

Criterion - 7.2.1

Best Practices: Faculty Development and Research Promotion

7.2.1 Research Fund in the Academic year 2019-20

Submitted to:



National Assessment and Accreditation Council



ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, - PALAI-

Academic Year 2019-20

S.No	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year	Amount Sanctioned	Name of the Funding Agency
1	Dr. Rajesh Baby	ME	2019-2020	50,000	CERD - APJAKTU-Kerala)
2	Mr. Kishore Sebastian	CSE	2019-2020	10,000	KSCSTE
3	Ms. Ashly Thomas	CSE	2019-2020	97,00	KSCSTE
4	Ms. Smitha Jacob	CSE	2019-2020	50,000	Kerala Startup Mission (IDEA GRANT)
5	Ms. Ginu Ann George	EEE	2019-2020	10,000	KSCSTE
6	Ms. Alphonsa Johny	CSE	2019-2020	20,00,000	UGC
7	Dr.Bennet Kuriakose (PI) and Dr. Rajesh Baby (Co-PI)	CE & ME	2019-2020	1,00,000	ANERT, Thiruvananthapuram
8	Ms. Alphonsa Johny	CSE	2019-2020	60,000	CERD
9	Dr.Bennet Kuriakose (PI) and Dr. Rajesh Baby (Co-PI)	CE & ME	2019-2020	1,00,000	ANERT, Thiruvananthapuram
10	Mr. Shiblemon K V	ME	2019-2020	1,35,000	CERD - APJAKTU-Kerala
11	Mr. Anooplal B	ME	2019-2020	1,20,000	CERD - APJAKTU-Kerala
12	Mr. Pradeep PV	ME	2019-2020	1,40,000	CERD
	Total Amount Sar	nctioned in Lakh	S		27.95

SJCET

File Ref.No.KTU/RESEARCH 2/4664/2019

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

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

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

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".



Sd/-

						<u> </u>	
	107		105	104	103	102	301
	Jesna Anver Associate Professor Ceira Sara Cherian (Co-Investigator)	Anup Kumar Asst Prof Dr.Jilse Sebastian (Co-Investigator)	Dr.Rajesh Baby HOD & Associate Professor	Sarju S. Assistant Professor Mereen Thomas (Co-Investigator)	Abraham George Assistant Professor Jineeth Joseph (Co-Investigator)	Ashly John Assistant Professor Hanna Mathew (Co-Investigator)	Dr. Riboy Cheriyan Professor & HoD Dr.Ansal K A (Co-Investigator)
	Yadev Jayachandran Rahul Murali Ansa N Varkey Varsha Harl	Akshay.Oomman Seinthosh Bijo,George P Aneesh George Jijo Jose	Josevin Joseph Sajo Mathew Sen Babu S Harish	Joel James Alka Augustine Ashna Saji Irene Treesa Jose Aksa Reji Daibin Raju	Akash Kalluvilayil Venugopal Sharon K Varghese Sheba Merin Jacob	Aiswarya Satheesh Akhila Vinod Arya R Anil Sreya M James	Joel Abraham Sree Sankar E Reuben George Mathai Sandeep Narayanan
	ToC H Institute of CSE Science & Technology	St.Joseph's College of Engineering & Technology Palai	St.Joseph's College of Engineering & Technology Palai	St.Joseph's College of Engineering & Technology Palai	Saintgits College of Engineering, Kottayam	SAINTGITS College of Engineering	SAINTGITS College of Engineering
		ME	ME	CSE	EEE	ECE .	ECE
	Sbox-Intelligent automobile blackbox	Performance and emission analysis of diesel engine fuelled with blend of biodiesel from waste coolding oil, pyrolysis plastic oil and diesel.	Design and fabrication of gasifier stove	Black box logging system for drones	Development of embedded system for speaker identification and recognition using AI method.	Automated wheelchair and Human automation.	Machine Learning-Based Fingerprinting for Accurate Positioning of Things in GPS denied Environmental using Lora WAN-Long Range Wide Area Networks
•	13,000	44783	50,000	11,000	10,600	13,547	32,000
	3000	10,000	15,000	4000	5400	900	5000
	7500	24,783	25,000	4000	1000	9647	20,000
	500	5000	5000		2700	1000	2000
	2000	5000	5000	3000	1500	2000	5000
\$ \$:	

Certified that out of Rs. 50,000 sanctioned by Centre for Engineering Research and Development of APJ Abdul Kalam Technological University towards financial assistance for the student project titled 'DESIGN AND FABRICATION OF GASIFIER STOVE', an amount of Rs. 58,525 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs.

