

DST/TMD/MECSP/2K17/50 (C)
 Government of India
 Ministry of Science and Technology
 Department of Science and Technology
 (Technology Mission Division)

Technology Bhavan
 New Mehrauli Road
 New Delhi-110 016
 Date: 18.02.2019


ORDER

Subject: Financial support for “DST – NFTDC Centre for Materials & Energy Storage Platforms – H2” submitted by Dr. K Balasubramanian (Lead PI), NFTDC, Kanchanbagh, Hyderabad (Lead Institute). The centre consortium consists of four partner institutes: Dr Anand M Shivapuji (IISc, Bengaluru), Prof P. Maiya (IIT Madras, Chennai), Dr Soobhankar Pati (IIT Bhubaneswar) and Dr. G. Mohan, (SreeChitraThirunal College of Engineering, Thiruvananthapuram).

2. With reference to the sanction order No. DST/TMD/MECSP/2K17/50 dated 18.02.2019. The sanction of the President is also accorded to the release of **Rs. 3,45,00,000/- (Rupees Three Crore Forty five Lakh Only)** to **Nonferrous Materials Technology Development Centre (NFTDC), Hyderabad**, being the first installment of grant under “Capital Components” for implementation of the above mentioned project.

Total Fund required for all 5 Institutes:

S. No	Item Head	1 st Year	2nd Year	3rd Year	4th year	5th year	Total
A	Non-recurring(Capital Items)						
	Permanent Equipment List WP#1						
	1. In-house Design & Fabrication of CNG Reformation						
	2. Balance of Systems (Battery + DC-DC + DC-AC)						
	3. 16-Nozzle Design & Development of existing Ink Jet Printing Sys						
	4. Modification of existing Plasma Gun						
	5. Solution Plasma Spray – Add on system						
	6. Workstations + Engg software						
	7. Bio-syngas gen system with Oxy steam gasification supplement						
	8. Fuel cell stack test setup						
	9. Bio-syngas reforming train – WGS system (Design and iterative operation based system evolution and fabrication)						
1	10. Bio-syngas reforming train – DBD system (Design and iterative						

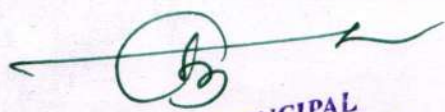

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	operation based system evolution and fabrication)	3,45,00,000	0	0	0	0	3,45,00,000
	11. Bio syngas conditioning train						
	12. Terminal gas heat recovery system						
	13. Burner system for varying terminal gas composition						
	14. Mass flow valves, controllers and sensors						
	WP#2						
	15. Design & Development of Graphene Mfg Apparatus						
	16. PCT – DSC Apparatus & Related System						
	17. Constant temperature baths, coriolis mass flow meters, Vacuum pump and accessories, Data logger and multiplexers, Swagelok cylinders and hoses, hydrogen safety systems						
	WP#3						
	18. Design & Development of Centrifugal Powder Making Apparatus						
	19. Modification to Attritor (for Milling in H2)						
B	Recurring Items (General)						
1.	Manpower	45,00,000	45,00,000	45,00,000	45,00,000	45,00,000	2,25,00,000
2.	Consumables	42,50,000	45,50,000	34,50,000	24,00,000	14,00,000	1,60,50,000
3.	Contingencies	3,00,000	3,00,000	3,00,000	3,00,000	3,00,000	15,00,000
4.	Travel	3,00,000	3,00,000	3,00,000	3,00,000	3,00,000	15,00,000
5.	Other Costs (Recurring), if any	15,00,000	25,00,000	17,00,000	12,00,000	7,00,000	76,00,000
6.	Overhead	4,00,000	4,00,000	4,00,000	4,00,000	4,00,000	20,00,000
	<i>Subtotal(General)</i>	1,12,50,000	1,25,50,000	1,06,50,000	91,00,000	76,00,000	5,11,50,000
C	Total cost of the project (A+B)	4,57,50,000	1,25,50,000	1,06,50,000	91,00,000	76,00,000	8,56,50,000

Fund Required for Lead Institute (NFTDC HYDERABAD)

S.No	Item Head	1st Year	2 nd Year	3 rd Year	4 th year	5 th year	Total
A	Non-recurring(Capital Items)						
	Permanent Equipment List						
	WP#1						
	1. In-house Design & Fabrication of CNG Reformation (28L)						



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	2. Balance of Systems (Battery + DC-DC + DCAC)(10L)						
	3. 16-Nozzle Design & Development of existing Ink Jet Printing Sys (14L)						
	4. Modification of existing Plasma Gun (7L)						
	5. Solution Plasma Spray – Add on system (2L) WP#2	1,14,00,000					1,14,00,000
	6. Design & Development of Graphene Mfg Apparatus (20L, 2 nd Year) WP#3						
	7. Design & Development of Centrifugal Powder Making Apparatus (23L)						
	8. Modification to Attritor (for Milling in H2) (6L, 2 nd Yr)						
B	Recurring Items (General)						
1.	Manpower	21,00,000	21,00,000	21,00,000	21,00,000	21,00,000	1,05,00,000
2.	Consumables	31,00,000	35,00,000	25,00,000	15,00,000	5,00,000	1,11,00,000
3.	Contingencies	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000
4.	Travel	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000
5.	Other Costs (Recurring), if any	10,00,000	20,00,000	15,00,000	10,00,000	5,00,000	60,00,000
6.	Overhead	1,60,000	1,60,000	1,60,000	1,60,000	1,60,000	8,00,000
	<i>Subtotal(General)</i>	65,60,000	79,60,000	64,60,000	49,60,000	34,60,000	2,94,00,000
C	Total cost of the project (A+B), NFTDC	1,79,60,000	79,60,000	64,60,000	49,60,000	34,60,000	4,08,00,000

(II Sc)

S. No	Item Head	1 st Year	2 nd Year	3 rd Year	4 th year	5 th year	Total
A	Non-recurring(Capital Items)						



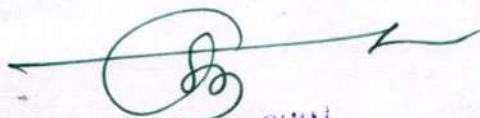
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1	Permanent Equipment List WP#1						
2	1. Workstations + Engg software (20L)						
3	2. Bio-syngas gen system with Oxy steam gasification supplement (30L)						
	3. Fuel cell stack test setup (50L)						
	4. Bio-syngas reforming train – WGS system (Design and iterative operation based system evolution and fabrication) (10L)	1,50,00,00					1,50,00,000
	5. Bio-syngas reforming train – DBD system (Design and iterative operation based system evolution and fabrication) (10 L)	0					
	6. Bio syngas conditioning train (10 L)						
	7. Terminal gas heat recovery system (5L)						
	8. Burner system for varying terminal gas composition (5L)						
	9. Mass flow valves, controllers and sensors (10 L)						
B	Recurring Items (General)						
1.	Manpower	6,60,000	6,60,000	6,60,000	6,60,000	6,60,000	33,00,000
2.	Consumables	5,00,000	5,00,000	5,00,000	5,00,000	5,00,000	25,00,000
3.	Contingencies	50,000	50,000	50,000	50,000	50,000	2,50,000
4.	Travel	50,000	50,000	50,000	50,000	50,000	2,50,000
5.	Other Costs (Recurring), if any	5,00,000	2,75,000	2,75,000	2,75,000	2,75,000	16,00,000
6.	Overhead	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000
	<i>Subtotal(General)</i>	18,60,000	16,35,000	16,35,000	16,35,000	16,35,000	84,00,000
			0		0	0	
C	Total cost of the project (A+B), IISc	1,68,60,000	16,35,000	16,35,000	16,35,000	16,35,000	2,34,00,000

(IIT Madras)

S. No	Item Head	1 st Year	2 nd Year	3 rd Year	4 th year	5 th year	Total
A	Non-recurring(Capital Items)						
	WP#2						
	1. PCT – DSC Apparatus & Related System (50 L)						
	2. Constant temperature baths,						



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	coriolis mass flow meters, Vacuum pump and accessories, Data logger and multiplexers, Swagelok cylinders and hoses, hydrogen safety systems, (22.5 L) Workstations + Engg Software (2.5 L)	70,00,000					70,00,000
B	Recurring Items (General)						
1.	Manpower	8,40,000	8,40,000	8,40,000	8,40,000	8,40,000	42,00,000
2.	Consumables	5,00,000	2,50,000	2,50,000	2,50,000	2,50,000	15,00,000
3.	Contingencies	50,000	50,000	50,000	50,000	50,000	2,50,000
4.	Travel	50,000	50,000	50,000	50,000	50,000	2,50,000
5.	Other Costs (Recurring), if any	0	0	0	0	0	0
6.	Overhead	80,000	80,000	80,000	80,000	80,000	4,00,000
	<i>Subtotal(General)</i>	15,20,000	12,70,000	12,70,000	12,70,000	12,70,000	66,00,000
			0		0	0	
C	Total cost of the project (A+B)	85,20,000	12,70,000	12,70,000	12,70,000	12,70,000	1,36,00,000
			0		0	0	

(IITBBSR)

S. No	Item Head	1 Year	2 Year	3 Year	4 th year	5 th year	Total
A	Non-recurring(Capital Items)						
1	Permanent Equipment List NIL	0	0	0		0	0
B	Recurring Items (General)						
1.	Manpower	4,80,000	4,80,000	4,80,000	4,80,000	4,80,000	24,00,000
2.	Consumables	1,50,000	1,50,000	50,000	50,000	50,000	3,50,000
3.	Contingencies	50,000	50,000	50,000	50,000	50,000	2,50,000
4.	Travel	50,000	50,000	50,000	50,000	50,000	2,50,000



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5.	Other Costs (Recurring), if any	0	0	0	0	0	0
6.	Overhead	30,000	30,000	30,000	30,000	30,000	1,50,000
	<i>Subtotal(General)</i>	7,60,000	7,60,000	6,60,000	6,10,000	6,10,000	34,00,000
C	Total cost of the project (A+B)	7,60,000	7,60,000	6,60,000	6,10,000	6,10,000	34,00,000

Sree ChitraThirunal College of Engineering, Thiruvananthapuram

S. No	Item Head	1 st Year	2 nd Year	3 rd Year	4 th year	5 th year	Total
A	Non-recurring(Capital Items)						
	Workstations + Engg Software (Matlab + Multi Physics COMSOL)	11,00,000					11,00,000
B	Recurring Items (General)						
1.	Manpower	4,20,000	4,20,000	4,20,000	4,20,000	4,20,000	21,00,000
2.	Consumables	0	1,50,000	1,50,000	1,50,000	1,50,000	6,00,000
3.	Contingencies	50,000	50,000	50,000	50,000	50,000	2,50,000
4.	Travel	50,000	50,000	50,000	50,000	50,000	2,50,000
5.	Other Costs (Recurring), if any	0	0	0	0	0	0
6.	Overhead	30,000	30,000	30,000	30,000	30,000	1,50,000
	<i>Subtotal(General)</i>	5,50,000	7,00,000	7,00,000	7,00,000	7,00,000	33,50,000
C	Total cost of the project (A+B)	16,50,000	7,00,000	7,00,000	7,00,000	7,00,000	44,50,000



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3. This Sanction is subject to the conditions 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 (SF) 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 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 installment will be released only after confirmation of the acceptance of the UC by the Division and the entry of previous Utilization Certificate in the PFMS.

5. If the grant has been released under the 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 the line with the Provisions of General Financial Rules 2017 will be followed by the institute /Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

(b) While submitting Utilisation Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regards 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 FY 2018-19 and onwards, all interests and other earnings, against released grant shall be remitted to Consolidated fund of India, immediately after the finalization of accounts, as it shall not be adjusted towards future release of grant. A certificate to this effect shall have to submit along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of grant/closure of project accounts.

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 payments 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 organization 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 organization is called upon to do so, as laid down under rule 236(1) of General Financial Rules 2017.



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11. Due acknowledgement of technical support/ financial assistance resulting from this project grant 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.

