



CRITERION 3

Research, Innovations and Extension

3.2 Resource Mobilization for Research

3.2.4 Average percentage of departments having research projects funded by government and nongovernment agencies during the last five years

Research Projects Sanction letters (2017-2018)				
Sl.No	Name of the Department	Name of the Principal Investigator/ Co Investigator	Name of the Funding Agency	Title of the Project
1	Electrical and Electronics Engineering	Dr.A.Srinivasan	DST-SERI DST/TMD/SERI/S83(G)	Recognition and characterization of solar cell defects using Thermography imaging techniques
		Mr.V.Kannan	ARMREB ARM(RD-17/2035/1008/D(R&D))	Design & Development of Compact Electric Drive for Various Applications
2	Mathematics	Dr.L.Rajendran & Dr.P.G.Jansirani	SERB	Modeling of nonlinear convection diffusion processes in hydrodynamic electrodes
3	Physics	Dr.K.Sakthipandi	DST-SERB	Synthesis and characterization of polymer blended lanthanides
		Dr. S. Karthick Kumar	SERB	Investigations on graphene modified metal oxide thin films for solar selective absorber
4	Civil Engineering	Dr.K.Vijai	MRP-6993/16 (SERO/UGC)	Development of Low Cost Roofing Elements for Rural Housing using Geo-polymer Composites
		Dr.R.Kumutha	UGC MRP	Cement free paver blocks using fly ash based geo-polymer Composites

F. No. DST/TMD/SERI/S83(C)
Government of India
Ministry of Science & Technology
Department of Science & Technology
(Technology Mission Division- Water and Clean Energy)

Technology Bhavan, New Delhi
Dated: 05/09/2017

Sanction order

Sub. - Financial support for project entitled: "Recognition and characterization of Solar cell defects using combined thermography image and reconfiguration scheme" by Dr. A Srinivasan, Professor & PG Programme Head, Department of Electrical and Electronics Engineering, Sethu Institute of Technology, Pulloor-626115, Virudhunagar District, Tamil Nadu.

Sanction of the President is hereby accorded to the approval of the above mentioned project at a total cost of **Rs 40,23,300/- (Rupees Forty lakhs twenty nine thousand three hundred only)** for a duration of 3 years. The detailed breakup of the grant for General as well as Capital Components are given below: -

Capital Component: Rs. 17,79,400/-

General Component: Rs. 22,49,900/-

S. No	Item Head	1st Year	2nd Year	3rd Year	Total (Rs.)
A	Capital Component 3425.60.200.70.00.35				1779400
1	Permanent Equipment Solar PV Pannel with 5KWp. Solar Power conditioning unit-5KW. Solar Inverter-5KW and Thermal Imaging camera	1779400			
A'	Subtotal (capital items)	1779400			1779400
B	General Component 3425.60.200.70.00.31				
1	Manpower (1 RA)	481200	481200	481200	1443600
2	Consumables	30000	20000	20000	70000
3	Contingencies	30000	30000	30000	90000
4	Travel	40000	30000	30000	100000
5	Other cost	100000	50000	30000	150000
6	Overhead	100000	100000	166300	366300
B'	Sub total (General)	781200	711200	757500	2249900
C	Total cost of the project (A'+B')	2560600	711200	757500	4029300

2. The sanction of the President is also accorded to the initial release of Rs 17,79,400/- (Rupees Seventeen lakhs seventy nine thousand four hundred only) to Sethu Institute of Technology, Pulloor-626115, Tamil Nadu being the first installment of grant under Capital Component for implementation of the above mentioned 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) 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 grant under the project shall be considered only on receipt of the said documents.
7. The grantee organisation 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 organisation, which will be adjusted towards future release of grant.
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. 84, Department of Science & Technology for the year 2017-18:

3425	:	Other Scientific Research (Major Head)
60	:	Others (Sub-major Head)
60.200	:	Assistance to other Scientific Bodies (Minor Head)
70	:	Innovation, Technology Development and Deployment
70.00.35	:	Grants-in-aid Capital for the year 2017-18 (Plan)
		(Previous : TDP-TMCD-3425.60.200.26.01.35)

Contd./pg 2

14. (a) The amount of Rs 17,79,400/- (Rupees Seventeen lakhs seventy nine thousand four hundred only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to Sethu Institute of Technology, Pulloor-626115, Tamil Nadu. The bank details for electronic transfer of funds through RTGS are given below: -
1. Name of the Account Holder: Dr. A. Senthil Kumar, Principal
 2. Name of the Bank: Indian Overseas Bank, First Floor, Kariapatti-626106, Tamil Nadu
 3. Bank Account Number: 254601000005555
 4. IFSC Code: IOBA0002546
 5. MICR Code: 626020307

15. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 246... in the register of grants (TMD - WE) maintained in the Division for the scheme (Innovation, Technology Development and Deployment).