> FOR JOSEPH ZACHARIA & ASSOCIATES CHARTERED ACCOUNTANTS

> > K. JOSEPH ZACHARIAS FCA M.No.024378 (Proprietor) FRN 001395S

Name & Signature of Accounts officer/

Chartered Accountant

RAJENA BABY Name & Signature of Principal Investigator

3

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Name & Signature of Head of the Institution

DR. J. DAVID loseph's College of Engg.& Technology, Palai Kerala - 686 579

Office Seal

Certified that out of Rs 44,783 sanctioned by Centre for Engineering Research and Development of APJ Abdul Kalam Technological University towards financial assistance for the student project titled 'PERFORMANCE AND EMISSION ANALYSIS OF DIESEL ENGINE WITH BLEND OF BIODIESEL FROM WASTE COOKING OIL, PYROLYSIS PLASTIC OIL AND DIESEL', an amount of Rs 49,962 was unitzed for the purposed sanctioned, at the close of 09/10/2020 as shown in the Statement of Expenditure annexed. AND DIESEL', an amount of Rs 49,962 was utilized for the purpose for which it was

Name & Signature of Principal Investigator PALAI

Name & Signature of Head of the Institution

DR. J. DAVID Principal St. Joseph's College of Engg. QIN: 21247476AAAAAQ 3357
Technology, Palai
Office Scale 579

for M.P.A.G. & ASSOCIATED

for M P A G & ASSOCIATES Chartered Accountants (FRN:018797S)

Name & Signature

of Accounts officer

Chartered Accountant

CA Anuja C Tom, B.Com ACA Partner M.No. 247476



Kerala State Council for Science, Technology and Environment

Prof (Dr.) K.P. Sudheer Executive Vice President KSCSTE, Pattom 16.01.2020

Letter No. 00409 /SPS 64/2019 / KSCSTE

Dear Mr. Kishore Sebastian,

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 "Text to Speech Conversion for Visually Impaired" submitted by Mr. Kishore Sebastian as Pl and Anisha P Emmanuel, Anjaly Siby, Chikku Lawrance, Jain Mariya Jayan 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	1000
3	Travel	1000
4	Research Literature & Documentation	1500
	Others (for analysis)	500
3	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 sed.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,

Jan.

Lighted Leiter Lines

Yours sincerely,

John J.

Prof (Dr.) K.P. Sudheer

To

Mr. Kishore Sebastian, Assistant Professor, Dept. of Computer Science& Engineering, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Copy to:

The Principal, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Anisha P Emmanuel, Anjaly Siby, Chikku Lawrance, Jain Mariya Jayan, Student(s), Bachelor of Technology (BTech), Computer Science Engineering, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Sasthra Bhavan, Pattom P.O., Thiruvananthapuram - 695 004, Kerala State, India
Tel: 0471 - 2548200-09, EVP - 2543557, 2548222, MS - 2534605, 2548220, CoA - 2543556, 2548248
Fax: 0471 - 2540085, 2534605 e-mail: kscste@gmail.com, www.kscste.kerala.gov.in

Certified that out of Rs 10,000 sanctioned by Kerala State Council for Science, Technology and Environment towards financial assistance for the student project titled "Text to Speech Conversion for Visually Impaired People" (File No./Letter No: 00409/SPS 64/2019/KSCSTE) an amount of Rs 10,000 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs -5,083 at the close of 13 July 2020 as shown in the Statement of Expenditure annexed.

Name & Signature of Principal Investigator

Name & Signature of Head of the Institution

DR. J. DAVID Principal St. Joseph's College of Engg. & Technology, Palai Kerala - 686 579 FOR JOSEPH ZACHARIA & ASSOCIATES CHARTERED ACCOUNTANTS

> K. JOSEPH ZACHARIAS FCA M.No. 024378 (Proprietor) Seal & STURNINGS of Chartered Accountant



Office Seal



Kerala State Council for Science, Technology and Environment

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

16.01.2020

Letter No. 00494 /SPS 64/2019/RSCSTE

Dear Mrs. Ashly Thomas,

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 "IoT Based Drowsy Driving Warning System" submitted by Mrs. Ashly Thomas as PI and Aneesha Shaly George, Christy Shaji, Harikrishnan A.Jose Paul as student investigator(s) has been approved. An amount of ₹9700/- is sanctioned by the Council. The budget estimate of the project is as detailed below.

