad using ITRA funds should be routed through the PI of the Lead Institution and the laid down procedures on the subject shall be followed.
- c) Any international travel, out of the funds earmarked by ITRA, for the project, would require explicit written approval of ITRA, on case to case basis, before undertaking any such travel.
- d) The international travel shall be as per the relevant rules of the grantee institution once the approval is granted by ITRA.
- (iii) The international travel of Advisor / Members from abroad is being separately managed by ITRA as per GOI norms.
- (iv)The Project Review and Steering Group, may from time to time, recommend changes to enhance the performance of the project. These may include changing the scope of work, adding new institutions, etc., and shall be made by the team with the approval of ITRA.
- (v) It is assumed that the project work, through the entire project period, will be carried out by the stated investigators with their current institutional affiliations. Any changes in this would require prior ITRA approval.





12) Legend:

PIP	Periodically Involved Personnel
SFCE	Specialized Facilities and Capital Equipment
RMC	Research Motivated Curricula
ORA	Outreach and Remote Activities
SSD	Societal Sensitivity Development
SPAB, MS, PhD	Special Programs to Attract Bachelor's and MS students to PhD
MISC. & Contg.	Miscellaneous & Contingency



George Arakal Director (Admin. & Finance)



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Ref. No.: ITRA/15(58)/Mobile/DISARM/2015

Date: October 14, 2015

TO WHOMSOEVER IT MAY CONCERN

Sub: Team members of the ITRA-Mobile project: DISARM

1. *ITRA-Mobile* project: "Post-Disaster Situation Analysis and Resource Management Using Delay Tolerant Peer-to-Peer Wireless Networks (DISARM)" being executed by: Indian Institute of Technology, Kharagpur (IITKGP), Indian Institute of Management, Kolkata (IIMC),Indian Institute of Engineering Science and Technology, Shibpur (IIEST), National Institute of Technology, Durgapur (NITD), Kalyani Government Engineering College, Kalyani (KGEC), Heritage Institute of Technology, Kolkata (HIT).

2. ITRA acknowledges the following team members are working in the project (as on date):

SI. No.	Name Designation & Affiliation		Role in Project	
1	Prof. Niloy Ganguly	Professor, Dept of CSE, IITKGP	Team Lead Pl	
2	Prof. Somprakash Bandyopadhay	Professor, Management Information Systems, IIMC	Lead PI	
3	Prof. Sipra DasBit	Professor, Dept of CS&T, IIEST	PI	
4	Dr. Subrata Nandi	Associate Professor, Dept of CSE, NITD	PI	
5	Dr. Indrajit Bhattacharya	Assistant Professor, Dept of Computer Application, KGEC	PI	
6	Prof. Pranay Chaudhyri	Principal, HIT	PI	
7	Dr. Bivas Mitra	Assistant Professor, Dept of CSE, IITKGP	Co-PI	
8	Dr. Animesh Mukherjee	Assistant Professor, Dept of CSE, IITKGP	Co-Pl	
9	Dr. Sandip Chakraborty	Assistant Professor, Dept of CSE, IITKGP	Co-PI	
10	Dr. Tamaghna Acharya	Assistant Professor, Dept of ECE, IIEST	Co-PI	
11	Dr. Saptarshi Ghosh	Assistant Professor, Dept of CS&T, IIEST	Co-Pl	
12	Mr. Sujoy Saha	Assistant Professor, Dept of Computer Applications, NITD	Co-Pl	
13	Mr. Partha Sarathi Banerjee	Assistant Professor, Dept of IT, KGEC	Co-Pl	
14	Dr. Siuli Roy	Associate Professor, Computer Application Centre, HIT	Co-Pl	

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(Gaurav Sharma) Senior Research Scientist, ITRA 3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs) (2) & 3.2.2 Percentage of teachers having research projects during the last five years (2) 3.2.4 Average Percentage of departments having Research projects funded by government and non government agencies during the last five years (3)