16. This issues with the concurrence of IFD vide their Concurrence Dy. No. 2226 dated 05/09/2017..

17. Sanction of the grant is subject to the conditions as detailed in DST website www.dst.gov.in. The acceptance of the grant will automatically imply acceptance of DST's term and conditions of the grant. The project would be monitored by a monitoring Committee appointed by Department of Science and Technology, Govt. of India. The project team ensure that legacy functional arrangement shall be put in place during the execution of project with institution/local bodies etc so that equipment/system can be maintained after the end of project period without DST support. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc. The Principal Investigator of the project has to ensure of obtaining the statutory clearances required for execution of the project.

18. The institute is registered under NGO Darpan Portal and their Unique ID is TN/2017/0157848.

19. It is important that the information and knowledge generated through the use of these funds are made publicly available as soon as possible. In order to achieve the aforementioned objectives, each institution is encouraged to set up its own inter-operable institutional open access repository ("IR") for its research papers and review articles published in peer reviewed journals. The Ministry of Science and Technology has set up a central harvester (www.sciencecentral.in) that will harvest the full text and metadata of these publications. Kindly update the findings accordingly.


Vineet Saini
Scientist 'D'

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 preparing the bill and remitting the amount to the above grantee.
2. Accounts Section, DST, New Delhi.
3. IFD, DST, New Delhi.
4. The Director of Audit, III Floor, AGCR Building, IP Estate, New Delhi
5. Dr. A Srinivasan,
Professor & PG Programme Head,
Department of Electrical and Electronics Engineering,
Sethu Institute of Technology,
Pulloor-626115, Virudhunagar District
Tamil Nadu
6. The Principal,
Sethu Institute of Technology,
Pulloor-626115, Virudhunagar District
Tamil Nadu.

Tel : 2300 7307
Fax: 23794562

ARMREB/ADMB/2015/164
Defence R&D Organization (HQ)
Armament Research Board
DRDO Bhawan, Rajaji Marg
New Delhi - 110 011
06 April 2015

To

The Principal
Sethu Institute of Technology
Pullor, Kariapatti - 626115

SANCTION OF PROJCT UNDER GRANT-IN-AID SCHEME OF ARMREB

Under the power vested in the ARMREB vide Government of India, Ministry of Defence letter No. ARM (RD-17)/2035/1008/D (R&D) dated 18/21 Mar 1997 & in terms of power delegated vide Sl. No. 3.1 of DRDO DBFA/FA/83226/M/01/2031/D(R&D) dated 30 July 2010, I am directed to convey the sanction of the Armament Research Board for the following project:-

Project Number : ARMREB/ADMB/2015/164

Title of the Project : Design and development of Compact Electric Drive for Various Applications

Name of the PI : Dr. M. Santhi, Professor & Head Department of Electrical & Electronics Engineering

2. **COST & Duration of the Project (PDC):** - The total cost of the project is ₹ 16,46,000/- with PDC of 36 months. However, the same is subject to revision based on performance of review committee/panel. Break-up of the project cost is given under: -

Heads (₹ in lakhs)	1 st Year	2 nd Year	3 rd Year
(a) Research Staff	1,92,000	1,92,000	1,92,000
(b) Equipments	5,00,000	2,75,000	1,00,000
• 5 HP BLDC motor HAL-Bach array			
• AC-DC converter			
• Three phase inverter			
• FPGA controller			
• Torque testing machines			
(c) Consumable stores, Chemicals etc.	40,000	35,000	30,000
(d) Contingencies (20,000	20,000	20,000
(e) TA/DA	10,000	10,000	10,000
(f) Overheads (15% Institute overheads)	-	-	-
Total	7,62,000	5,32,000	3,52,000
Grand Total	16,46,000		

3. **Aim of the Project:-** To design and development of slot less type with Halbach array Brushless DC Motor Drives which is capable of converting electrical power to drive gun assembly actuators and other subsystems at variable speeds.

4. **Procedure for Release of Funds:-** Project will be executed under MOC/MOU. The grantee institute will prepare Contingent Bill (in triplicate in the enclosed format) duly completed, signed on revenue stamp with official seal by the competent financial authority of the institute and submit to the Member Secretary, ARMREB, Room No. 307, 3rd Floor DRDO Bhawan, Rajaji Marg, New Delhi-110 011 for countersignature and submission to the PCDA(R&D) for release of installment. The following documents may be submitted to comply the requirement of G.F.R 2005 and release of first installment : -

- (i) ECS mandate form (in the enclosed format)
- (ii) Certificate from the Grantee institution that grants has not been obtained or applied for the same purpose/ task to be carried out under the MOC with ARMREB or activity from any other Ministry/Department of Government of India or State Government.
- (iii) Documents as per rule 209 (I) of GFR 2005

5. **Commencement date of the Project:-** The date of receipt of the grant would be reckoned as the commencement date of the project, which is intimated to the undersigned as well as the PCDA (R&D), DRDO HQ Cell, 'West Block '5', R K Puram, New Delhi - 110 066 without any ambiguity.

6. **Accounting and Audit of Grant:-**

- (i) Statement of Account and Utilization Certificate duly certified by the executive financial authority of the institution and countersigned by the audit authority is to be submitted in the enclosed format along with the technical report by end of the each financial year.
- (ii) Separate account for the grant would be maintained by the institution. Interest earned thereon if any, would accrue to ARMREB. In case of interests not accrue under the project the reason for the same may be incorporated in utilization certificate for audit purpose. Unspent balance on completion of the project should be sent to the undersigned by the grantee institution through a Demand Draft in favor of PCDA(R&D) drawn at New Delhi, for doing the needful.