SL.NO.	ITEMS	AMOUNT(₹)
1	Consumables	7500
2	Minor equipments	500
3	Travel	1000
4	Research Literature & Documentation	500
5	Others (for analysis)	200
	Total	9700

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 sed.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

Mrs. Ashly Thomas, As istant Professor, Dept. of Computer Science& Engineering, St. Joseph's College Of Engineering And Technology, Palai, Kottayam-686579

Copy to:

The Principal, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Aneesha Shaly George, Christy Shaji, Harikrishnan A, Jose Paul, Student(s), Bachelor of Technology (BTech), Computer Science & Engineering, St. Joseph's College Of Engineering And Technology, Palai, Kottayam-686579

Sasthra Bhavan, Pattom P.O., Thiruvananthapuram - 695 004, Kerala State, India
Tel: 0471 - 2548200-09, EVP - 2543557, 2548222, MS - 2534605, 2548220, CoA - 2543556, 2548248
Fax: 0471 - 2540085, 2534605 e-mail: kscste@gmail.com, www.kscste.kerala.gov.in

Certified that out of Rs 9,700 sanctioned by Kerala State Council for Science, Technology and Environment towards financial assistance for the student project titled 'Iot Based Drowsy Driving Warning System' (File No./Letter No. 00409/SPS 64/2019/KSCSTE),an amount of Rs. 9,700 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs:2,850 at the close of 13 July 2020 as shown in the Statement of Expenditure annexed.

Ashly Thomas Name & Signature of Principal Investigator

Name & Signature

Office Seal

of Head of the Institution

DR. J. DAVID Principal
St. Joseph's College of Engg. &
Technology, Palai
Kerala - 686 579 FOR JOSEPH ZACHADIA & ASSOCIATES CHARTEREE ALL JUNIANTS

> K. JOSEPH ZACHARIAS FCA M.No.024378 (Proprietor) FRN 0013955 Seal & Signature of Chartered Accountant





KERALA STARTUP MISSION

Abstract

Kerala Startup Mission - Idea Grant - Payment to IEDC of St. Joseph's College of Engineering and Technology-Sanctioned - Orders Issued.

KERALA STARTUP MISSION

KSUM/190/2020

Date: 04.03.2020

ORDER

The students of IEDC of St. Joseph's College of Engineering and Technology were selected for Idea Grant in the idea day held on 29.06.2019 for their idea named 'MyGarageZone". Accordingly it has been decided to sanction an amount of Rs. 50,000/- to the IEDC for onward transmission to the students subject to execution of a tri party agreement by the IEDC and students together with the KSUM.

In the circumstances, sanction is accorded for the payment of Rs. 50,000/- to the IEDC of St. Joseph's College of Engineering and Technology for onward transmission to the students of the idea Grant by debiting the expenditure from the Youth Entrepreneurship Development Programme – Funding – Idea grant.

B. Sreekumaran Nair Secretary & Registrar

To:

IEDC of St. Joseph's College of Engineering and Technology

The Accounts Department

The Junior Engineer (Electronics)
File No: KSUM/108/2020-MG (SC)

Forwarded/ By Order

B. Sreekumaran Nair Secretary & Registrar



Fwd: Regarding IDEA FEST 2019 Results

1 message

Angitha George <angitha.george@sjcetpalai.ac.in>
To. Dona Mary Cherian <dona@sjcetpalai.ac.in>

Mon, May 16, 2022 at 9.26 AM

From: Sarju S <sarju.s@sjcetpalai.ac.in>
Date: Sat, 14 May 2022 at 10:24 AM
Subject: Fwd: Regarding IDEA FEST 2019 Results
To: Angitha George <angitha george@sjcetpalai.ac.in>