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 2018-19:

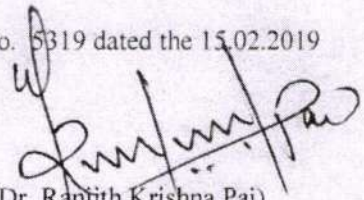
3425	Other Scientific Research (Major Head)
60	Other
60.200	Assistance to other scientific bodies (Minor head)
70	Innovation, Technology Development and Deployment
70.00.35	Grants for creation of capital assets-plan 2018-19 (CEMI) (Previous: TDP-TMD-3425.60.200.70.00.35)

14. The amount of **Rs. 3, 45, 00,000/- (Rupees Three Crore Forty five Lakh Only)** will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to **Nonferrous Materials Technology Development Centre (NFTDC), Hyderabad**. The bank details for electronic transfer of funds through RTGS are given below.

1. Name of the Account Holder: - Nonferrous Materials Technology Development Centre (NFTDC)
2. Name of the Bank: - Canara Bank
3. Bank Account Number: - 1849201000310
4. IFSC Code: - CNRB0001849
5. MICR Code: - 500015032

15. As per Rule 234 of GFR 2017, this sanction has been entered at S.No. **377**. In the register of grants of grants maintained in the Division for the scheme (TMD).

16. This issues with the concurrence of IFD Vide their Concurrence Dy. No. 5319 dated the 15.02.2019


(Dr. Ranjith Krishna Pai)
Scientist 'D'

To

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

Copy for information and necessary action to:

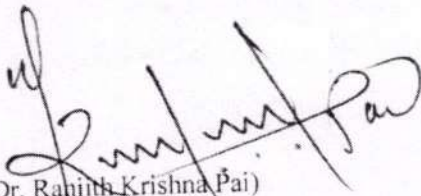
1. Cash Section (3 copies), DST, New Delhi--for preparing the bill and remitting the amount to the grantee
2. Accounts Section, DST, New Delhi, 3. IFD, DST, New Delhi.
3. Director of Audit (CW & M-II), AGCR Building, IP Estate, New Delhi.
4. **Dr. K Balasubramanian (Lead PI), NFTDC**
Dr Anand M Shivapuji (IISc, Bengaluru)
Prof P. Maiya (IIT Madras, Chennai),
Dr Soobhankar Pati (IIT Bhubaneswar)

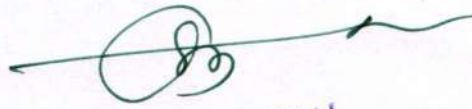


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5. Sanction folder
6. Office Copy
7. Head- TMD
8. FICCI Cell


(Dr. Rajith Krishna Pai)
Scientist 'D'



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**APJ Abdul Kalam Technological University
Thiruvananthapuram**

Abstract

APJAKTU - CERD - Engineering Colleges - Financial Assistance to Student Project - Administrative Sanction - Accorded -Orders issued.

CERD

U.O.No. 218/2020/KTU

Thiruvananthapuram, Dated: 06.02.2020

- Read:-**
1. Minutes of the 1st meeting of Engineering Research Council dated 27.01.2010.
 2. Minutes of 2nd meeting of Executive Committee dated 21.10.2010.
 3. Meeting of the 2nd Research Council dated 29.02.2017.
 4. Proposals of Student Project for Financial Assistance.
 5. Screening Committee meeting held on January 2020 for evaluation of project proposals.

ORDER

By the minutes read 1st above, the Engineering Research Council had approved the scheme for Financial Assistance to Student Project for the Government Engineering College.

By the minutes read 2nd above, it was decided to extend the financial assistance for the students project to the students of the Government aided and Government Controlled Engineering Colleges.

By the minutes 3rd above, it was decided to extend the financial assistance to Students Project of all engineering colleges affiliated to KTU with NBA accreditation. It is also decided that the financial assistance will be provided as reimbursement of expenditure occurred for the sanctioned project.

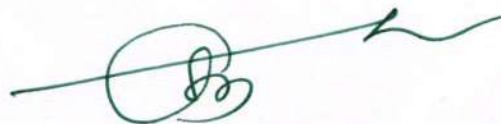
The Screening Committee meetings held in January 2020 evaluated the project proposals forwarded from Engineering Colleges affiliated to KTU and recommended financial assistance to selected proposals as listed in Annexure 1.

Administrative sanction is therefore accorded for financial assistance to student project as detailed in Annexure I. The project shall be completed within a period of 1 year and the project should be completed with the students who presented the project before the Screening Committee.

The expenditure should be incurred as per the terms and conditions as per Annexure II. The amount will be reimbursed to the Principal of the concerned Colleges only after the successful completion of the project and on the production of certified bills & vouchers along with the audited utilization certificate, statement of expenditure and project completion report.

The expenditure may be met from the Head of Account

" S- 3- Research Activities-002-Innovative Student Project".



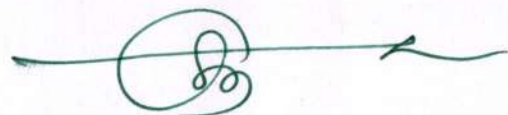
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Sd/-

**Dr. VRINDA V NAIR
DEAN (Research)**



35	Dr. Siddharth Shelly Assistant Professor Dr. Aji Joy (Co-Investigator)	Abhay V S Fahida V H Reshma T R Sajan C K	MACE Kothamangalam	BCE	IoT Based Domestic Vertical Farming System	18,000	2000	13,000	1000	2000	
36	Lija Thomas Assistant Professor Dr. Jinsa Kuruvila (co-Investigator)	Aadir Ahamed Aiswarya Palchadathil Athira S Kumar George N J	MACE Kothamangalam	ECE	Petroleum quality checker	9000	1000	7000	500	500	
37	Dinto Mathew Assistant Professor Eldhose K. A. (Co-Investigator)	Ismath K I Lami Mershed T P Sruthy K Muraleedharan Vaishnav C	MACE Kothamangalam	EEE	Design and implementation of hybrid MMC for variable speed applications	45,000	6000	32,000	2000	5000	
38	Rohini S. Assistant Professor Baji K (Co-Investigator)	Aparna Ajithkumar Aswin Raj P Floriya Antony Lakshmi Santhosh	SCT College of Engg Pappanamcode	BT&BCE	Novel Target using Quercetin Delivery System for Prevention & treatment of cancer stem cells.	50,000	5000	35,000	5000	5000	
39	Susmitha Kumari Assistant Professor Rajitha J Rajan (Co-Investigator)	Aakash Muralidharan Allen Souj	SCT College of Engg Pappanamcode	BT&BCE	Physiochemical efficiency of constructed wetlands in the treatment of Automobile waste water	50,000	10,000	40,000			
40	Asha S. Assistant Professor Sajith Sethu P (Co - Investigator)	Manukulathilakan S	SCT College of Engg Pappanamcode	ECE	Vehicle Safety System With Real Time Heart attack and Drowsiness Monitoring.	37,000	10,000	20,000	2000	5000	
41	Dr. Baiju V. Assistant Professor	Abin Varkey Amal P Raj Hari Babuprakash Jose Gijo Ananthu V Pillai	TKM College of Engineering Kollam	ME	Solar powered hybrid water generator using adsorption.	49050	5000	34050	3000	3000	4000
42	Amal Azad Sahib Associate Professor Dr. Priya K. L. (co-Investigator)	Anand Nelson Muhammad Hijas H Josmer Jose Aswin P Unnithan	TKM College of Engineering Kollam	Civil	Drainage of Kuttanad soil using Electrokinetic Geosynthetics.	40,000	10,000	22,000	3000	5000	



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KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND ENVIRONMENT
An Autonomous body of the Government of Kerala

KSCSTE - Student Project entitled -"Phytochemical studies on Indian Borage (*Plectranthus amboinicus*)." submitted by Mr.Biju Jacob, Assistant Professor, Biotechnology, Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018as PI and Megha C J,Mymoon Raseefa P A,S V Nandakrishna,Neeraj S Dharanas student investigator(s) - financial assistance - Orders issued.

Council (P) Order No386/2021/KSCSTE Dated: Thiruvananthapuram,05/10/2021


- Ref: - 1. Decision of the 64th SP Committee meeting dated December 13, 2019 on item No. SP- 64_ (00271 /SPS 64/2019/KSCSTE)
2. KSCSTE/1292/2020-SP

ORDER

Kerala State Council for Science Technology and Environment (KSCSTE) is operating a programme for supporting student projects in colleges and university departments.Mr.Biju Jacob, Assistant Professor, Biotechnology,Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018, has submitted a student project as PI withMegha C J,Mymoon Raseefa P A,S V Nandakrishna,Neeraj S Dharanas student investigator(s) for financial assistance. The 64th SP Committee meeting dated December 13, has sanctioned **₹10000/- (Rupees ten thousand only)** for the conduct of the above said project. The PI has submitted the final report and financial statements after completion of the project.

KSCSTE has verified the submitted documents and is pleased to accord sanction for the release of **₹7245/- (Rupees seven thousand two hundred and forty five only)** towards financial assistance for the student project titled -"Phytochemical studies on Indian Borage (*Plectranthus amboinicus*)."submitted byMr.Biju Jacob, Assistant Professor, Biotechnology,Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018.The amount will be disbursed to **The Principal, Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018**by means of Electronic Fund Transfer as per their bank details given below.

Beneficiary Account Name	Principal, SCT College Pappanamcode
Beneficiary Account Number(SB/CC)	00000067059187685 37563956143
Beneficiary IFSC code	SBIN0070851
Name of bank	SBI, SCT Engineering College Branch, Pappanamcode
Beneficiary Address	The Principal, Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018


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Kerala State Council for Science, Technology and Environment

Prof (Dr.) K.P. Sudheer
Executive Vice President
KSCSTE, Pattom

16.01.2020

Letter No. 00271 /SPS 64/2019/KSCSTE

Dear Mr. Biju Jacob,

Sub:-Financial assistance for Student Project scheme of KSCSTE reg.
Ref:-Your application received under Student Project scheme

This is to invite your attention to the reference cited and to inform that the project proposal titled "Phytochemical studies on Indian Borage (*Plectranthus amboinicus*).", submitted by Mr. Biju Jacob as PI and Megha C J, Mymoon Raseefa P A, S V Nandakrishna, Neeraj S Dharan as student investigator(s) has been approved. An amount of ₹10000/- is sanctioned by the Council. The budget estimate of the project is as detailed below.

SL.NO.	ITEMS	AMOUNT(₹)
1	Consumables	6000
2	Minor equipments	2000
3	Travel	0
4	Research Literature & Documentation	1000
5	Others (for analysis)	1000
	Total	10000

The PI has to submit the signed Terms and Conditions (as per the guidelines) and the date of start of the project within two weeks to the undersigned. The project should be completed within six months and submit the certified soft copy of the final report (in pdf to sec@kscste.kerala.gov.in), audited Statement of Expenditure and Utilization Certificate counter signed by the Head of the Institution for releasing the grant. The format for final report, SE and UC can be downloaded from www.kscste.kerala.gov.in.