7. **Special Equipment:-**

- (i) Under the special equipment head procurement of laptop is not permitted and subsequently any request for regularization of the same would not be considered by ARMREB.
- (ii) The equipment purchased from the project fund would be taken on the ledger charge of the institution and details of the same may kindly be submitted to this office alongwith G.F.R 19 (format enclosed) duly certified by the auditors of the institution that necessary check has been applied and the inventory acquired under the project has been found in order.
- (iii) On completion of the project the grantee institution would forward the consolidated list of equipment along with formal request for retention of equipment and an undertaking by the institute for another project / in house R&D.

8. **Policy on Ownership of Intellectual Properties: -**

- (i) The ownership of any intellectual properties, generated by research performed under this grant, whether or not legally protected, shall vest in the grantee institution. The grantee institution shall promptly report to DRDO its intention to protect legally any such intellectual properties.
- (ii) DRDO shall be deemed to have an irrevocable and royalty-free license to use such intellectual properties, whether or not legally protected, for such purposes as DRDO may decide, keeping the grantee institution informed.
- (iii) The grantee institution shall consult DRDO prior to contracting any agreement that envisages the use of such intellectual properties, whether or not legally protected, during or after the closure of the activities conducted through this grant. In any such agreement, the grantee institution shall declare that its ownership over the intellectual properties is encumbered to the extent of Para (ii) above.
- (iv) Neither DRDO nor the Government of India accept any liability for infringement, innocent or otherwise, by the grantee institution, or by the investigators of the intellectual or other property right of third parties.

9. **RTI Act, 2005:-**

- (i) The grantee institution shall not disclose any information under RTI Act, 2005 as DRDO is placed under Second Schedule and is exempted from disclosure of information under Section 24 (1) of the Act except information pertaining to the allegations of corruption and human rights violations.
- (ii) In case any application is received by the grantee institution for seeking information pertaining to DRDO Projects under RTI Act, 2005, it may not be replied to directly and the same shall be transferred to CPIO, DRDO HQ for
- (iii) necessary action and reply under Section 6(3) of the RTI Act at the following address:-

314 A, 'B' Block, RTI Cell
DRDO Bhawan, Rajaji Marg
New Delhi - 110 011

10. **Publication of Technical Papers: -** The PI will seek prior permission from DRDO for the publication of the technical papers, if any, related to the project work, in Indian/foreign journals including thesis of the research students. PI will submit a formal request along with copy of the paper to the Secretary, ARMREB for further necessary action in this regard. The assistance rendered by the ARMREB will be acknowledged in the paper. Three copies of reprint of published paper will sent to the secretary ARMREB. The PI should also consider - submitting one or two papers, out of the research work carried out under the project, to the Defence Science Journal (DSJ), being published by Defence Scientific Information & Documentation Centre (DESIDOC/DRDO), Metcalfe House, Delhi - 110054.

11. **Progress Review Mechanism:** -

- (i) Review of progress would be carried out by the team constituted under MOC. The expenditure incurred on travel and payment of honorarium to the external experts (Non-DRDO) would be paid by the grantee institution from the TA/DA head of the project. Annual progress will be reviewed by the Board.
- (ii) On completion of the project, a meeting will be arranged by the PI in consultation with respective panel, Scientists of the user lab and Secretary ARMREB for final review of the project and application/dissemination of the project outcome.

12. **Closure Report:** - Closure report containing hard and soft copies of the technical report, critical data and know how along with the information required in the enclosed format will be obtained by the Panel Coordinator from the PI within 60 days after completion of the project PDC to verify the report contents and onward submission to the Member Secretary, ARMREB for formal closure of project.

13. The PCDA(R&D), DRDO HQ Cell, 'West Block '5', R K Puram, New Delhi - 110 066 will make disbursement of money year wise as sanctioned in para 2 above on submission of contingent bill by the Institute. The expenditure will be debited from the major head 2080, Defence Services R&D, minor head-004, Research & Development and code head 852/4 of the Defence Services Estimates.

14. It is requested that documents given above at Para 4 may be submitted to this office at the earliest for further necessary action.

15. Sanction Code is CCTM/TM/ARMREB/GIA/14-15/0329 dated 31/03/2015.

16. This has issued with concurrence of IFA (R&D), New Delhi vide their U.O. No. IFA/R&D/1956/1486 dated 27/03/2015.

Encls : As above.

Yours faithfully,


(SK Rastogi)

Member Secretary ARMREB

Copy for information to: -

1. Dr SK Salwan, Chairman ARMREB
G-26, Civil Officers Welfare Society
P-7, Silver Oke, Greater Noida-201308
2. The CCR&D (TM) & DS
DRDO Bhawan, Rajaji Marg, New Delhi - 110 011
3. Dr B Sivasubramonian, Chairman, Panel 'ADMB'
Group Dir (STAG), VSSC, Thiruvananthapuram - 695 022
4. Sh. Harikrishanan, Sc. 'F', Coordinator 'ADMB' Panel
ARDE, Pashan, Pune - 411 021

R&D File
Tel: 2300 7307
Fax: 23794562

ARMREB/ADMB/2015/164
Defence R&D Organization (HQ)
Armament Research Board
DRDO Bhawan, Rajaji Marg
New Delhi – 110 011

31 Aug 2017

To

✓ The Principal
Sethu Institute of Technology
Pullor, Kariapatti - 626115

AMENDMENT

Reference: Letters of even no. dated 06 April 2015 and 15 May 2017.