Forwarded message -----

From: Vineeth Kumar <k.vineeth26@gmail.com>

Date: Tue, 22 Oct, 2019, 5:25 pm

Subject: Fwd: Regarding IDEA FEST 2019 Results

To: Sarju S <sarju.s@s/cetpalai.ac.in>

----- Forwarded message ------

From: Sreekutty O U <sreekutty@startupmission.in>

Date: Tue, Oct 22, 2019 at 4:19 PM

Subject: Regarding IDEA FEST 2019 Results

10

Cc: Ajazf09 <ajazf09@gmail.com>, <analrazicka1997@gmail.com>, <adawnjoseph@gmail.com>, K Vineeth <k wineeth26@gmail.com> Rajath Jayashankar <jayashankar.rajath1335@gmail.com>, <homaskuttyjsph3@gmail.com> <erfanmuhammed27c@gmail.com>, Neeraj PM <neerajpm95@gmail.com>, <aliwynambat@gmail.com> Parvathym <parvathym636@gmail.com>, <marcenakunjachan@gmail.com>, <kopanangmathaba@gmail.com> Vaidyanathaiyerr <vaidyanathaiyerr@gmail.com>, sarang bora <sarangbora@gmail.com>, Akshayanoop <akshayanoop99@gmail.com>, Nandumpilicode <marchabategmail.com>, <saurabhsaurc@gmail.com>, Kamal Nathan <kamal.rkara@gmail.com>, BIOVENT-Solution for Research Challenges <info@biovent.co.in>, ithamarygr8@gmail.com>, Arm Gp <arm.gp23@gmail.com> Jithintj555 <jithintj555@gmail.com> , <nithinraju9497@gmail.com> , <saird ynot@gmail.com> ,

Dear Team,

Greetings!!

First of all congratulations on your well-deserved achievement.

And as the next process of the Fund allocation process, please follow the below points:

- Your team is requested to complete and submit the tracker with the necessary details which we will send to you shortly.
- And also please note that in the initial tranche you will receive half of the total grant amount sanctioned and after the effective utilization of the initial amount, next tranche of the fund will be given.

Ser Billita,

Certified that out of Rs 50000/- sanctioned by Kerala Startup Mission towards financial assistance for the project/student project titled MyGarageZone (File No./Letter No:KSUM/190/2020) an amount of Rs50000/- was utilized for the purpose for which it was sanctioned, leaving a balance of Rs 0/- at end of the financial year 15/3/2021 for utilization in the subsequent year.

SMITHA JACOB

Name and signature of Principal Investigator Name and signature of
Finance Officer

Name and signature of Head of the Institution

ST. JOSEPH'S COLLEGE OF ENGG. & TECHNOLOGY, PALAI





Kerala State Council for Science, Technology and Environment

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

16.01.2020

Letter No. 00987 /SPS 64/2019/KSCSTE

Dear Ms. Ginu Ann George,

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 "ECO-BIN" submitted by Ms. Ginu Ann George as PI and Biny Ann Biju, Induja J, Jerly K George, Sandra Shaji 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	6500
2	Minor equipments	1000
3	Travel	1200
4	Research Literature & Documentation	800
5	Others (for analysis)	500
	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 sed.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 .

Yours sincerely.

Prof (Dr.) K.P. Sudheer

To

Ms. Ginu Ann George, Assistant Professor, Dept. of Electrical & Electronics Engineering, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Copy to:

The Principal, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Biny Ann Biju,Induja J,Jerly K George,Sandra Shaji, Student(s), Bachelor of Technology (BTech), Electrical & Electronics Engineering, St. Joseph'S College Of Engineering And Technology, Palai, Kottayam-686579

Sasthra Bhavan, Pattom P.O., Thiruvananthapuram - 695 004, Kerala State, India Tel: 0471 - 2548200-09, EVP - 2543557, 2548222, MS - 2534605, 2548220, CoA - 2543556, 2548248 Fax: 0471 - 2540085, 2534605 e-mail: kscste@gmail.com, www.kscste.kerala.gov.in
Digitally signed by Devassia V P
Date:Fri Jun 30 16:10:14 IST 2023



(उन्हातर शिक्षा विभाग, शिक्षा मंत्रालय, भारत सरकार के तहल एक स्वायल अंगटन) (An Autonomous Org. under the Department of Higher

(An Autonomous Org. under the Deptartment of Higher Education, Ministry of Education, Govt. of India)



Block C-20/1A/8, Sector-62, IITK Outreach Centre, Gautam Buddh Nagar 201309, Uttar Pradesh (India) Phone: 0120-6895200

JRF AWARD LETTER

Dated: 10.12.2020

NTA Ref. No.: 200510338011

ALPHONSA JOHNY

Son/Daughter of JESSY and JOHNY THOMAS

Subject: COMPUTER SCIENCE AND APPLICATIONS





Dear Candidate.