Thanking you,

Yours sincerely,

Prof (Dr.) K.P. Sudheer

To

Mr. Biju Jacob, Assistant Professor, Dept. of Biotechnology, Sree Chitra Thirunal College Of Engineering,
Pappanamcode P O, Thiruvananthapuram 695018

Copy to:

The Principal, Sree Chitra Thirunal College Of Engineering, Pappanamcode P O, Thiruvananthapuram 695018

Megha C J, Mymoon Raseefa P A, S V Nandakrishna, Neeraj S Dharan, Student(s), Bachelor of Technology
(BTech), Biotechnology, Sree Chitra Thirunal College Of Engineering, Pappanamcode P O,
Thiruvananthapuram 695018

Sasthra Bhavan, Pattom P.O., Thiruvananthapuram - 695 004, Kerala State, India
Tel : 0471 - 2548200-09, EVP - 2543557, 2548222, MS - 2534605, 2548220, CoA - 2543556, 2548220
Fax : 0471 - 2540085, 2534605 e-mail : kscste@gmail.com, www.kscste.kerala.gov.in

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Sree Chitra Thirunal
College of Engineering

Thiruvananthapuram - 695018



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KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND ENVIRONMENT

An Autonomous body of the Government of Kerala

KSCSTE -Technology Development and Adaptation Programme (TDAP) - Project entitled 'Development of a Prototype for a Float Type Multiform Wave Energy Harvester' submitted by Dr. R. Ajith, Head of the Department, Department of Mechanical Engineering, SCT College of Engineering, Pappanamcode - financial grant - sanctioned - Orders issued

Council (P) Order No1010/2019/KSCSTE Dated: Thiruvananthapuram,04/07/2019

- Ref. -
- 1 Revised Proposal dated: 03.05.2018
 - 2 File No. KSCSTE/812/2018-TDAP
 - 3 Minutes of the 11th meeting of TC-TDAP held on 23rd January 2018
 - 4 Letter No. TDAP/23/2017/KSCSTE, dt: 10.01.2019
 - 5 Agreement executed by Dr. R. Ajith

ORDER

1. As per reference (1) cited above, Dr. R. Ajith, Head of the Department, Department of Mechanical Engineering, SCT College of Engineering, Pappanamcode submitted a project proposal entitled 'Development of a Prototype for a Float Type Multiform Wave Energy Harvester' seeking financial assistance under the TDAP scheme. The Technical Committee for Technology Development and Adaptation Programme (TC-TDAP) of the Council evaluated the proposal and based on the recommendations, the Council has decided to support the project by offering an amount of Rs.5,25,000/-. As per reference (5) cited above, Dr. R. Ajith, Head of the Department, Department of Mechanical Engineering, SCT College of Engineering, Pappanamcode as the Principal Investigator (PI) executed an agreement on the Terms and Conditions, duly signed by the Principal, SCT College of Engineering, Pappanamcode, Thiruvananthapuram- 695 018, in the requisite stamp paper worth Rs. 100/-.

2. Kerala State Council for Science, Technology and Environment (KSCSTE) is pleased to accord sanction for the project entitled 'Development of a Prototype for a Float Type Multiform Wave Energy Harvester' submitted by Dr. R. Ajith under Technology Development and Adaptation Programme and to support the project by providing financial grant of Rs.5,25,000/- (**Rupees Five Lakh Twenty Five Thousand only**). The Co-Principal Investigators (Co-PIs) of the project shall be Shri. Abhilash S. S., Assistant Professor, Department of Mechanical Engineering, SCT College of Engineering, Pappanamcode, Thiruvananthapuram- 695 018. The Principal Investigator (PI) shall be responsible for the smooth implementation of the project, submission of periodic report and successful and time bound completion of the project. The financial responsibility of the project shall be vested with the Principal Investigator (PI)

3. Based on the recommendations of TC-TDAP, Rs.3,22,500/- (cost of equipment + 50% of budget heads 2, 3, 4 & 5) will be released as initial payment and the funds will be released to the Head of the Institution. The sanctioned budget heads for the project are as given below.

Sl. No.	Item	Amount (Rs.)
1	Equipment	1,20,000/-
2	Consumables	3,00,000/-

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3	Manpower (Labour Charges)	25,000/-
4	Travel Expenses	50,000/-
5	Other expenses	30,000/-
	Total	5,25,000/-

4. Duration of the project shall be six months. PI should report the date of start of the project and in any case, it shall not be later than one month of the date of issue of the Council Order. Also, it should be ensured that Quarterly Progress Reports (QPRs) in the prescribed format are submitted promptly.

5. Head of the Institution should ensure that the Terms & Conditions executed are strictly followed in the implementation of the project.

6. KSCSTE's name should be engraved or affixed permanently on all equipment/ instruments procured and also fabricated ones under the TDAP Programme of KSCSTE as 'Procured under TDAP project sanctioned from KSCSTE'. It should be ensured that all the assets are acquired strictly following the purchase procedure of the institution.

7. KSCSTE is pleased to release Rs 3,22,500 (Rupees Three Lakh Twenty Two Thousand and Five Hundred only) being the first installment of the project cost for the implementation of the project and the amount will be disbursed to The Principal, SCT College of Engineering, Pappanamcode, Thiruvananthapuram - 695 018 through net banking for the above said purpose.

8. The balance amount will be released based on the performance review of the project and verification of audited financial statements (Statement of Expenditure and Utilization Certificate) in the prescribed format.

9. The amount will be disbursed to the following Bank Account through net banking e-payment.

Beneficiary Account Name	The Principal, SCT College of Engineering
Beneficiary Account Number (SB/CC)	37563926143
Beneficiary IFSC code	SBIN0070851
Beneficiary Name and Branch	State Bank of India, SCT Engineering College Branch, Pappanamcode
Beneficiary Address	SCT College of Engineering
Beneficiary Mobile No.	9447537887
Beneficiary email id	aathir@sbci.co.in

10. The expenditure in this regard will be met from the Council's budget head III Schemes and Programmes of KSCSTE (E-3) Technology Development and Adaptation Programme.

Signature valid

Digitally signed by **AJUDHEER K P**
 Date: 2019.08.25 15:25:30 IST
 Reason: **AJUDHEER**

EXECUTIVE VICE PRESIDENT, KSCSTE



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**APJ Abdul Kalam Technological University
Thiruvananthapuram**

Abstract

APJAKTU - CERD - Engineering Colleges - Financial Assistance to Student Project - Administrative Sanction - Accorded -Orders issued.

CERD

U.O.No. 933/2021/KTU

Thiruvananthapuram, Dated: 15.06.2021

- Read:-**
1. Minutes of the 1st meeting of Engineering Research Council dated 27.01.2010.
 2. Minutes of 2nd meeting of Executive Committee dated 21.10.2010.
 3. Meeting of the 2nd Research Council dated 29.02.2017.
 4. Proposals of Student Project for Financial Assistance.
 5. Screening Committee meeting held on April /May 2021 for evaluation of project proposals.

ORDER

Vide paper read 1st above, the Engineering Research Council had approved the scheme for Financial Assistance to Student Project for the Government Engineering College. Vide paper read 2nd above, it was decided to extend the financial assistance for the students project to the students of the Government aided and Government Controlled Engineering Colleges.

It was decided to extend the financial assistance to Students Project of all engineering colleges affiliated to KTU with NBA accreditation as per paper read 3rd above. It was also decided that the financial assistance will be provided as reimbursement of expenditure occurred for the sanctioned project.

The Screening Committee meetings held in April/May 2021 evaluated the project proposals forwarded from Engineering Colleges affiliated to KTU and recommended financial assistance to selected proposals as listed in Annexure 1.

Administrative sanction is therefore accorded for financial assistance to student project as detailed in Annexure I. The project shall be completed within a period of 1 year and the project should be completed with the students who presented the project before the Screening Committee.

The expenditure should be incurred as per the terms and conditions as per Annexure II. The amount will be reimbursed to the Principal of the concerned Colleges only after the successful completion of the project and on the production of certified bills & vouchers along with the audited utilization certificate, statement of expenditure and project completion report.

The expenditure shall be met from the Head of Account " S- 3- Research Activities-002-Innovative Student Project".

Orders are issued accordingly.


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Dr. Shalij P.R *



Copy to:-

1. Principals of Engineering Colleges.
2. Principal Investigators.

* This is a computer system (Digital File) generated letter. Hence there is no need for a physical signature.



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ANNEXURE-I - STUDENT PROJECT SELECTED LIST 2020-21

Sl No	Name of Principal Investigator	Name of Student Investigators	College	Branch	Title of the Project	Consumables	Equipments	Travel	Contingency	Amount sanctioned
1	Dr. Sajith Vijayaraghavan	Athul T Devika Shaji Gaadha P Nath Shyama H	College of Engineering Trivandrum	ECE	Re-Vent: A Low-Cost Portable Ventilator for COVID-19	3500	30,000		1500	35,000
2	Dr. T Rajeev Professor	Ankith K Lekshmy P Merin Mariam Jose Sreejith KS	College of Engineering Trivandrum	EEE	Sustainable and Portable Electricity Delivery system	2000	18,000	1700	1500	23,200
3	Dr. Dinesh Gopinath Associate Professor	Adarsh M S Nair Basil P Mathew Jijo George Varghese Vishnu P Nambiar	College of Engineering Trivandrum	EEE	Photovoltaic array Emulator based on buck converter	5000	20,000	3000	3000	31,000
4	Jayakumar P Associate professor	Ansu Susan Bijoy Samanya Subash Maneesha Mohan Haripriya MD	College of Engineering Trivandrum	EEE	Intelligent Grid Tie Module		12,525	500	500	13,525
5	Sajitha M Assistant Professor	A Sreelesh Saajid KS Sreerag K Sreeraj S.	Govt. Engg. College, Sreekrishnapuram.	EEE	Smart Energy Meter with remote load switching And anti energy theft system.	10,000	22,000	1000	4000	37,000
6	Dr. Sreelakshmi R Professor	Arjun K Ajay Krishnan P V Haseeb Rahman V K Sinadin Zidan K	GEC Thrissur	CSE	An alert hardware system to prevent intruder animals in huge agricultural lands using machine learning	5000	20,000		2000	27,000
7	Biji G Assistant Professor	Jyothis J Joy Akbarsha Rahul Krishnan R Sini Sreekumar	GEC Barton Hill	EEE	Enhanced power quality electric vehicle changing system	6000	30,000	2000	2000	40,000
8	Sudheesh Kumar C P Associate Professor	Aakarsh S Abhilash P Abhinav K V Akshay C C	GCE Kannur	ME	Experimental investigation of rainfall induced noise from roofing sheets	10,000	30,000	5000	5000	50,000
9	Dr. Sajesh Kumar U Assistant Professor	Anupriya T V Aswin C P Harishma Hari Yadun Murali K	GCE Kannur	ECE	Design, verification and implementation of LoRa WAN based end to end communication system for air pollution monitoring	7500	24,000		2500	34,000
10	Dr. U Prakash Professor	C Sathesh Sanjay Kumar S Raamesh Bhardwaj Nidhin Mohan J	Sree Chitra Thirunal College of Engineering Trivandrum	ME	Hybrid supercapacitor battery pack in electric scooter	10,000	28,000	4000	3000	45,000

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11	Dr. Lakshmi V S Assistant Professor	Midhun B M Midhun M Naveen Jo Sajan Neelima Anilkumar	Sree Chitra Thirunal College of Engineering Trivandrum	ECE	Automated Public Distribution System using Blockchain	5000	15,000		2500	22,500
12	Vineetha Lekshmy P V Assistant Professor	Abdur Rameez S Anjali N Anupa Pradeep Shona Maria Shaji	Sree Chitra Thirunal College of Engineering Trivandrum	BTBC	Synthesis of Nanocellulose from Tapioca (Manihot esculenta) stem and leaves and the formulation of a bionanocomposite film reinforced with tapioca starch and glycerol for bio-packaging	10,000	25,000		5000	40,000
13	Dr. R Sudhir Kumar Professor	Sai Prasanth N Jishnu S Novin Antony Sanal Kumar A	NSS College of Engineering Palakkad	ME	Development of Sensor Activated Safety System For Drowning Car	10,000	30,000	5000	5000	50,000
14	Dr. Sudha T Principal	Neha Rahul R Sreenidhi P A Vyjayanthi J Shenoy	NSS College of Engineering Palakkad	ECE	AI enabled remote medical assistant	5000	9000		1500	15,500
15	Dr. Sreelekshmy Pillai G Assistant Professor	AGNES MARIKJ ANCYMOL STANLEY ATHIRA P HARITHA MS	NSS College of Engineering, Palakkad	Civil	FACILE IRRIGATION	15,000	25,000	5000	5000	50,000
16	PRADIP C Associate Professor	KRISHNA PRASAD R NIHAL FARHAN K T SANEESH T T SANJU P P	NSS College of Engineering, Palakkad	EEE	GREEN CHARGING STATION	4000	15,500	2000	3000	24,500
17	Dr. Surya S S Assistant Professor	Mohamed Nazique V S Muhammad Niyas Vishnu V S Mohamed Fuaadh K P	NSS College of Engineering, Palakkad	Civil	Liquid speed breaker	10,000	20,000	5000	5000	40,000
18	Nikhil Binoy C Associate Professor	Anjali Shah Dilijith R Thejaswikrishna L Thoufeek M	NSS College of Engineering, Palakkad	EEE	Gas leakage prediction and automation using Artificial neural network and Internet of Things	5000	20,000	1000	4000	30,000
19	Eldho Paul Assistant Professor	Thomas Chacko Adash V M Nevil Abraham Elias Sourav Sunil	Mar Athanasius College of Engineering, Kothamangalam	ME	Design and fabrication of Sapling planting machine	10000	17,000	5000	5000	37,000
20	Thomas Mohan Assistant Professor	Alwin Mathew Bennet Mathew Krishnakumar V S Sehjay Shajan	Mar Athanasius College of Engineering, Kothamangalam	ECE	Intelligent System of Crop fencing from wild animal attacks	5000	15,000		2500	22,500
21	Dr. Siddharth Shelly Assistant Professor	Minnu Varghese Rohit Deepak Rugma N Shaji Thejus K	Mar Athanasius College of Engineering, Kothamangalam	ECE	Navigation Method for Visually Impaired	2000	7500		2000	11,500