2. In exercise of Sl. No. 3.1 of GOI, MoD letter No. DRDO/DBFA/FA/83226/M/01/2031/D(R&D) dated 30 July 2010, the competent authority has accorded approval for the following amendments in Para 1 of the letter under reference for the project entitled Design and Development of Compact Electric Drive for Various Applications" sanctioned to Sethu Institute of Technology, Kariapatti under Grant-in-Aid scheme of ARMREB:-

	<u>FOR</u>	<u>READ</u>
PI	Dr. M. Santhi, Professor & Head Department of Electrical & Electronics Engineering, Sethu Institute of Technology, Kariapatti	Mr. V. Kanan, Assistant Professor, Department of Electrical & Electronics Engineering, Sethu Institute of Technolog Kariapatti



(RS Gauba)

Member Secretary ARMREB

Copy for information to:

1 Shri Surendra Kumar,
Chairman, Panel 'ADMB'
25 Laxmi Gyatri Enclave, Near
MNR PG College HMT, Hills,
Kukkat Palli, Hyderabad – 500085

3 Sh. Harikrishanan, Sc. 'F',
Coordinator 'ADMB' Panel
ARDE, Pashan, Pune – 411 021

5 The Secretary, NRB, DRDO HQ

2 The OS & DG (TM)

4 Mr. V. Kanan, Assistant Professor,
Department of Electrical & Electronics
Engineering, Sethu Institute of Technolog
Kariapatti

6 The Secretary, AR&DB, DRDO HQ

RdD

FILE NO. EMR/2015/002279
SCIENCE & ENGINEERING RESEARCH BOARD

5 & 5A, Lower Ground Floor
Vasant Square Mall
Plot No. A, Community Centre
Sector-B, Pocket-5, Vasant Kunj
New Delhi-110070

Dated: 26-Aug-2016

ORDER

Subject: Financial Sanction of the research project titled "Modeling of Non-Linear Convection-Diffusion Processes in Hydrodynamic Electrodes" under the guidance of **Dr. Lakshmanan Rajendran, MATHEMATICS, Sethu Institute of Technology, Pulloor, Kariapatti, Virudhunagar, Virudhunagar, Tamil Nadu-626115** and by **Dr. P G Jansirani, Professor, Mathematics, Sethu Institute Of Technology** - 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. 1332980/-** (Rs. Thirteen Lakh Thirty Two Thousand Nine Hundred and Eighty Only) with break-up of **Rs. 241000/-** under Capital (Non-recurring) head and **Rs. 1091980/-** under General (Recurring) head for a duration of Three years. The items of expenditure for which the total allocation of **Rs. 1332980/-** has been approved are given below:

The following budget may be considered for Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar

S.No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Maple software -> Printer -> UPS -> HP TOWER PC	241000
A'	Total (Non-Recurring)	241000
B	Recurring Items	
1	Recurring - A : (Manpower, Consumables, Travel, Contingencies)	970800
2	Recurring - B : (Overhead Charges)	121180
B'	Total (Recurring)	1091980
C	Total cost of the project (A' + B')	1332980

2. Sanction of the SERB is also accorded to the payment of

Rs. 241000/- (Rupees Two Lakh Forty One Thousand only) under 'Grants for creation of capital assets' and **Rs. 363900/-** (Rupees Three Lakh Sixty Three Thousand Nine Hundred only) under 'Grants-in-aid General' to Principal, Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar being the first installment of the grant for the year 2015-2016 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 Extra Mural Research Funding (Individual Centric). (PAC Inorganic Physical Chemistry)

4. The Sanction has been issued to Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar with the approval of the competent authority under delegated powers on 21 August, 2016 and vide Diary No. SERB/F/3417/2016-17 dated 25 August, 2016


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

25.8.2016 — 25.8.2019 3 years

To
Finance & Budget Officer
SERB, New Delhi

Copy forwarded for information and necessary action to: -

1	The Principal Director of Audit, A.G.C.R. Building, IIIrd Floor I.P. Estate, Delhi-110002
2	Sanction Folder, SERB, New Delhi.
3	File Copy
4	Dr. L. Rajendran Professor, Department of Mathematics Sethu Institute of Technology (Autonomous) Pullor, Kariapatti-626115 (Tamilnadu) <i>(For guidance, terms & Conditions etc. Please visit www.serb.gov.in. Please intimate the start date by post)</i>
5	The Principal Sethu Institute of Technology (Autonomous) Pullor, Kariapatti-626115 (Tamilnadu) <i>(Kindly send receipt of the grant by post)</i>


(Dr. Arvind Chaudhary)
Scientist-C

Science and Engineering Research Board

(A Statutory Body under Department of Science and Technology)

Technology Bhavan
New Mehrauli Road
New Delhi - 110 016

Dated 03.09.2014

ORDER

Subject:- Financial assistance for the research project entitled "Synthesis and characterization of polymer blended lanthanides doped nano ferrites" by Dr. K Sakthipandi, Department of Physics, Sethu Institute of Technology, Virudhu Nagar, Kariapatti - 626115, Tamil Nadu.