Name of the Principal Investigator/ Co Investigator (if applicable)	Department of Principal Investigator/ Co Investigator	Title of the funded project	Funds provided (INR in lakhs)	Name of the Funding agency	Year
Siuli Roy and Souvik Basu (Technology Partners, Heritage Institute of Technology)	Prof. Siuli Roy (Information Technology), Prof. Souvik Basu (Computer Applications)	Creating a digitally enabled social knowledge management platform for rural SC community to bridge rural-urban knowledge, information and market divide	6.94	Science for Equity, Empowerment & Development (SEED) Division, Department of Science and Technology Ministry of Science and Technology, Government of India	2020-21
Ritayan Chatterjee	Physics	Synthesis of New Thermoelectric Materials, Exploring Cu-S Binary		Science & Engineering Research Board (SERB), Department of Science & Technology, Government of India	2020-21
Jayati Datta	Chemistry and Environment	Formulation and Fabrication of Composite Titania Matrix with Surface Plasmon and Quantum dots for use in Dye Sensitized Solar Cell and Sensor system		Department of Science and Technology-Nano Mission, New Delhi	2020-21
Siuli Roy and Souvik Basu (Technology Partners, Heritage Institute of Technology)	Prof. Siuli Roy (Information Technology), Prof. Souvik Basu (Computer Applications)	Creating a digitally enabled social knowledge management platform for rural SC community to bridge rural-urban knowledge, information and market divide	7.88	Science for Equity, Empowerment & Development (SEED) Division, Department of Science and Technology Ministry of Science and Technology, Government of India	2019-20
Ritayan Chatterjee	Physics	Synthesis of New Thermoelectric Materials, Exploring Cu-S Binary	31.57	Science & Engineering Research Board (SERB), Department of Science & Technology, Government of India	2019-20
Jayati Datta	Chemistry and Environment	Design and Fabrication of Pt- free/low level Pt Nano catalysts for Oxygen Reduction Reaction (ORR) in low temperature Fuel cell	7.02	Council of Scientific & Industrial Research, New Delhi	2019-20
Jayati Datta	Chemistry and Environment	Formulation and Fabrication of Composite Titania Matrix with Surface Plasmon and Quantum dots for use in Dye Sensitized Solar Cell and Sensor system		Department of Science and Technology-Nano Mission, New Delhi	2019-20
Reshma Roychoudhuri	Computer Science and	Geofencing of data on NavIC/IRNSS Signals	3.00	Indian Space Research Organisation, Department	2018-19
Soma Banerjee	Biotechnology	Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti- inflammatory action and application in animal model.(9G-38)	3.52	West Bengal Department of Science and Technology	2018-19
Jayati Datta	Chemistry and Environment	Design and Fabrication of Pt- free/low level Pt Nano catalysts for Oxygen Reduction Reaction (ORR) in low temperature Fuel cell	3.41	Council of Scientific & Industrial Research, New Delhi	2018-19
Jayati Datta	Chemistry and Environment	Formulation and Fabrication of Composite Titania Matrix with Surface Plasmon and Quantum dots for use in Dye Sensitized Solar Cell and Sensor system	16.50	Department of Science and Technology-Nano Mission, New Delhi	2018-19
Soma Banerjee	Biotechnology	Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti- inflammatory action and application in animal model.(9G-38)	3.39	West Bengal Department of Science and Technology	2017-18
(Late) Prof. Pranay Chaudhuri (PI, HIT) and Siuli Roy (Co-PI, HIT)	(Late) Prof. Pranay Chaudhury (Computer Science and Engineering) and Prof. Siuli Roy (Computer Applications)	Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)	12.97	ITRA, Media Lab Asia, Department of Electronics & Information Technology, Ministry of Communications and Information Technology, Government of India	2017-18
Jayati Datta	Chemistry and Environment	Design and Fabrication of Pt- free/low level Pt Nano catalysts for Oxygen Reduction Reaction (ORR) in low temperature Fuel cell		Council of Scientific & Industrial Research, New Delhi	2017-18
Debiyoti Chowdhury and Madhurima Chattopadhyay	Applied Electronics and Instrumentation Engineering	Cost Effective Self-Stabilizing Smart Hand Held Platform (spoon/pen) for Elderly or Parkinson's Disease Patients	1.00	BIRAC SRISTI PMU	2016-17
Soma Banerjee	Biotechnology	Screening of potential biofilm producer isolates from clinical samples and in vitro determination of killing kinetics by application of some herbal agents with known anti- inflammatory action and application in animal model.(9G-38)	3.09	West Bengal Department of Science and Technology	2016-17
(Late) Prof. Pranay Chaudhuri (PI, HIT) and Siuli Roy (Co-PI, HIT)	(Late) Prof. Pranay Chaudhury (Computer Science and Engineering) and Prof. Siuli Roy (Computer Applications)	Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)	7.07	ITRA, Media Lab Asia, Department of Electronics & Information Technology, Ministry of Communications and Information Technology, Government of India	2016-17