I am pleased to inform you that you have qualified for Junior Research Fellowship (JRF) and eligibility for Assistant Professor in the National Eligibility Test (UGC-NET) conducted in June 2020. The tenure of fellowship is five years and it commences from the date of declaration of NET result, i.e., 30th November, 2020 (or) from the date of admission under M.Phil./Ph.D. (or) from the date of joining M.Phil./Ph.D. programme, whichever is later. The summary of financial assistance offered under the scheme is mentioned at Annexure 1 available on www.ugc.ac.in/net/rf

The Awardee is required to get admission and registration for regular and full time M.Phil./Ph.D. course in a University/Institution/College recognized by UGC at the first available opportunity but not later than three years from the date of issue of this award letter. University/Institution/College is requested to process for award of JRF based on this letter, in accordance with the procedure available on www.ugc.ac.in/netjrf.

It may be noted that the fellowship amount shall be disbursed through Canara Bank to bank account of the Awardee (any bank) directly. UGC has developed a dedicated web portal (https://scholarship.canarabank.in) for capturing data of the awardee. The Universities/Colleges/Institutions will link the data of the awardee with the master data on the UGC web portal with unique Maker/Checker lds which have already been provided to them along with the passwords. The Universities/Colleges/Institutions shall update the information in the master data (regarding monthly payment confirmation, HRA, up-gradation, resignation etc.) of the beneficiaries on monthly basis. Based on the data updated on UGC web portal by the converned Universities/Colleges/Institutions, the payment of the fellowship will be made to the beneficiaries (Detailed process available at https://www.ugc.ac.in/ugc_notices.aspx?id=2153).

It may also be noted that UGC has proposed to link "AADHAAR" with bank account of students so that there can be direct cash transfer and effective disbursal of fellowship into bank account of the student. In this regard, Secretary, UGC has already requested the universities to help students in Aadhaar enrolment vide D.O. No. F.14-34/2011 (CPP-II) dated 11.01.2013.

It may please be noted that the award is liable to be cancelled by Implementing/Awarding agency and it will also attract legal action against the Awardee in the following cases:

- i. If the awardee is found to be ineligible to receive the award at any point during the entire duration of fellowship,
- ii. Misconduct of Awardee,
- iii. Unsatisfactory progress of research work,
- iv. Failure in any examination related to M.Phil./Ph.D.,
- v. In case any other fellowship is drawn from other source(s),
- vi. Concealment of facts.

The e-Certificate of eligibility for Assistant Professor has been uploaded on https://ecertificate.nta.ac.in. The eligibility of the candidate is to be ensured by the institution/appointing authority. The category in which the candidate had appeared may be verified from NTA.

This electronic JRF award letter can also be verified by scanning the QR Code.

With best wishes,

(Dr Sadhana Parashar) Senior Director

Jularashan

Note: NTA has issued the electronic JRF award letter on the basis of information provided by the candidate in his her online application form. The authority should verify the original records/certificates of the candidate while considering him her for JRF award or appointment, as the NTA will not any faise information provided by the candidate. The NTA is only responsible for the result which can be verified from the repository available in the well (ugenet nta me in). The candidate must fulfil the minimum eligibility conditions as laid down in the notification for UGC NET.

2.1.2. Junior Research Fellowship (CSIR/ UGC)

The CSIR Research Fellowships and Associateships are provided to bright young men and women for training in methods of research under the expert guidance of faculty members or scientists working in University Departments/institutes of national importance/national laboratories and institutes of CSIR in various fields of Science & Technology and Medical Sciences. Candidates are selected for the fellowship after qualifying the National Eligibility Test (NET) conducted by CSIR twice a year in June and December.