All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)
Nelson Mandela Marg, VasantKunj, New Delhi-110070 Website: www.aicte-india.org

MODROB - Sanction Letter

F.No.9-1/IDC/MODROB/Policy-1/2019-20

Date: 20.07.2020

To

The Drawing and Disbursing Officer,
 All India Council for Technical
 Education, Nelson Mandela Marg,
 Vasant Kunj, New Delhi - 110070

Sub: Release of a sum of **Rs.1915000/- (Rupees Nineteen Lakh Fifteen Thousand Only)** being the **Grant-in-Aid** under the scheme **Modernization and Removal of Obsolescence (MODROB)** for the year **2019-20** payable during the current financial year **2020-21**- reg.

Sir,

With reference to the proposal submitted by the institute, this is to convey that the sanction of the Council for payment of **Rs.1915000/- (Rupees Nineteen Lakh Fifteen Thousand Only)** as Grant-in-Aid under the **Modernization and Removal of Obsolescence (MODROB)** scheme, as per details given below:

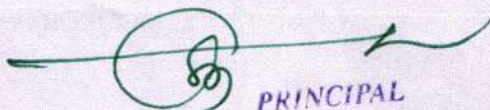
1.	Name and address of the Beneficiary Institution:	Director/ Principal/ Registrar, SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING, PAPPANAMCODE THIRUVANANTHAPURAM		
2.	Title of Project:	Modernization of Downstream Processing Laboratory (Biotechnology and Biochemical Engineering)		
3.	Name of Coordinator:	Mr. BIJU JACOB		
4.	Duration of the project:	2 years		
4.	Total Grant-in-aid Sanctioned:	Total: Rs.1915000/-	Non-Recurring (85%): Rs.1627750/-	Recurring (15%): Rs.287250/-
5.	Amount to be released during the year 2020-21:	1st Installment Rs.1915000/-	Non-Recurring (85%): Rs.1627750/-	Recurring (15%): Rs.287250/-
6.	Sanctioned grant-in-aid is debatable to:	Major Head 601.18(a) Gen. (Plan Head)		

- The amount of the Grant shall be drawn by the Drawing and Disbursing Officer, All India Council for Technical Education on the Grant-in-Aid bill and shall be disbursed to and credited to the account of Director/Principal/ Registrar of the Institute through RTGS/PFMS.
- This Grant-in-Aid is being released in conformity with the terms & conditions as well as norms of the scheme as already communicated, and also being communicated in this letter.

The instructions/guidelines to be followed by University/Institution

i. Release of funds

- The Principal/ Director of the institute and the Coordinator of the project are hereby requested to verify the correctness of the undermentioned bank account/ RTGS details submitted by them along with the Proposal in which the grant is being released:


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F.No.9-1/IDC/MODROB/Policy-1/2019-20



Institute PAN No.	Bank Name	Bank Branch Name	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AADTS5927K	STATE BANK OF INDIA	SCT ENGINEERING COLLEGE BRANCH	SCT ENGG. COLLEGE CAMPUS, PAPPANAMCODE, THIRUVANTHAPURAM-18	PRINCIPAL	Current Account	37563956143	SBIN007085

In case of any omission the same should be reported to AICTE immediately.

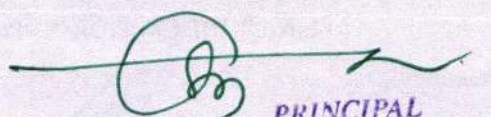
- The sanction is issued in exercise of the powers delegated to the council and other terms & conditions laid down in the guidelines of the scheme.
- 100% grant of the sanctioned amount is being released to Government/Govt. Aided institutions. Utilization Certificate (UC) and other requisite documents are to be submitted within one month of the completion of the project.
- To self-financed/Pvt. Institutions 80% of the sanctioned amount is being released as first installment followed by 20% as reimbursement after receipt of UC and other requisite documents as specified in terms & Conditions of MODROB Scheme.

II. Maintenance of accounts

- The Institute shall strictly follow the provisions laid down in the scheme document and sanction order No. F.No.9-1/DC/MODROB/Policy-1/2019-20 dated 20.07.2020 issued by this office. All correspondences related to the project must contain this number along with year of sanction of the project; failing which correspondence will not be entertained.
- Funds covered by this grant shall be kept separately and would not be mixed up with other funds, so as to know the amount of interest accrued on the grant AICTE.
- The University/College/Institute shall maintain proper accounts of the expenditure out of the grants, which shall be utilized only on approved items of expenditure (list enclosed).
- The Council or its nominee shall have the right to check /verify the account to satisfy that the fund has been utilized for the purpose for it was sanctioned.
- The date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Principal / Director / Registrar shall intimate about the receipt of the grant to AICTE. Any expenditure incurred prior to the issuance of the approval letter will not be allowed to be adjusted in the grant and if the Institution / University do not take the project work within one month of the receipt of the grant, the approval shall ipso fact lapse.
- After receipt of the grant from AICTE, the Institute shall send a confirmation to AICTE within 2 months of receipt of grant that the sanctioned project has been started/is in progress.

III. Refund of grant by way of a demand draft in favour of Member Secretary, AICTE, New Delhi

- If the college/institute does not have the Letter of Approval (LOA) or Extension of Approval issued by AICTE for the academic year 2020-21, the fund released should be immediately refunded to AICTE with interest accrued thereon.
- If project is not started within six months of the issuance of this Offer Letter, the released amount, along with interest accrued thereon, has to be necessarily returned to AICTE.
- In any case, if the institute is required to refund the grant or interest accrued thereon or balance amount, the amount will be refunded to AICTE.
- It may be ensured that the project is completed within the stipulated time. If the project is not completed in time, no further extension will be granted in any case and institute has to refund the entire amount to AICTE.


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F.No.9-1/DC/MODROB/Policy-1/2019-20



- e. As AICTE needs adequate time for depositing the Demand Draft in the bank, the same be immediately dispatched to avoid any lapse of the validity period.

IV. Submission of documents by college/institution after completion of Project/Subsequent years.

The following mandatory relevant documents are required to be submitted by the college/institution within one month of the completion of the project: -

- a. Feedback form in the prescribed proforma.
- b. The **Annual Progress Report (APR)** in the prescribed format along with the original Statement of actual Expenditure in the prescribed proforma duly signed by the Head of the institution and shall be submitted to AICTE not later than one month after completion.
- c. The **Utilization Certificate (UC)** supported by Audited Statement of Expenditure to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the AICTE immediately after completion of the project. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council. Audited Statement of Expenditure indicating expenditure incurred in the total duration of the project in the prescribed format and GFR-19 shall be submitted to the Council.
- d. In case of self-financing/private institutions, Statement of actual Expenditure & Utilization Certificate are required to be audited & signed by a Chartered Accountant (with membership no., full address & stamp). Photocopies of formats are enclosed.
- e. **Program Evaluation Committee (PEC)** is required to be constituted at Institutional level. The constitution of the PEC shall be asunder:
 - (i) Principal/Director/Registrar of the Institution(Chairperson)
 - (ii) Coordinator of the project (Member Secretary),
 - (iii) Two HODs and one subject expert(Members).

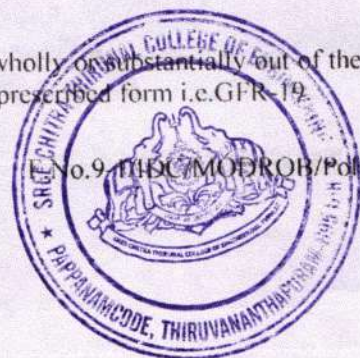
The members of the said PEC shall not be below the rank of Associate Professor. The minutes of the meetings are to be submitted to the Council at end of the project along with other mandatory documents.

- f. Project completion report project indicating the activities undertaking, number of students benefited, laboratory works photographs of students, together with their views is to be submitted.
- g. Attested photocopies of supporting vouchers/bills of expenditure incurred for the completion of Project.
- h. Photographs of equipment's purchased.
- i. The balance amount of the grant will be reimbursed to the university/institution only on submission of the above documents. On receipt of these documents, the total amount of balance of financial assistance, admissible as per the norms, shall be worked out and grant-in-aid shall be released, as second installment, in favour of the beneficiary institution.

V. General instructions

- a. The amount of interest accrued on the grant should be treated as part of the grant to be utilized for that particular project. However, the interest amount accrued along with grant disbursed should not exceed the total grant sanctioned for the project. The Institute receiving the grant should reflect the same in the audited statement of accounts/ utilization certificate and may either refund the interest amount to AICTE or AICTE shall adjust the same in the next installment of grant before its released.
- b. Any unavoidable circumstantial change in the project with respect to name of Project Coordinator for the MODROB project would mandatorily require prior approval of the Council. All such requests should be addressed to AICTE, in advance, recording the specific reasons for proposed changes, failing which the offer for the grant already issued would be treated as automatically withdrawn and the financial assistance released in favour of the beneficiary institution shall be refunded immediately to the Council. Kindly mention the File No.9-1/RIFD/MOD/Policy-1/2019-20 in your future correspondence.
- c. The grantee shall maintain an audited record of assets acquired wholly or substantially out of the Grant-in-Aid and a register of assets shall be maintained by the Institute in the prescribed form i.e.GFR-19.


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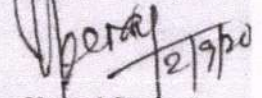


- d. The College / Institute receiving grant under MODROB is expected to put up a plaque at the main entrance of the Lab/Department, which has been modernized using the grant. All the equipment procured through the project should be super scribed with AICTE project file number.
- e. The assets acquired wholly or substantially out of grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the AICTE and should at any time the institution cease to function, such assets shall revert to the AICTE.
- f. The grantee Institution shall observe all financial norms and guidelines as prescribed by the AICTE/ Government of India from time to time. GOI GFR rules (@<https://doe.gov.in/order-circular/general-financial-rules2017-0>) should be followed during utilization of grant.

List of Equipment's approved:

Name of Equipments
CyberLab LC-100 HPLC system
Bench-top cross flow filtration kit (UF,MF, NF and RO)
Batch crystallizer
Rotary vacuum evaporator
Plate and frame filter press

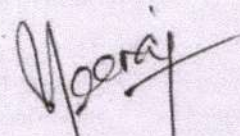
Yours sincerely,



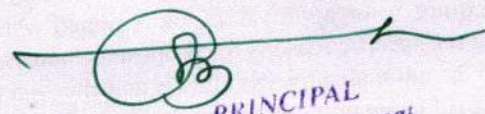
Dr. Neeraj Saxena
Advisor - II (IDC)

Copy forwarded for information and necessary action to:

1. **Name and Address of the Coordinator,**
Mr. BIJU JACOB
SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING,
PAPPANAMCODE THIRUVANANTHAPURAM 695018
2. **The Registrar / Director / Principal,**
Mr. BIJU JACOB
SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING
PAPPANAMCODE THIRUVANANTHAPURAM 695018
3. **Guard File**



Dr. Neeraj Saxena
Advisor - II (IDC)



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GOVERNMENT OF KERALA

Abstract

Sree Chitra Thirunal College of Engineering - Annual Plan 2021-22 - Setting up of new Nano Electronics & Materials Lab in the Department of Electronics & Communication Engineering - Revised Administrative Sanction accorded - Orders issued.