Sanction of the Science and Engineering Research Board (SERB) is hereby accorded to the above-mentioned project at a total cost of Rs. 16,86,000/- (Rupees sixteen lakh eighty six thousand only) with break-up of Rs. 4,00,000/- under Non-Recurring head and Rs. 12,86,000/- under Recurring head for a duration of three years. The items for which the total allocation of Rs. 16,86,000/- has been approved for a period of three years, are given below:

Sl. No	Head	Total (in Rs.)
A	Non-Recurring	
1.	Minor Equipment sonochemical reactor and laptop	4,00,000/-
A'	Total Non-Recurring	4,00,000/-
B	Recurring	
B.1	Recurring A JRF(1), Consumables, Travel, Contingencies (including analytical charges)	10,05,000/-
B.2	Recurring B (Overhead Charges)	2,81,000/-
B'	Total Recurring (B.1 + B.2)	12,86,000/-
C	Total cost of the project (A' + B')	16,86,000/-

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.

The sanction of the Board is also accorded to the payment of Rs. 4,00,000/- (Rupees four lakh only) under 'Non-Recurring' head and Rs. 4,20,000/- (Rupees four lakh twenty thousand only) under 'Recurring' head to the Principal, Sethu Institute of Technology, Pulloor, Virudhu Nagar, Kariapatti - 626115, Tamil Nadu being the first installment of the grant for the year 2014-15 for implementation of the said research project.

Sanction of the grant is subject to the conditions as detailed in Annexure - I.

The expenditure involved is debitable to

Fund for Science and Engineering Research (FSER)

The sanction has been issued with the approval of the competent authority in SERB vide Dy. No. ERB/F/ 4106 /2014-15 dated 03.09.2014.

7 The amount of Rs. 8,20,000/- (Rupees eight lakh twenty thousand only) meant for both 'Non-Recurring' head and 'Recurring' head will be drawn by the Finance & Budget Officer of the SERB and it will be disbursed to The Principal, Sethu Institute of Technology, Kariapatti - 626115, Tamil Nadu by means of RTGS transaction as per their details given below:

Account Name	The Principal, Sethu Institute of Technology
Bank Name & Branch	State Bank of India, Kariapatti Branch, Virudhunagar
Bank Account Number	11319797286
IFSC Code	SBIN0003781
e-mail ID of the grantee	principal@sethu.ac.in

8 The Institute will furnish to the Board, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.

9 While providing operational flexibility among various subheads under head Recurring -A, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

10 The manpower sanctioned in the project, if any, is co-terminus with the project and SERB will have no liability to meet the fellowship etc. beyond the duration of the project.

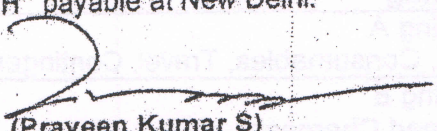
11 All purchases of equipments etc. would be as per GFR and the disposal of the same would be done with prior approval of SERB.

12 The Institute will maintain separate audited accounts for the project. It is found expedient to keep a part or whole of grant in a bank account earning interest. The interest earned should be reported to the SERB, New Delhi. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.

13 As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the Institute is called upon to do so.

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

15 The Institute may refund any unspent balance to SERB by means of an a/c payee Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.


(Praveen Kumar S)
Scientist 'D'

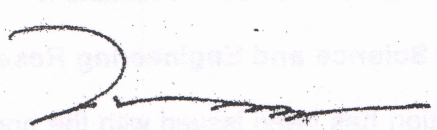
Copy forwarded for information and necessary action to:

1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi - 110 002.
2. The Finance & Budget Officer, SERB (2 copies).

3. **Dr. K Sakthipandi**
Department of Physics
Sethu Institute of Technology
Pulloor, Virudhu Nagar, Kariapatti - 626 115, Tamil Nadu
e-mail: sakthipandi@gmail.com

4. The Principal
Sethu Institute of Technology
Pulloor, Virudhu Nagar, Kariapatti - 626 115, Tamil Nadu

5. Sanction folder SERB
6. SERB Secretariat


(Praveen Kumar S)
Scientist 'D'

R&D
Grant

FILE NO. ECR/2016/002017

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. A, Community Centre
Sector-B, Pocket-5, Vasant Kunj
New Delhi-110070

Dated: 12-Jul-2017

ORDER

Subject: Financial Sanction of the research project titled **"Investigation of Graphene Modified Metal Oxide Thin Films for Solar Selective Absorbers"** under the guidance of **Dr. Senthuran Karthick Kumar, Physics, Sethu Institute of Technology, Pulloor, kariapatti, virudhunagar, Virudhunagar, Tamil nadu-626115 - 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. 2734600/- (Rs. Twenty Seven Lakh Thirty Four Thousand Six Hundred Only) with break-up of Rs. 1000000/- under Capital (Non-recurring) head and Rs.1734600/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 2734600/- has been approved are given below:

The following budget may be considered for Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Angle dependent Dip Coating unit -> Emissiometer -> Digital Magnetic stirrer	1000000
A'	Total (Non-Recurring)	1000000
B	Recurring Items	
1	Recurring - A : (Manpower, Consumables, Travel, Contingencies)	1486000
2	Recurring - B : (Overhead Charges)	248600
B'	Total (Recurring)	1734600
C	Total cost of the project (A' + B')	2734600

2. Sanction of the SERB is also accorded to the payment of

Rs. 1000000/- (Rupees Ten Lakh only) under 'Grants for creation of capital assets' and **Rs. 578200/-** (Rupees Five Lakh Seventy Eight Thousand Two Hundred only) under 'Grants-in-aid General' to **THE PRINCIPAL, Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar**

being the first installment of the grant for the year 2017-2018 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 Early Career Research Award. (EC Physical & Mathematical Sciences)

4. The Sanction has been issued to Sethu Institute Of Technology, Pulloor, Kariapatti, Virudhunagar with the approval of the competent authority under delegated powers on **04 July, 2017** and vide Diary No. **SERB/F/2626/2017-2018** dated **06 July, 2017**

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website

8. 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.

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

10. The release amount of Rs. 1578200/- (Rupees Fifteen Lakh Seventy Eight Thousand Two Hundred only) will be drawn by the Finance & Budget Officer of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	PRINCIPAL, SETHU INSTITUTE OF TECHNOLOGY
Account Number	254601000005555
Bank Name & Branch	INDIAN OVERSEAS BANK KARIAPATTI,ABCOMPLEX,MADURAITUTICORIN MAIN ROAD,KARIAPATTI VIRUTHUNAGAR DISTRICT,TAMIL NADU, 626106
IFSC/RTGS Code	IOBA0002546
Email id of A/C Holder	principal@sethu.ac.in
Email id of PI	physicsmsckarthick@gmail.com

11. The institute will furnish to the SERB, New Delhi, 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.

12. 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.

13. The project File no. ECR/2016/002017 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

14. 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

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

16. 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.

17. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

18. 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, a statutory body of Department of Science & Technology (DST), Government of India.

(Dr. Magesh K K)

Scientist

ms_pm@serbonline.in



A/c Dy No. 1095
Date: 3/8/2017

UNIVERSITY GRANTS COMMISSIONS -SOUTH EASTERN REGIONAL OFFICE
5-9-194, CHIRAG ALI LANE, IV FLOOR, A.P.S.F.C. BUILDING, HYDERABAD -500 001
Phones: 040 - 23204735, 23200208 FAX: 040 - 23204734, Website: www.ugc.ac.in, email: ugcsero@gmail.com

No.F MRP-6993/16 (SERO/UGC)

Link No:6993.

August,2017

The Accounts Officer
UGC-SERO, Hyderabad

Comcode: TNAN036
UniqueID:SIT

3 AUG 2017

Sub: Release of Grants-in-aid to Minor Research Projects for the year 2017-2018 .

Sir / Madam,

The has reference to the Minor Research Project proposal submitted by **Dr.K.Vijai Department of Civil Engineering of "Sethu Institute of Technology", VIRUDHUNAGAR** entitled **"DEVELOPMENT OF LOW COST ROOFING ELEMENTS FOR RURAL HOUSING USING GEOPOLYMER COMPOSITES"**. The subject expert, who evaluated the proposal, has recommended for financial assistance as detailed below.

Sl. No	Item	Amount Allocated (Rs.)	Amount Sanctioned as first installment (Rs.)
1.	Books & Journals	20000.	20000.
2.	Equipment	225000.	225000.
	Total	245000.	245000.
3.	Field work & Travel	10000.	5000.
4.	Chemical & Glass Ware	80000.	40000.
5.	Contingency (incl. Special Needs)	20000.	10000.
6.	Hiring Services	10000.	5000.
	Total	120000.	60000.
	Grand Total	365000.	305000.

1. I am further to convey the sanction of the University Grants Commission to the payment of Rs.305000. to the principal, Sethu Institute of Technology,,VIRUDHUNAGAR as first installment (100% Non-Recurring and 50% Recurring grants) towards the above project.

Amount Sanctioned	Head of Accounts	Category
Rs. 245000.	35-CAP-MRP(50)-3(A)2202.03.102.02.01	GEN
Rs. 60000.	31-GIA-MRP(50)-3(A)2202.03.102.02.01	GEN