Eligibility

- Candidates holding degrees from BS-4 years programme/BE/BTech/BPharma/MBBS/ Integrated BS-MS/MSc or equivalent; BSc (Hons) or equivalent degree holders; or students enrolled in integrated MS-PhD programmes
- Minimum 55% marks for General & OBC (50% for SC/ST candidates, physically and visually handicapped candidates)
- Candidates with a Bachelor's degree (science, engineering or any other discipline), eligibility contingent on getting registered/enrolled for a PhD/integrated PhD programme within the validity period of two years
- Candidates enrolled for MSc or having completed 10+2+3 years of the qualifying examinations listed above, eligible under the Result Awaited (RA) category
- · Fellowships tenable in India
- Available only to bonafide Indian citizens residing in India

Support

- JRF: The stipend of a selected JRF is ₹31,000 per month for the first two years.
- SRF (NET): On completion of two years as JRF and if the fellow is registered for PhD, the fellowship will be upgraded to SRF(NET) and the stipend will be increased to ₹35,000 per month for the third and subsequent years on the basis of the assessment of the fellow's research progress/achievements.
- In addition to the fellowship, awardees are also entitled to a House Rent Allowance (HRA) component as per the rules of the host institution.
- An annual contingency grant of ₹20,000 per fellow will be provided to the University/Institution.
- CSIR research fellows will be given an extra lump sum of ₹3,000 upon submission of PhD thesis in an electronic form

Duration

The maximum total duration of the fellowship (JRF plus SRF (NET)) is five years.

Deadline

Online applications for JRF-NET are invited **twice a year** with registrations opening in **March and September**.

Website

https://csirhrdq.res.in/Home/Index/1/Default/1476/60

Self Attured

The tenure of fellowship is initially for two years and before expiry of this period, the work of the fellow will be evaluated by a Committee of three members comprising of Head of the Department, Supervisor and one outside subject expert to be constituted by the concerned Department of the University/Institution/College—If the research work is found satisfactory, his/her tenure will be extended further for a period of three years under the enhanced emoluments of the JRF in Science, Humanities & Social Sciences

RATE OF FELLOWSHIP

The rate of fellowship for JRF and SRF will be at par with the UGC Fellowship as amended from time to time. Presently these rates are as follows:

Fellowship	(a) Rs 16,000/- per month for initial two years (JRF.) (b) Rs 18,000/- per month for remaining tenure (SRF.)
Contingency for Humanities and Social Sciences	(a) Rs. 10,000/- per annum for initial two years. (b) Rs. 20,500/- per annum for remaining three years.
Contingency for Science	@ Rs 12,000/- per annum for initial two years. @ Rs 25,000/- per annum for remaining three years.
Escorts/Reader Assistance	@ Rs. 2,000/- per month in case of physically and visually challenged candidates
HRA	As per University/Institute rules.

Alphone, Jehy Hole

Certified that out of Rs. 22,17,600 sanctioned by University Grant Commission, Junior Research Fellowship (JRF) in Sciences, Humanities and Social Sciences Scheme towards financial assistance for doing Ph.D. in Computer Science & Engineering (JRF Award Letter No.: 200510338011 dated 10/12/2020) an amount of Rs. 1,46,658 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs. 20,70,942 at the end of the financial year 2020-2021 for utilization in subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution



PRINCIPAL ST. JOSEPH'S COLLEGE OF ENGG. & TECHNOLOGY, PALAI

Certified that out of Rs. 22,17,600 sanctioned by University Grant Commission, Junior Research Fellowship (JRF) in Sciences, Humanities and Social Sciences Scheme towards financial assistance for doing Ph.D. in Computer Science & Engineering (JRF Award Letter No.: 200510338011 dated 10/12/2020) an amount of Rs. 4,43,520 was utilized from an available fund of Rs. 20,70,942 (from the previous financial year) for the purpose for which it was sanctioned, leaving a balance of Rs. 16,27,422 at the end of the financial year 2021-2022 for

utilization in subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution



PRINCIPAL ST. JOSEPH'S COLLEGE OF ENGG. & TECHNOLOGY, PALAI

Certified that out of Rs. 22,17,600 sanctioned by University Grant Commission, Junior Research Fellowship (JRF) in Sciences, Humanities and Social Sciences Scheme towards financial assistance for doing Ph.D. in Computer Science & Engineering (JRF Award Letter No.: 200510338011 dated 10/12/2020) an amount of Rs. 4,43,520 was utilized from an available fund of Rs. 16,27,422 (from the previous financial year) for the purpose for which it was sanctioned, leaving a balance of Rs. 11,83,902 at the end of the financial year 2022-2023 for utilization in subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution DR. V.P. DEVASSIA