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.76/2022/TRANS Dated,Thiruvananthapuram, 21-02-2022

Read 1 GO(Rt)No.294/2021/Trans dated 03.09.2021.

- 2 Letter no.60/AC1/2022/SCTCE(PF) dated 04.02.2022 from the Principal, Sree Chitra Thirunal College of Engineering.
- 3 Minutes of the Departmental Working Group meeting held on 08.02.2022.

ORDER

As per the Government order read above, administrative sanction was accorded for the setting up of a Nano electronics & Materials Research Lab in the Department of Electronics & Communication Engineering of Sree Chitra Thirunal College of Engineering at an estimated cost of Rupees One crore by meeting the expenditure under the head of account '5055-00-800-74 (P)'. One of the components of this administrative sanction is the purchase of 'Nano Electronic Circuit Design and Optical Simulation tool - Cadence University Bundle, Optisim / Optigrating Simulation software'.

2. As per the letter read above, the Principal, Sree Chitra Thirunal College of Engineering informed that a meeting of the Technical Committee held on 01.02.2022 decided to recommend to purchase 'Optisystem software' instead of 'Optigrating Simulation Software' and also to purchase 21 numbers of Desktop computers. The Principal informed that the cost for these computers is available due to the deletion of two items - Optical System Analyser and White Light Source - coming under Optical Equipments and hence there is no change in the total administrative sanction amount of Rupees one crore. The Principal also informed that the recommendation of the Technical

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Committee was approved by the meeting of the External Purchase Committee held on 03.02.2022. He has therefore requested to take steps for issuing a revised administrative sanction with the modifications - Purchase of Optisystem Software instead of Optigrating Simulation Software and also to purchase 21 numbers of Desktop computers (Desktop High End Windows 10 with Intel processor) additionally. The Departmental Working Group met on 08.02.2022 considered the proposal and approved the same as per the minutes read above.

3. Government have examined the matter and are pleased to issue revised administrative sanction for the setting up of a Nano electronics & Materials Research Lab in the Department of Electronics & Communication Engineering of Sree Chitra Thirunal College of Engineering at an estimated cost of Rupees One crore by meeting the expenditure under the head of account '5055-00-800-74(P) ' with the following modifications:

1. Optisystem Software shall be purchased instead of Optigrating Simulation Software
2. sanction is also accorded for the purchase of 21 numbers of Desktop computers (Desktop High End Windows 10 with Intel processor).

4. The Government Order read above stands modified to the above extent.

(By order of the Governor)
VIJAYASREE K S
JOINT SECRETARY

The Principal, Sree Chitra Thirural College of Engineering,
Pappanamcode, Thiruvananthapuram

Dr.Smitha P.S., Assistant Professor, Department of Electronics &
Communication Engineering, Sree Chitra Thirunal College of
Engineering, Pappanamcode, Thiruvananthapuram

(through the Principal, Sree Chitra Thirunal College of Engineering)

The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram

The Sub Treasury Officer, Government Secretariat Sub treasury,
Thiruvananthapuram

Transport (D) Department

Planning & Economic Affairs Department



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GOVERNMENT OF KERALA

Abstract

Sree Chitra Thirunal College of Engineering - Annual plan 2021-22 - Setting up of new Nano electronics & Materials Lab in the Department of Electronics & Communication Engineering - Administrative Sanction accorded - Orders issued.

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.294/2021/TRANS Dated,Thiruvananthapuram, 03/09/2021

- Read 1 Proposal from the Principal (i/c), Sree Chitra Thirunal College of Engineering
- 2 Minutes of the 1st Departmental Working Group meeting for 2021-22 held on 30.04.2021.
 - 3 Government letter No.TRANS-A3/90/2021-TRANS dated 29.07.2021
 - 4 Letters No.92-A2/2021/SCTCE dated 25.06.2021, 29.06.2021 and 25.08.2021 from the Principal (i/c), Sree Chitra Thirunal College of Engineering
 - 5 Minutes of meeting of Technical Committee held on 09.08.2021.

ORDER

The Departmental Working Group (Transport) held on 30.04.2021 has approved the proposal submitted by the Principal (i/c), Sree Chitra Thirunal College of Engineering for the setting up of new Nano electronics & Materials Lab in the Department of Electronics & Communication Engineering at an estimated cost of Rs. 1.00 Crore. The Technical Committee, after scrutinizing the estimates and specifications of items, recommended purchase of equipments for setting up of the new Nano electronics & Materials Lab, as per the minutes read as 5th paper above.

2. As approved by the Departmental Working Group and the

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19/9/21

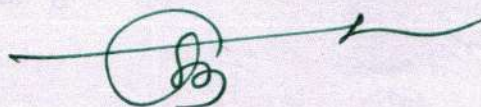
Technical Committee, Government are pleased to accord administrative Sanction for the Establishment of a New Laboratory - Nano electronics & Materials lab in the Department of Electronics & Communication Engineering of the Sree Chitra Thirunal College of Engineering at an estimated cost of Rs.1 Crore (Rupees One Crore only) by meeting the expenditure under the Head of Account '5055-00-800-74 (P) - Academic Infrastructure Development - Sree Chitra Thirunal College of Engineering'. This administrative sanction includes the purchase of the following items:

1. Materials Synthesis Equipments
2. Device Fabrication Equipments
3. Device Characterization Equipments
4. Nano electronic Device Modeling Tool - COMSOL Multiphysics
5. Nano electronic Circuit Design and Optical Simulation tool - Cadence University Bundle, Optisim / Optigrating Simulation software
6. Optical equipments
7. Computational Facility - Desktop Computers i5 (20 Nos.), Gpu-Nvidia (1 No.), Desktop computer i9 (1 No.), Networking devices and UPS
8. Furniture
9. Air-conditioner (4 Nos.)
10. Consumables

3. Dr.Smitha P.S., Assistant Professor, Department of Electronics & Communication Engineering shall be the Project Manager and she shall ensure that the project will be completed within 31.03.2022.

(By order of the Governor)
Vijayasree K S
Joint Secretary

The Principal (i/c), Sree Chitra Thirunal College of Engineering,
Pappanamcode, Thiruvananthapuram
Dr.Smitha P.S., Assistant Professor, Department of Electronics &
Communication Engineering, Sree Chitra Thirunal College of
Engineering, Pappanamcode, Thiruvananthapuram



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(through the Principal, Sree Chitra Thirunal College of Engineering)
 The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram
 The Sub Treasury Officer, Government Secretariat Sub treasury,
 Thiruvananthapuram
 Transport (D) Department
 Planning & Economic Affairs Department
 Finance Department
 The Information & Public Relations (Web & New Media) Department
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 Section Officer

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GOVERNMENT OF KERALA

Abstract

Sree Chitra Thirunal College of Engineering - Annual plan 2021-22 - Release of funds for the establishment of Nano Electronics & Materials Lab and Centre for Innovation - Sanctioned - Orders issued.

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.446/2021/TRANS Dated,Thiruvananthapuram, 15/12/2021

Read 1 G.O.(Rt.)No.211/2021/TRANS dated 26.06.2021

2 G.O.(Rt)No.294/2021/TRANS dated 03.09.2021

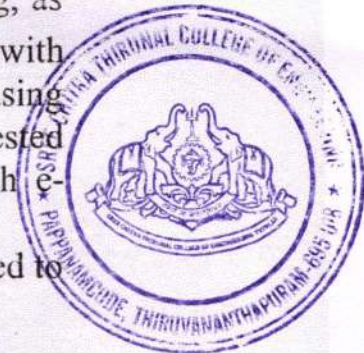
3 Letter No.92-A2/2021/SCTCE dated 10.11.2021 from the Principal, Sree Chitra Thirunal College of Engineering

ORDER

As per the Government Order read as 1st paper above, Administrative Sanction was accorded for the establishment of a Centre for Innovation in the Department of Mechanical Engineering of Sree Chitra Thirunal College of Engineering at an estimated amount of Rs.90,00,000/- (Rupees ninety lakh only). Administrative Sanction was also accorded for the establishment of a new laboratory (Nano electronics & Materials lab) in the Department of Electronics & Communication Engineering of the Sree Chitra Thirunal College of Engineering at an estimated cost of Rs.1 Crore (Rupees One Crore only), as per the Government Order read as 2nd paper above. These expenditures are to be met under the head of account '5055-00-800-74 (P)'.
2. The Principal, Sree Chitra Thirunal College of Engineering, as per the letter read as 3rd paper above, informed that in accordance with the above said administrative sanctions, the procedure for purchasing various items through e-tender had been initiated. Hence, it is requested to release the sanctioned amounts for procuring the items through e-tender.

3. Government have examined the matter in detail and are pleased to

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accord sanction to release Rs.1.90 Crore (Rupees one crore and ninety lakh only), for bearing the expenses of establishing a new laboratory (Nano electronics & Materials Lab) in the Department of Electronics & Communication Engineering (Rs.1 crore) and a Centre for Innovation in the Department of Mechanical Engineering (Rs.90 lakh) in Sree Chitra Thirunal College of Engineering, from the Head of Account '5055-00-800-74 (P) - Academic Infrastructure Development - Sree Chitra Thirunal College of Engineering' to the treasury PSTSB account No.799012700002151 of the Principal, Sree Chitra Thirunal College of Engineering.

(By order of the Governor)
K R Jyothish
Principal Secretary

The Principal (i/c), Sree Chitra Thirunal College of Engineering,
Pappanamcode, Thiruvananthapuram
The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram
The Sub Treasury Officer, Government Secretariat Sub treasury,
Thiruvananthapuram
The Transport (D) Department
The Planning & Economic Affairs Department
The Finance Department

(vide note No.1924351/I&PW-A1/21-Fin dated 13/12/2021)

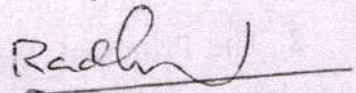
The Information & Public Relations (Web & New Media) Department
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GOVERNMENT OF KERALA

Abstract

Transport Department-Departmental Working Group - Administrative Sanction - Accorded - Orders issued.

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.357/2021/TRANS Dated, Thiruvananthapuram, 25/10/2021

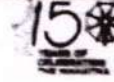
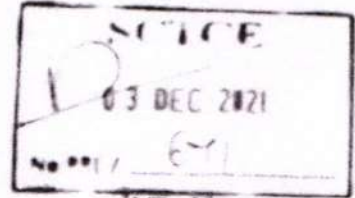
- Read 1. Letter No.92/A2/2021/SCTCE dated 01.10.2021 from the Principal(i/c), Sree Chithra College of Engineering.
2. Letter No.ML1/006040/21 dated 05.10.2021 from the Chairman&Managing Director Kerala State Road Transport Corporation.
3. Letter No.AB5(AB3)/030709/18 dated 05.10.2021 from the Chairman&Managing Director Kerala State Road Transport Corporation.
4. Minutes of the Departmental Working Group meeting held on 06.10.2021.

ORDER

In the Departmental Working Group meeting held on 06.10.2021, the proposal submitted by the Principal(i/c), SCT College of Engineering and Chairman&Managing Director KSRTC were approved. In the circumstance, as approved by the Departmental Working Group, Government are pleased to accord Administrative Sanction for the following proposals as detailed below:

Department	Head of Account	Outlay	Component	Approved amount
Sree Chitra Thirunal College of Engineering	3055-00-800-93- E-mobility promotion fund	12 crore	Conversion of diesel mini bus and Autorickshaw to Electric Vehicles	Rs.30 lakh

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06/12/2021

Kerala State Road Transport Corporation	5055-00-800-91 - Road Transport Safety measure	8 crore	Installation of Dash board cameras to 150 Super class buses of KSRTC	Rs 1 crore
Kerala State Road Transport Corporation	3055-00-800-93- E-mobility promotion fund	12 crore	Payment towards KSEB Nilaykkal Charging Station	Rs.12.3192 lakh

2. The expenditure shall be met from the current financial year. Dr. Prakash U, Professor in Mechanical Engineering shall be the Project Manager in respect of the proposal from the SCT College of Engineering and Sri. R.Chandrababu, Executive Director (Maintenance&Works) shall be the Project Manager in respect of the proposals from KSRTC. The date of completion of the projects shall be 31.03.2021.