2. The above approval is subject to the general conditions of grants prescribed by the UGC for this scheme.
3. The sanctioned amount is debitable to the Head of Accounts 35-CAP-MRP(50)-3(A)2202.03.102.02.01 (General), 31-GIA-MRP(50)-3(A)2202.03.102.02.01(General) and is valid for payment during the financial year 2017-18 only and the amount of the Grant shall be drawn by the Accounts Officer (Drawing and Disbursing Officer) UGC-SERO, Hyd. on the Grants-In Aid Bill and shall be disbursed to and credited to "The Principal, Sethu Institute of Technology, , VIRUDHUNAGAR by Electronic Mode through PFMS Portal at the following details: "(a) Name & Address of Account Holder: The Principal, Sethu Institute of Technology, , VIRUDHUNAGAR (b) Account No: 11319797286 (c) Name & Address of Bank Branch: (d) IFSC Code: SBIN0003781.
4. In case the Principal investigator is having ongoing Major/Minor Research Project OR has been transferred/left/retired from the college, the released amount of Rs.305000./- may be returned to UGC-SERO, Hyderabad immediately, failing which action will be initiated against the College for not adhering with the norms of UGC for the scheme.
5. The grantee institution shall ensure the utilization of grants -in-aid for which it is being sanctioned/paid. in case of non-utilization /part utilization, interest @ 10% per annum as amended from time to time on utilized amount from the date of drawl to the date of refund as per provision contained in General Financial Rules of Govt. of India will be charged.
6. The assets acquired wholly or substantially out of UGC's grants shall not be disposed or encumbered or utilized for the purposes other than those for which the grant was given, without proper sanction of the UGC and should, at any time the college ceased to function, such assets shall revert to the UGC.

7. The Principal investigator of the project is required to submit the First year progress report of the work done along with the documents 1) Annual Report of the Project as per Annexure-III 2) Utilization Certificate duly signed by the Principal Investigator, Principal & Chartered Accountant 3) Statement of Expenditure for the approved heads for the sanctioned amount as per Annexure-V duly signed by the Principal Investigator, Principal & Chartered Accountant.
8. The interest earned by the College / Institute on this grants-in-aid shall be treated as additional grant which may be shown in the Utilization Certificate / Statement of Expenditure to be furnished by the grantee institution.
9. The college has to send the filled in Acceptance certificate within 15 days of receipt of this letter, else the college may return back the sanctioned amount to this office. Further if the conditions of the acceptance letter is not acceptable or applicable to the P.I/College, the sanctioned amount be refunded back to SERO-UGC, Hyderabad.
10. The guidelines of Minor Research Project have to be followed in toto.
11. The Grant is subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/Institution.
12. The University/Institution shall maintain proper accounts of the expenditure out of the Grants, which shall be utilized, only on the approved items of expenditure.
13. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of current financial year.
14. The college shall maintain a Register of Assets acquired wholly or substantially out of the grant in the prescribed proforma.
15. The College shall fully implement to Official languages Policy of Union Govt. and comply with the Official Language Act, 1963 and Official languages (use for official purposes of the Union) Rules, 1976 etc.,
16. The approval for the above has been received vide letter No.F.7-3/2016(SERO/MRP/RO) dated 6th September, 2016 from UGC, New Delhi.

Subject Expert's Suggestions/Remarks:

Yours faithfully,

(Dr.G.Srinivas)
Joint Secretary

03/8/2017

Copy to:

1. The Principal (Along with DD / Funds transferred through E-mode)
Sethu Institute of Technology
, VIRUDHUNAGAR - 626115.
2. Dr.K.Vijai
Dept. of Civil Engineering
Sethu Institute of Technology
, VIRUDHUNAGAR - 626115.
3. The Dean/Director, College Development Council of affiliating University
4. The Commissioner /Director Collegiate Education, Government of TAMIL NADU
5. The Principal Accounts General (A & E)- Government of TAMIL NADU

(G.K.Pasrija)
Under Secretary

GAR Cap. Sl.No. 524 /2017-2018
GAR GIA Sl.No. 692 /2017-2018

The sanctioned grant of Rs.305000. /- has been transferred to your college Account as mentioned at the Point No. 3 of this Sanction Order by e-payment through PFMS portal vide date.....You are requested to acknowledge the receipt of the above amount in your account by sending back the enclosed stamped receipt within 7 days.

(R.Rayappa)
Accounts Officer



Grant R&D
dy

A/c Dy No. 390
Date: 29/6/17

UNIVERSITY GRANTS COMMISSIONS -SOUTH EASTERN REGIONAL OFFICE
5-9-194, CHIRAG ALI LANE, IV FLOOR, A.P.S.F.C. BUILDING, HYDERABAD -500 001
Phones: 040 - 23204735, 23200208 FAX: 040 - 23204734, Website: www.ugc.ac.in, email: ugcsero@gmail.com

No.F MRP-6467/16 (SERO/UGC)

Link No:6467.

June,2017

The Accounts Officer
UGC-SERO, Hyderabad

Comcode: TNAN036
UniqueID:SIT

Sub: Release of Grants-in-aid to Minor Research Projects for the year 2017-2018.
Sir / Madam,

30 JUN 2017

The has reference to the Minor Research Project proposal submitted by Dr.R.Kumutha Department of Civil Engineering of "Sethu Institute of Technology", KARAIPATTI entitled "CEMENT FREE PAVER BLOCKS USING FLY ASH BASED GEOPOLYMER COMPOSITES". The subject expert, who evaluated the proposal, has recommended for financial assistance as detailed below.