Principal
St. Joseph's College of Eng. & To mology

Palai, Kerala - 686 579



PROCEEDINGS OF THE GENERAL MANAGER-, ANERT (PRESENT: CHANDRA SEKHARAN P) ABSTRACT

Supporting R&D and Innovation-Project Proposal SRI-18/2018-19 on "Experimental Investigations on Energy Efficient Buildings Using Phase Change Materials in Tropical Climate" from Rev. Fr. Dr. Bennet Kuriakose, Associate Professor, Department of Civil Engineering, SJCET – Financial Support and Release of First Instalment – sanctioned –Order Issued

File No.: ANERT-TECH/110/2019-S(NEP)

AF 551 / R&D/ANERT/2019

05/12/2019

Ref: 1) Guidelines of the ANERT Programme on Supporting R&D and Innovation

2) MoM of TAC Meeting held on 22/12/2018.

3) Project Proposal SRI-18/2018-19 from Rev. Fr. Dr. Bennet Kuriakose, Associate Professor, Department of Civil Engineering, SJCET

4) Lr. No. ANERT-TECH/110/2019-S(NEP) dt. 27/05/2019

5) Lr. No. Nil dt. 10/06/2019 from Rev. Fr. Dr. Bennet Kuriakose

6) Lr. No. Nil dt. 17/07/2019 from Rev. Fr. Dr. Bennet Kuriakose

7) Lr. No. ANERT-TECH/110/2019-S(NEP) dt. 19/10/2019

8) Undertaking dt. 01/11/2019 received from Rev. Fr. Dr. Bennet Kuriakose

ORDER

ANERT had initiated a programme on Supporting R&D and Innovation (SRI) in the budget for the Financial Year 2018-19 to promote innovative ideas and technology adaptations in renewable energy. The Guidelines for this programme were finalised (Ref project proposals for financial support invited institutions/organisations and NGOs in Kerala. In response, 37 project proposals from various institutions were received by ANERT. From these proposals, 32 were short-listed and presented before the Technical Advisory Committee (TAC) of ANERT which recommended 12 proposals for financial support during its meeting held on 22/12/2018 (Ref 2). Project Proposal SRI-18/2018-19 on "Experimental Investigations on Energy Efficient Buildings Using Phase Change Materials in Tropical Climate" from Rev. Fr. Dr. Bennet Kuriakose, Associate Professor, Department of Civil Engineering, St. Joseph's College of Engineering and Technology, Palai, Kottayam (Ref 3) was among the recommended proposals. Further processing of the proposals was done by ANERT - but, release of funds could not happen during 2018-19.

In the budget for Financial Year 2019-20 funds were made available for providing financial support to the 12 project proposals recommended by the TAC.

Thereafter, clarifications were obtained from the Principal Investigator of the project Rev. Fr. Dr. Bennet Kuriakose (Ref.4 to Ref.6). After evaluation of the project proposal and the clarifications obtained, an amount of Rs. 1,00,000/- (Rupees One Lakh Only) was approved as financial support for the above project vide Ref. 7.

As per the approval, an amount of Rs. 25000/- (Rupees Twenty Five Thousand Only) being 25% of the approved financial support could be released as first instalment as per Guidelines on receipt of the following:

1) An Undertaking regarding willingness to carry out the project with the sanctioned budget, objectives & time schedule and non-receipt of fund from other external sources 2) Details of the Bank Account opened in the name of the Head of the Institution specifically for implementation and management of this project.

The Undertaking in specified format (Ref. 8) and the details of the bank account have been received by ANERT. Therefore, sanction is hereby accorded for providing an amount of Rs. 1,00,000/- (Rupees one lakh only) as financial support for execution of the project proposal SRI-18/2018-19 (as detailed in the below table) strictly adhering to the Guidelines of the programme. Sanction is also accorded for release of an amount of Rs. 25000/- (Rupees twenty five thousand only) as first instalment of the financial support and for e-transfer of this amount to the bank account created for implementation and management of the project the details of which are available in the below table.