(By order of the Governor)
Biju Prabhakar
Secretary

The Commissioner, Kerala Road Safety Authority, Thiruvananthapuram
The Transport Commissioner, Thiruvananthapuram
The Chairman & Managing Director, Kerala State Road Transport Corporation, Thiruvananthapuram

~~The~~ Principal, Sree Chitra Thirunal College of Engineering, Pappanamcode, Thiruvananthapuram

The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram
The Sub treasury Officer, Government Secretariat Sub treasury, Thiruvananthapuram

The Transport (D) Department

The Planning & Economic Affairs Department

The Finance Department

The Information & Public Relations (Web & New Media) Department

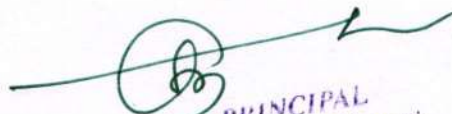
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GOVERNMENT OF KERALA

Abstract

Sree Chitra Thirunal College of Engineering - Plan fund 2021-22
Academic Infrastructure Development -Establishment of a centre for
Innovation in the Department of Mechanical Engineering for an
estimated amount of Rs 90,00,000/- - Administrative Sanction accorded-
Orders issued

TRANSPORT (D) DEPARTMENT

G.O.(Rt)No.211/2021/TRANS Dated,Thiruvananthapuram, 26/06/2021

Read 1 Letter No.92-A2/2021/SCTCE dated 15.06.2021 from the
Principal, Sree Chitra Thirunal College of Engineering
2 Minutes of the Departmental Working Group meeting held on
24.06.2021

ORDER

An amount of Rs. 9 Crore (Rupees Nine crore only) is provided
in the State Budget 2021-22 to Sree Chitra Thirunal College of
Engineering, Thiruvananthapuram for the Academic Infrastructure
Development in the under the plan head of account '5055-00-800-74'.
The Principal, Sree Chitra Thirunal College of Engineering as per the
letter read above submitted a proposal for Rs. 90,00,000/- for Academic
Infrastructure Development -Establishment of a centre for Innovation in
the Department of Mechanical Engineering.

2. Government have examined the matter in detail and are
pleased to accord Administrative Sanction for the Academic
Infrastructure Development -Establishment of a centre for Innovation in
the Department of Mechanical Engineering for an estimated amount of
Rs 90,00,000/- (Rupees Ninety Lakh only). This expenditure shall be
debited from the plan head '5055-00-800-74 - Academic Infrastructure
Development - Sree Chitra Thirunal College of Engineering' on

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Condition that an Advisory Board shall be constituted with Dr.Prakash.U, Professor & Head of Division of Mechanical (Automobile) Engineering , Dept. of Mechanical Engineering as Head and experts in Auto mobile sector especially from IOC, ARE, TATA CRRI so as to make the institution as premium College in five years.

3.Dr.Prakash.U, Professor & Head shall be the Centre Head and he shall ensure that the project is completed within 31.03.2022.

(By order of the Governor)
Biju Prabhakar
Secretary

The Principal, Sree Chitra Thirunal College of Engineering,
Pappanamcode, Thiruvananthapuram

The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram

The Transport (A) Department

The Planning & Economic Affairs Department

The Finance Department

The Information & Public Relations (Web & New Media) Department

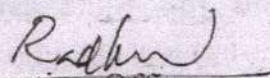
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GOVERNMENT OF KERALA

Abstract

Sree Chitra Thirunal College of Engineering - Plan fund 2021-22 - Academic Infrastructure Development - Establishment of a Centre for Innovation in the Department of Mechanical Engineering for an amount of Rs.90 lakh - Revised administrative sanction accorded - Orders issued.

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.77/2022/TRANS Dated,Thiruvananthapuram, 21-02-2022

Read 1 G.O.(Rt)No.211/2021/TRANS dated 26.06.2021.

2 Letter NO.114/AC1/2021/SCTCE(PF) dated 07.02.2022 from the Principal, Sree Chitra Thirunal College of Engineering.

3 Minutes of the Departmental Working Group meeting held on 08.02.2022.

ORDER

As per the Government Order read above, administrative sanction was accorded for the establishment of a Centre for Innovation in the Department of Mechanical Engineering, Sree Chitra Thirunal College of Engineering for an estimated amount of Rs 90/- lakh (Rupees Ninety Lakh only) by meeting expenditure under head of account '5055-00-800-74'. Accordingly, the Board of Governors of the College met on 02.09.2021 sanctioned purchase of various items for the work, which included 'ANSYS Research Edition with various add-ons, LabVIEW 2020 professional software (1 user license) and CATIA Software (Single user license)'.

2. As per the letter read above, the Principal, Sree Chitra Thirunal College of Engineering now informed that the External Purchase Committee, in its meeting held on 03.02.2022, after considering the decision and recommendation of Advisory Committee and Technical Committee approved certain modifications in the items to be purchased, subject to the approval of the Board of Governors. The suggested modifications are to replace 'ANSYS Research edition with various



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add-ons' with 'Altair Multiphysics/ Mechatronics Engineer (MME)' and to replace 'LabVIEW 2020 professional software and CATIA Software' with 'IPG Truck Maker /Office Pro Nodelocked- Academic'. The Departmental Working Group met on 08.02.2022 considered the proposal and approved the same.

3. Government have examined the matter in detail and are pleased to issue revised administrative sanction for the establishment of 'Centre for Innovation in the Department of Mechanical Engineering in Sree Chitra Thirunal College of Engineering' at an estimated cost of Rs. 90/- lakh (Rupees Ninety Lakh only) by meeting expenditure under the head of account '5055-00-800-74 (P)' with following modifications:

Serial No.	Sanctioned component	To be replaced with
1	ANSYS Research edition with various add-ons	Altair Multiphysics / Mechatronics Engineer (MME)
2	LabVIEW 2020 professional software	IPG Truck Maker /Office Pro Nodelocked- Academic
3	CATIA Software	

4. The Government Order read above stands modified to the above extent.

(By order of the Governor)
VIJAYASREE K S
JOINT SECRETARY

The Principal, Sree Chitra Thirural College of Engineering,
Pappanamcode, Thiruvananthapuram

Dr.Praksh U., Professor, Department of Mechanical Engineering, Sree
Chitra Thirunal College of Engineering, Pappanamcode,
Thiruvananthapuram

(through the Principal, Sree Chitra Thirunal College of Engineering)

The Accountant General (Audit/A&E), Kerala, Thiruvananthapuram

The Sub Treasury Officer, Government Secretariat Sub treasury,
Thiruvananthapuram

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Signed by Radhakrishnan S
S

Section Office
Date: 25-02-2022 14:37:27



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**APJ Abdul Kalam Technological University
Thiruvananthapuram**

Abstract

APJAKTU - Financial Assistance to Student Projects 2022 - Administrative Sanction accorded - Orders issued.

RESEARCH SECTION

U.O.No. 964/2022/KTU

Thiruvananthapuram, Dated: 27.04.2022

- Read:-**
1. Minutes of the 1st meeting of Engineering Research Council dated 27.01.2010.
 2. Minutes of 2nd meeting of Executive Committee dated 21.10.2010.
 3. Meeting of the 2nd Research Council dated 29.02.2017.
 4. Proposals of Student Projects for Financial Assistance.
 5. Screening Committee meeting held on March/April 2022 for evaluation of project proposals.

ORDER

Vide paper read 1st above, the Engineering Research Council had approved the scheme for Financial Assistance to Student Projects for the Government Engineering Colleges. Vide paper read 2nd above, it was decided to extend the financial assistance to the student projects to the students of the Government aided and Government Controlled Engineering Colleges.

It was decided to extend the financial assistance to Student Projects for all engineering colleges affiliated to the University with NBA accreditation as per paper read 3rd above. It was also decided that the financial assistance will be provided as reimbursement of expenditure occurred for the sanctioned project.

The Screening Committee meetings held in March/April 2022 evaluated the project proposals forwarded from Engineering Colleges affiliated to the University and recommended financial assistance to selected proposals as per the List appended.

Administrative sanction is therefore accorded for financial assistance to student project as detailed in the list attached below. The project shall be completed within a period of 1 year and the project shall be completed with the students who presented the project before the Screening Committee.

The expenditure should be incurred as per the terms and conditions as per Annexure II attached. The amount will be reimbursed to the Principal of the concerned Colleges only after the successful completion of the project and on the production of certified bills & vouchers along with the audited utilization certificate, statement of expenditure and project completion report.

The expenditure shall be met from the Head of Account "S 3022-Innovative Student Project".

Orders are issued accordingly.

Sd/-

Dr. Shalij P.R *
DEAN (Research)



Copy to:-

1. Principals of Engineering Colleges.
2. Principal Investigators.

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**APJ Abdul Kalam Technological University
Thiruvananthapuram**

Abstract

APJAKTU - CERD - Engineering Colleges - Financial Assistance to Student Project - Administrative Sanction - Accorded -Orders issued.

CERD

U.O.No. 933/2021/KTU

Thiruvananthapuram, Dated: 15.06.2021

- Read:-**
1. Minutes of the 1st meeting of Engineering Research Council dated 27.01.2010.
 2. Minutes of 2nd meeting of Executive Committee dated 21.10.2010.
 3. Meeting of the 2nd Research Council dated 29.02.2017.
 4. Proposals of Student Project for Financial Assistance.
 5. Screening Committee meeting held on April /May 2021 for evaluation of project proposals.

ORDER

Vide paper read 1st above, the Engineering Research Council had approved the scheme for Financial Assistance to Student Project for the Government Engineering College. Vide paper read 2nd above, it was decided to extend the financial assistance for the students project to the students of the Government aided and Government Controlled Engineering Colleges.

It was decided to extend the financial assistance to Students Project of all engineering colleges affiliated to KTU with NBA accreditation as per paper read 3rd above. It was also decided that the financial assistance will be provided as reimbursement of expenditure occurred for the sanctioned project.

The Screening Committee meetings held in April/May 2021 evaluated the project proposals forwarded from Engineering Colleges affiliated to KTU and recommended financial assistance to selected proposals as listed in Annexure 1.

Administrative sanction is therefore accorded for financial assistance to student project as detailed in Annexure I. The project shall be completed within a period of 1 year and the project should be completed with the students who presented the project before the Screening Committee.

The expenditure should be incurred as per the terms and conditions as per Annexure II. The amount will be reimbursed to the Principal of the concerned Colleges only after the successful completion of the project and on the production of certified bills & vouchers along with the audited utilization certificate, statement of expenditure and project completion report.

The expenditure shall be met from the Head of Account " S- 3- Research Activities-002-Innovative Student Project".

Orders are issued accordingly.