Sl. No	Item	Amount Allocated (Rs.)	Amount Sanctioned as first installment (Rs.)
1.	Books & Journals	20000.	20000.
2.	Equipment	326325.	326325.
	Total	346325.	346325.
3.	Field work & Travel	10000.	5000.
4.	Chemical & Glass Ware	60000.	30000.
5.	Contingency (incl. Special Needs)	20000.	10000.
6.	Hiring Services	10000.	5000.
	Total	100000.	50000.
	Grand Total	446325.	396325.

1. I am further to convey the sanction of the University Grants Commission to the payment of Rs.396325. to the principal, Sethu Institute of Technology, KARAIPATTI as first installment (100% Non-Recurring and 50% Recurring grants) towards the above project.

Amount Sanctioned	Head of Accounts	Category
Rs. 346325.	35-CAP-MRP(50)-3(A)2202.03.102.02.01	GEN
Rs. 50000.	31-GIA-MRP(50)-3(A)2202.03.102.02.01	GEN

2. The above approval is subject to the general conditions of grants prescribed by the UGC for this scheme.
3. The sanctioned amount is debitable to the Head of Accounts 35-CAP-MRP(50)-3(A)2202.03.102.02.01 (General), 31-GIA-MRP(50)-3(A)2202.03.102.02.01(General) and is valid for payment during the financial year 2017-18 only and the amount of the Grant shall be drawn by the Accounts Officer (Drawing and Disbursing Officer) UGC-SERO, Hyd. on the Grants-In Aid Bill and shall be disbursed to and credited to "The Principal, Sethu Institute of Technology, KARAIPATTI by Electronic Mode through PFMS Portal at the following details: (a) Name & Address of Account Holder: The Principal, Sethu Institute of Technology, KARAIPATTI (b) Account No: 11319797286. (c) Name & Address of Bank Branch: SBI KARIAPATTI (d) IFSC Code: SBIN0003781.
4. In case the Principal investigator is having ongoing Major/Minor Research Project OR has been transferred/left/retired from the college, the released amount of Rs.396325/- may be returned to UGC-SERO, Hyderabad immediately, failing which action will be initiated against the College for not adhering with the norms of UGC for the scheme.
5. The grantee institution shall ensure the utilization of grants -in-aid for which it is being sanctioned/paid. in case of non-utilization /part utilization, interest @ 10% per annum as amended from time to time on utilized amount from the date of drawl to the date of refund as per provision contained in General Financial Rules of Govt. of India will be charged.
6. The assets acquired wholly or substantially out of UGC's grants shall not be disposed or encumbered or utilized for the purposes other than those for which the grant was given, without proper sanction of the UGC and should, at any time the college ceased to function, such assets shall revert to the UGC.

7. The Principal investigator of the project is required to submit the First year progress report of the work done along with the documents 1) Annual Report of the Project as per Annexure-III 2) Utilization Certificate duly signed by the Principal Investigator, Principal & Chartered Accountant 3) Statement of Expenditure for the approved heads for the sanctioned amount as per Annexure-V duly signed by the Principal Investigator, Principal & Chartered Accountant.
8. The interest earned by the College / Institute on this grants-in-aid shall be treated as additional grant which may be shown in the Utilization Certificate / Statement of Expenditure to furnished by the grantee institution.
9. The college has to send the filled in Acceptance certificate within 15 days of receipt of this letter, else the college may return back the sanctioned amount to this office. Further if the conditions of the acceptance letter is not acceptable or applicable to the P.I/College, the sanctioned amount be refunded back to SERO-UGC, Hyderabad.
10. The guidelines of Minor Research Project have to be followed in toto.
11. The Grant is subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/Institution.
12. The University/Institution shall maintain proper accounts of the expenditure out of the Grants, which shall be utilized, only on the approved items of expenditure.
13. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of current financial year.
14. The college shall maintain a Register of Assets acquired wholly or substantially out of the grant in the prescribed proforma.
15. The College shall fully implement to Official languages Policy of Union Govt. and comply with the Official Language Act, 1963 and Official languages (use for official purposes of the Union) Rules, 1976 etc.,
16. The approval for the above has been received vide letter No.F.7-3/2016(SERO/MRP/RO) dated 6th September, 2016 from UGC, New Delhi.

Yours faithfully,

(Dr.G.Srinivas)

Joint Secretary

30/6/2017

Copy to:

1. The Principal (Along with DD / Funds transferred through E-mode)
Sethu Institute of Technology
, KARAIPATTI - 626115.
2. Dr.R.Kumutha
Dept. of Civil Engineering
Sethu Institute of Technology
, KARAIPATTI - 626115.
3. The Dean/Director, College Development Council of affiliating University
4. The Commissioner /Director Collegiate Education, Government of TAMIL NADU
5. The Principal Accounts General (A & E)- Government of TAMIL NADU

(G.K.Pasrija)

Under Secretary

GAR Cap. Sl.No.95. /2017-2018

GAR GIA Sl.No.243. /2017-2018

The sanctioned grant of Rs.396325. /- has been transferred to your college Account as mentioned at the Point No. 3 of this Sanction Order by e-payment through PFMS portal vide date.....18/07/17.....You are requested to acknowledge the receipt of the above amount in your account by sending back the enclosed stamped receipt within 7 days.

(R.Rayappa)

Accounts Officer