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Sree Chitra Thirunai
College of Engineering
Trivandrum - 18



Sd/-

Dr. Shalij P.R *



27	Femina A Associate Professor	Ansil AS Devipriya Mudiyl Hina Mol Yadu Krishnan V	Removal of Heavy Metal from Water using Agro-waste	TKM College of Engineering, Kollam.	3000	10,000	1000	1000 (10,000/- for analysis)	25,000	CHEMICA L/BIOTEC H
28	Dr.Habeeb Muhammed MA Assistant Professor	Anitha Jose Joseph Martin Parvathy Santhosh Bhadran Vishnu Sabadev	Fabrication of NIR luminescent gols nanocluster NIR Plasmonic Copper Sulphide nanoparticle hybrid for bioapplications	TKM College of Engineering Kollam	10,000	33,000	2000	5000	50,000	CHEMICA L/BIOTEC H
29	Prof. Nikhil Binoy C Associate Professor	Sreeja Balaji Vismaya K Jinsha C	Detection of Pipeline Crack and Clog detection Robot using Convolutional Neural Network.	NSS College of Engineering NSS Nagar, Akathethara, Palakkad.	2000	5000		500	7500	ECE
30	KEERTHI KRISHNAN K Assistant Professor	Abhishek.A Govind Vijayan Vishnu Nismi PT	Smart Assistance Glove with Gesture Recognition.	NSS College of Engineering NSS Nagar, Akathethara, Palakkad	2500	3500		1500	7500	ECE
31	Dr.MayaMohan AssociateProfessorand Head	AmalRosh AnolJoseph C Vyshanv Prasanth SouravMenon	Intrusion Detection in Home IoT Network Using Deep Learning.	NSS College of Engineering NSS Nagar, Akathethara, Palakkad,	3400	13,800		1500	18,700	CSE
32	Soja Salim Professor	Assistant S Aravind P Lakshmi Sara Sulthana Shaji	Satellite imagery to map translation	SCT College of Engineering, Pappanamcode				5000	5000	CSE
33	Dr. Soniya B Professor	Sukanya M V Arun T Jose Aarcha J.R	Multimodal FakeNews Detection using hybrid RNN-CNN approach	SCT College of Engineering, Pappanamcode			50000 (for purchase of GPU)		50,000	CSE
34	Biju Jacob Assistant Professor	Albin I. Vinod Aswathy p Chandran Manya Madhu.B Naveen Antony	Comparitive Study of Methods for restoration of biological soil crust in ecosystems disturbed by excessive surface runoff	Sree Chitra Thirunal College of Engineering Pappanamcode	10,000	30,000	2000	5000	47,000	CHEMICA L/BIOTEC H
35	Smt Gayathri V Assistant Professor	Devi Krishna Diya Sharma Jeswin Elizabeth James Naveeneeth Subash	Comparitive Study of biohydrogen Production in Microalgae and bacteria through fermentation process	Sree Chitra Thirunal College of Engineering Pappanamcode	10,000	30,000	2000	5000	47,000	CHEMICA L/BIOTEC H
36	Biju Jacob Assistant Professor	Anstlet Mary Abhinav Ani Anupama SS V Reshmi	Analysis and Optimisation of Process Parametres for Improving the Self Healing Capacity of Immobilized Bacteria Based Concrete.	Sree Chitra Thirunal College of Engineering Pappanamcode	9960	29,000	2000	5000	45,960	CHEMICA L/BIOTEC H
37	Venkitaraj K P Assistant Professor	Aneesh A Arun B Aswathy Elizabeth Jacob Aswathy Ramesh	Thermal Management of Photovoltaic Cell using PCM FOR Improved Efficiency and Power Output	College of Engineering Adoor	10,000	33,000	2000	5000	50,000	MECH
38	Deebu U S Professor	Assistant Ajayand R Bhatt Ananthu Krishnan Arjun CO Shifas Shalghat	Smart door system with COVID-19 risk factor evaluation, contactless data acquisition and sanitization.	College of Engineering, Adoor	2000	12,000		2000	16,000	ECE



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj,
New Delhi-110070

RPS - Sanction Letter

File No. 8-49/FDC/RPS/POLICY-1/2021-22



The Drawing and Disbursing Officer
All India Council for Technical Education
Nelson Mandela Marg,
Vasant Kunj, New Delhi-110070,

Sub: Release of a sum of Rs. 1661041/- being the 1st installment of the total grant of Rs. 1898333/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2021-22.

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs. 1661041/- (Rupees Sixteen Lakh SixtyOne Thousand FourtyOne Only) as 1st installment out of a total approved grant-in-aid of Rs.1898333/- for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:-

I.	Name and address of the Beneficiary Institution (University / College / Institution)	: Registrar / Director / Principal, SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING, PAPPANAMCODE THIRUVANANTHAPURAM -695018, KERALA
II.	Principal Investigator's Name & Dept./Course	: Dr. MOHAN GOPINATHAN (MECHANICAL ENGINEERING)
III.	Co-Principal Investigator's Name & Dept.	: ANUP THOMAS (APPLIED CHEMISTRY)
IV.	Grant-in-aid Sanctioned	: Rs. 1898333/- (Rs. 1423749/- for non-recurring and Rs.474584/- for recurring expenditure)
V.	Amount to be Released during the year 2021-22 (as 1 st installment)	: Rs. 1661041/- (Rs. 1423749/- Full amount of non-recurring & Rs. 237292/- recurring i.e. 50 % of total sanctioned recurring grant)
VI.	Project Duration	: 3 Years
VII.	Title of the Project	: Development of Novel Metal Hydride Thermal Actuators and their Performance Evaluation

I. Release of funds:

- The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING, PAPPANAMCODE THIRUVANANTHAPURAM -695018, KERALA through PFMS.
- The sanctioned grant-in-aid is debitible to the Major Head "601.12.a (RPS Plan)" Gen. and is valid for payment during the financial year 2021-22.
- The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
- The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

- Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount of interest accrued on the grant.
- The grant is intended to cover items of expenditure/equipment approved by AICTE.
- Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within 15 days from the receipt of the grant to the following address:

Director (Faculty Development Cell), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

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Sree Chitra Thirunal
College of Engineering
Trivandrum - 18



Contd...2/-

4. The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any officer designated by them.
5. The Principal and PI of the institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant :-

Institute Pan No.	Bank Name	Bank Branch	Bank Branch Add.	Account Holder Name	Account Type	Account Number	IFSC Code
AADTS59 27K	STATE BANK OF INDIA	SCT ENGINEERING COLLEGE BRANCH	PAPPANAMCODE , THIRUVANTHAPUR AM -18	PRINCIPAL, SCT College of Engg.	Current Account	37563956143	SBIN0070851

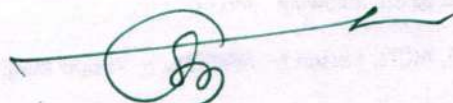
6. The grantee Institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
7. Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.

III. General Instructions:

1. It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.
2. The duration of Project is 03 years and the **date of release of the grant by AICTE shall be taken as the date of commencement of the project.** The Registrar/Director/Principal shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work **within 6 months** of the receipt of the grant, approval shall *ipso facto* lapse and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said-duration 18% interest will be levied on it. The grant has to be refunded to AICTE, through RTGS as per details given below:

Account Number	55113199952
Name of the Account Holder	Member Secretary, AICTE, New Delhi
Bank Name	State Bank of India
Branch Name	Shashtri Bhawan, New Delhi
IFSC Code	SBIN0050203

3. The Institute may constitute a Project Monitoring Committee (PMC). The composition of the PMC shall be as under:
- Principal/Director of the institution (Chairperson)
 - Two HODs from institute (Members)
 - In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
 - Coordinator of the project (Member Secretary)
4. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.
5. Similarly, the recurring grant can be used for the items (non-recurring) sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference **within the country**, the travel expenses may be met from the recurring grant.



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:: 3 ::

6. No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.
7. The institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.
8. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. **The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Monitoring Committee (PMC).**
9. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
10. Each project sanctioned by AICTE is assigned a specific Reference Number, which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.
11. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

IV. Submission of documents by the institute/PI to AICTE:


A. Documents to be submitted within one month of completion of each financial year:

- i. Annual Progress Report, indicating therein the number of patents, publications or any other achievement.
- ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure.
- iii. Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.
- iv. Separate Bills/vouchers related to Non-recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.
- v. Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of institution.

B. Documents to be submitted within two month of completion of the Project:

- i. The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.
- ii. Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which it has been sanctioned. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council.
- iii. Project Completion Report duly signed & stamped by the PI & Head of the institution and Project Evaluation Committee (PEC) Members.
- iv. Principal Investigator/institute to submit the Feed Back Form in AICTE format.
- v. The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from www.aicte-india.org/schemes/research-innovations-development-schemes.

Note: Any deviation from the above said time schedule will cause serious action against the institute.



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Contd...4/-

V. Approved List of Items under Non-recurring grant:

S. No.	Approved Items (As per proposal)	No. of Units	Amount recommended (in Rs.)
A.	Non-recurring		
i)	Constant temp bath/circulator	1	Rs. 1423749/-
ii)	Coriolis flow meter	1	
iii)	Datalogger and 20 channel multiplexer	1	
iv)	Desktop Workstation	1	
v)	Diffusion Vacuum Pump	1	
vi)	Pressure Sensor	5	
vii)	Thermocouple welder	1	
B.	Recurring i.e. 50% of total approved recurring grant) for Contingencies & Consumables only		Rs. 237292/-
	Grand Total (A) + (B)		Rs. 1661041/-

Copy forwarded for information and necessary action to:

1. REGISTRAR / DIRECTOR / PRINCIPAL,

SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING,
PAPPANAMCODE THIRUVANANTHAPURAM -695018,
KERALA

2. NAME OF PRINCIPAL INVESTIGATOR,

Dr. MOHAN GOPINATHAN,
(MECHANICAL ENGINEERING)
SREE CHITRA THIRUNAL COLLEGE OF ENGINEERING,
PAPPANAMCODE THIRUVANANTHAPURAM -695018,
KERALA

3. OFFICE OF DIRECTOR GENERAL OF AUDIT
GENERAL REVENUES, AGCR BUILDING
I.P. ESTATE, NEW DELHI-110002.

4. GUARD FILE

(Col. B. Venkat)
Director (FDC)

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GOVERNMENT OF KERALA

Abstract

Transport Department - Sree Chitra Tirunal College of Engineering - Plan Fund 2022-23 - Administrative Sanction Accorded - Orders Issued

TRANSPORT (A) DEPARTMENT

G.O.(Rt)No.334/2022/TRANS Dated,Thiruvananthapuram, 10-08-2022

- Read 1 Letter No.895-A2/2021/SCTCE dated 27.05.2022 from the Principal, SCT College of Engineering.
- 2 Minutes of the Departmental Working Group meeting held on 08.07.2022.

ORDER

As per the letter read as 1st paper above, the Principal, Sree Chitra College of Engineering, Thiruvananthapuram has submitted proposals for issuing administrative sanction for a total amount of Rs.252 Lakh (Rupees Two Crore Fifty Two Lakh Only) under the Head of Account 5055-00-800-74 -Road Transport for the following projects:

- (i). Setting up of Artificial Intelligence Laboratory - Rs.52 Lakh
- (ii). Establishment of Innovation Centre for IOT and wireless communication - Rs.100 Lakh
- (iii). Establishment of Advanced Research Lab for Gaseous Bio Fuels in Transportation - Rs.100 Lakh

2. The Departmental Working Group, in its meeting held on 08.07.2022, approved the above three proposals.

3. As approved by the Departmental Working Group, Government are pleased to accord administrative sanction for the above three projects, as detailed below, by meeting expenditure from the provision under the Head of Account '5055-00-800-74 -Road Transport' in the current year's budget:

Date of _____

[Handwritten Signature]

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Sl. No.	Project	Amount	Project Manger	completion of the project
1	Setting up of Artificial Intelligence Laboratory	Rs.52 Lakh	Dr.Subu Surendran	March 2023
2	Establishment of Innovation Centre for IOT and wireless communication	Rs.100 Lakh	Dr.Lakshmi VS	March 2023
3	Establishment of Advanced Research Lab for Gaseous Bio Fuels in Transportation	Rs.100 Lakh	Sri.Biju Jacob	March 2024
	Total	Rs.252 Lakh		

(By order of the Governor)
VIJAYASREE K S
ADDITIONAL SECRETARY

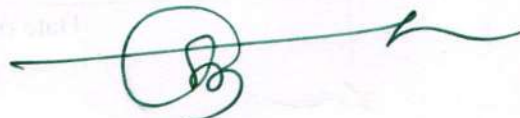
To:

✓ The Principal, Sree Chitra Thirunal College of Engineering,
Thiruvananthapuram
The Accountant General (Audit/A&E) Kerala, Thiruvananthapuram
The Finance (PU-A) Department,
The Planning Department
The Information & Public Relations (Web & New Media)
Department (for Publishing in Official Website)
Stock File/ Office Copy

Copy to: PS to Minister (Transport)
PA to Secretary (Transport)

Forwarded /By order

Section Officer



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Finance Department
The Information & Public Relations (Web & New Media) Department
(For publishing in official website)
Stock File / Office Copy
Copy to: PS to Minister, Transport Department
PA to Principal Secretary, Transport Department

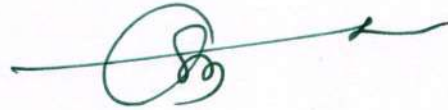
Forwarded /By order

Signed by Radhakrishnan S

S

Date: 22-02-2022 14:38:13

Section Officer



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**APJ Abdul Kalam Technological University
Thiruvananthapuram**

Abstract

APJAKTU - Financial Assistance to Student Projects 2022-23 - Administrative Sanction accorded - Orders issued.

RESEARCH SECTION

U.O.No. 672/2023/KTU

Thiruvananthapuram, Dated: 18.03.2023

- Read:-**1. Minutes of the 1st meeting of Engineering Research Council dated 27.01.2010.
2. Minutes of 2nd meeting of Executive Committee dated 21.10.2010.
3. Meeting of the 2nd Research Council dated 29.02.2017.
4. Proposals of Student Projects for Financial Assistance.
5. Screening Committee meeting held on February 2023 for evaluation of project proposals.

ORDER

Vide paper read 1st above, the Engineering Research Council had approved the scheme for Financial Assistance to Student Projects for the Government Engineering Colleges. Vide paper read 2nd above, it was decided to extend the financial assistance to the student projects to the students of the Government aided and Government Controlled Engineering Colleges.

It was decided to extend the financial assistance to Student Projects for all engineering colleges affiliated to the University with NBA accreditation as per paper read 3rd above. It was also decided that the financial assistance will be provided as reimbursement of expenditure occurred for the sanctioned project.

The Screening Committee meetings held in February 2023 evaluated the project proposals forwarded from Engineering Colleges affiliated to the University and recommended financial assistance to selected proposals as per the List appended.

Administrative sanction is therefore accorded for financial assistance to student project for an amount of ₹46,58,352/- (Forty Six Lakhs Fifty Eight Thousand Three Hundred and Fifty Two only) as detailed in the list attached below. The project shall be completed within a period of 1 year and the project shall be completed with the students who presented the project before the Screening Committee.

The expenditure should be incurred as per the terms and conditions as per Annexure II attached. The amount will be reimbursed to the Principal of the concerned Colleges only after the successful completion of the project and on the production of certified bills & vouchers along with the audited utilization certificate, statement of expenditure and project completion report.

The expenditure shall be met from the Head of Account "CERD (Plan) 4181-6307-Innovative Student Project".

Orders are issued accordingly.


Sd/-

Dr. Shalij P.R *
DEAN (Research)



Copy to:-

1. Principals of Engineering Colleges.
2. Principal Investigators.


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51	Dr Elizabeth Isaac Assistant Professor Co-Investigator Leya Elizabeth Sunny Assistant Professor	Jazeel Anwar Manu P S Vidya V	CSE	Automatic robotic arm for pepper plucking	45,000		45,000			
52	Dr. Jisha P Abraham Professor Co-Investigator Dr Elizabeth Isaac Assistant Professor	Abisha Simon Malavika Raju Sreekala K R	CSE	Bionic hand for amputee using myoelectric direct control system	50,000	500	48,500	500	500	

Model Engineering College, Thrikkakara

Sl No	Name of Principal Investigator	Name of Student Investigators	Branch	Title of the Project	Amount Sanctioned	Consumables	Equipments	Travel	Contingency
53	Jagadeesh Kumar P Assistant Professor Co-Investigator Pradeep M Associate Professor	Kalyani Pradeep Kiran Ajith Joseph Jeswin Pius	ECE	Fall Detection using mmWave Radar Sensor	30,000	25,000		3,000	2,000
54	Dr. Preetha Theresa Joy Professor Co-Investigator Sreekumar K Assistant Professor	Adithya A Aldrin Jenson Gouri Hariharan Nayana Vinod	CSE	MULTI-LAYERED ARCHITECTURE FOR ANOMALY DETECTION IN SURVEILLANCE NETWORKS USING DISTRIBUTED COMPUTING	50,000	4,000	46,000		
55	Sreekumar K Assistant Professor	Krishnendu nambiar Nikita Menon Sharat Jacob Jacob Rahulkrishna V Nambiar	CSE	Building A General-purpose Compute-efficient Training Mechanism For Language	50,000	4,200	45,800		

SCT College of Engineering, Thiruvananthapuram

Sl No	Name of Principal Investigator	Name of Student Investigators	Branch	Title of the Project	Amount Sanctioned	Consumables	Equipments	Travel	Contingency
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56	Dr Sheeja M K HOD	Jassim Shaji K J Abhirami Rohith G Sarma Sruthi B Nair	ECE	Visualization of Thermal Diffusivity using DHI (Digital Holographic Interferometry)	35,000	1,000	32,000	1,000	1,000	
57	Subha V Assistant Professor	Sravan H Varun Asokan Nivya PS	ECE	Lung Cancer Cell Enhancement Detection using Fourier Ptychography Microscopy	20,000		20,000			
58	Dr. Kamal Krishna R Assistant Professor Co-Investigator Dr. Arun M Assistant Professor	Anand M S Suryajith SS Akhilesh R Akshaj B	Mechanical	Performance enhancement techniques of Gasoline engines Retrofitted with CNG fuel system.	50,000	9,000	35,000	1,000	5,000	
59	Syama R Assistant Professor	Afreen A Habeeb Dhanya S B Nithin P	CSE	Home automation using AR	20,500	5,000	12,500	2,000	1,000	
60	Susmitha Kumar S Assistant Professor Co-Investigator Jackson D H Assistant Professor	Aishathul Haniyya Ann Elza George Parvathy S Sidharth S	BTBC- CH-FT	A study of the impact of various drying techniques on the performance of solid state fermentation process for Prodieinsin production	50,000	10,000	30,000	5,000	5,000	
61	Gayathri V Assistant Professor Co-Investigator Dr K.B Radhakrishnan Professor & Head	V VISHAL MOORTHY SREERAJ BITTU THOMAS CK ASWATHI	BTBC- CH-FT	Struvite Production & Treatment of Dairy waste Water using Fluidized Bed Reactor	50,000	9,000	33,000	5,000	3,000	
62	Biju Jacob Professor Co-Investigator Susmithakumari S Assistant Professor	Parvathy P Safna Siraj T.S Sagarkrishna G Lekshminarayanan Potti S	BTBC- CH-FT	COMPARATIVE STUDIES ON THE EFFECT OF VARIOUS BACTERIAL CARRIERS IN SELF-HEALING CONCRETE	50,000	20,000	10,000	10,000	10,000	

TKM College of Engineering Kollam



No. DST/TMD/MECSP/2K17/50 (G)
Government of India
Department of Science & Technology
(Technology Mission Division)

Technology Bhavan
New Mehrauli Road
New Delhi-110 016
Date: 04.01.2022

Sanction Order

Subject: -2nd year Release for project entitled "DST – NFTDC Centre for Materials & Energy Storage Platforms – H2" submitted by Dr. K Balasubramanian (Lead PI), NFTDC, Kanchanbagh, Hyderabad (Lead Institute). The centre consortium consists of four partner institutes: Prof S. Dasappa (IISc, Bengaluru), Prof P. Maiya (IIT Madras, Chennai), Dr Soobhankar Pati (IIT Bhubaneswar) and Dr. G. Mohan, (Sree Chitra Thirunal College of Engineering, Thiruvananthapuram).

In continuation of this Department's sanction order of even number DST/TMD/MECSP/2K17/50 (G), dt 18.02.2019 (1st release), sanction of the President is hereby accorded to the release of **Rs. 1, 25, 50,000/- (One crore Twenty five Lakh Fifty thousand Rupees Only)** under CEMI Program under the 'Grants-in-aid General' in 2020-21. C/F sanction amount of Rs. 0/- (recurring) from the financial year 2020-21 to 2021-22 to NFTDC, Hyderabad with four partner institutes is also approved.

2. The continuation of the programme/scheme beyond 31.3.2021 will be subject to appraisal and approval of the continuation of the Umbrella scheme "Innovation, Technology Development & Deployment" under which these projects are funded.

3. The Department/Institute will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The College/Institute is requested to utilize the released funds in first one year.

4. NFTDC, Hyderabad with four partner institutes with the 'Terms and Conditions' already agreed to by the Institute. Further, as per Rule 211 of revised GFRs the accounts of this Project Grants at Grantee Organization shall be made available for inspection by the sanctioning authority/ audit where ever the Organization is called upon to do so.

5. There is no pending SE/UC on this project. The previous UC as received from the Department is attached with this Sanction Order. NFTDC, Hyderabad.

6. The University/Institute will furnish to the DST, Utilization Certificate and an audited Statement of Expenditure pertaining to the grant immediately after the end of each financial year.

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 FY 2020-21 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 the finalization of accounts, as it shall not be adjusted towards future release of grant. A certificate to this effect shall have to submit along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of grant/closure of project accounts.

8. The Organization/Institute/University should ensure that the technical support/financial assistance provided to them by the Department of Science & Technology should **invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.**

9. A goods (consumables/equipment) available in Government emarket (GeM) portal are to be procured mandatorily online through GeM only.



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10. The detailed list of items which are procured in bulk, regularly and are not available in GeM, may be furnished to DST at the earliest, so that the matter may be taken up with GeM, for its inclusion in the list of items available in GeM portal.

11. Grantee Institution (GI) is advised to start using EAT module and next release will be made only after mapping and following EAT modules by the GI.

12. The expenditure involved is debitible to Demand No.88, Department of Science & Technology for the year 2020-21:

3425	:	Other Scientific Research (Major Head)
60	:	Others
60.200	:	Assistance to Other Scientific Bodes (Minor Head)
70	:	Innovation, Technology Development and Deployment
70.00.31	:	Grants-in-aid General for the year 2020-21 (CEMI)

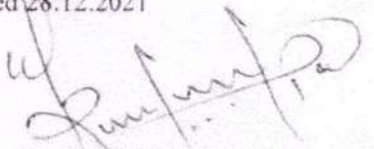
(Previous: TDP-TMD-3425.60.200.26.01.31)

13. The amount **Rs. 1, 25, 50,000/- (One crore Twenty five Lakh Fifty thousand Rupees Only)** will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed **Nonferrous Materials Technology Development Centre (NFTDC), Hyderabad**. The bank details for electronic transfer of funds through RTGS are given below:-

1. Name of the Account Holder: - Nonferrous Materials Technology Development Centre (NFTDC)
2. Name of the Bank: - Canara Bank
3. Bank Account Number: - 1849201000310
4. IFSC Code: - CNRB0001849
5. MICR Code: - 500015032

14. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. ³⁸³ in the register of grants maintained in the Division for the scheme Technology Development Programme.

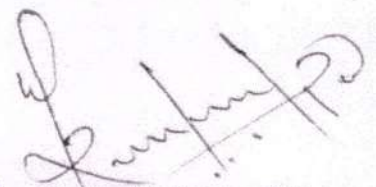
15. These issues with the concurrence of IFD vide their Concurrence Dy. No. 3766 Dated 28.12.2021


(Dr. Ranjith Krishna Pai)
Scientist 'E'

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

Copy for information and necessary action to:

1. Cash Section (3 copies), DST, New Delhi--for preparing the bill and remitting the amount to the grantee
2. Accounts Section, DST, New Delhi, 3. IFD, DST, New Delhi.
3. Director of Audit (CW & M-II), AGCR Building, IP Estate, New Delhi.
4. **Dr. K Balasubramanian (Lead PI), NFTDC**
Prof S. Dasappa (IISc, Bengaluru)
Prof P. Maiya (IIT Madras, Chennai),
Dr Soobhankar Pati (IIT Bhubaneswar)
Dr. G. Mohan
5. Sanction folder
6. Office Copy
7. Head- TMD
8. FICCI Cell


(Dr. Ranjith Krishna Pai)
Scientist 'E'


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