1	Name of the project	Experimental Investigations on Energy Efficient Buildings Using Phase Change Materials in Tropical Climate
	Reference Number	SRI-18/2018-19
3	Details of Investigators	Principal Investigator: Rev. Fr. Dr. Bennet Kuriakose, Associate Professor, Department of Civil Engineering, St. Joseph's College of Engineering and Technology, Palai, Kottayam Co-Investigator: Dr. Rajesh Baby, Professor and Head, Department of Mechanical Engineering, St. Joseph's College of Engineering and Technology, Palai, Kottayam
4	Objectives	Characterisation studies on PCM for the use in buildings Experimental investigations for the performance of PCM based and non PCM based buildings for the tropical climate

5	Last Date for completion of the Project	f <mark>28/02/2020</mark>
1.18		
6	Approved Financial Support	Rs. 1,00,000/-
7	First Instalment Sanctioned	Rs. 25,000/-
8	Details of Bank Account	Customer Name: M/s ANERT 18 SJCET
		Account No.: 0708053000006284
1	to a series	Bank : South Indian Bank
	,	Branch: 0708 Choondacherry
	2 P	IFSC Code : SIBL0000708

This expenditure is to be met from the provision in Item No. 12 (R&D and Innovation) of the Head of A/c 2810-00-800-90 (07)-35-00 of the Budget for Financial Year 2019-20. Further instalments will be released as decided by ANERT only after receiving the Progress Report. Final instalment will be released after completion of the project and submission of the specified documents by the Principal Investigator.

 The Principal, St. Joseph's College of Engineering and Technology, Choondacherry PO, Palai, Kottayam-686579

min to a pro-

Rev. Fr. Dr. Bennet Kuriakose, Associate Professor, Department of Civil Engineering, St. Joseph's College of Engineering and Technology, Choondacherry PO, Palai, Kottayam– 686579

^{3.} Finance Department/Cashier

Certified that out of Rs 100,000 sanctioned by Agency for New and Renewable Energy Research and Technology (ANERT) towards financial assistance for the student project titled Exeprimental Investigations on Energy Efficient Buildings using Phase Change Materials in Tropical Climate (File No./Letter No.: SRI - 18/2018-19) an amount of Rs 100,000 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs 0 at the close of 26 June 2023.

Da - Bennet Kuriakore Name and signature of

Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution



DR. V.P. DEVASSIA
Principal
St. Joseph's College of Engg. & Technology
Palai, Kerala - 686 579



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

CET campus, Thiruvananthapuram - 695 016
Ph: 0471 2598122; Fax: 2598522 www.ktu.edu.in Email: university@ktu.edu.in

No. KTU/RESEARCH 2/4068/2019

Dated: 22.11.2019

From

The DEAN (Research)

To

The Principal,

St. Joseph's College of Engineering,

Palai.

Sir

Sub:- APJAKTU - CERD - Research Seed Money Scheme - Projects Selected for funding - reg:-

I am glad to inform you that the project proposals as listed in Annexure I are provisionally selected for funding under Research Seed Money (RSM) scheme of KTU.

The expenditure should be incurred as per the sanctioned budget heads and in accordance with terms and conditions given in Annexure II. Format of MOU to be furnished by the college is given as Annexure III.

The Principal Investigators may please be directed to forward request (in Annexure II) for releasing the fund with Bank Account details. The fund will be released only after settling pending accounts of the principal investigator in CERD, if any. Any request received after three months from the date of this letter will not be considered.

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

Copy To

1. Pradeep P. V.,

Assistant Professor, Mechanical Engineering.

2. Shiblemon K. V.,

Assistant Professor, Mechanical Engineering.

3. Anooplal B.,

Assistant Professor, Mechanical Engineering.

4. Alphonsa Johny,

Assistant Professor, Computer Science & Engineering.



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

signature.



List of Research Seed Money Projects selected for funding-November 2019

List of Research Seed Money Projects selected for funding-Government Engineering Colleges

	Contingency	20,000	10,000	75,000
			10,000	
	Research Other Literature		2000	
	Travel	20,000	10,000	20,000
	Equipments		1,00,000	000'06
lrum	Consumables Equipments Travel	40,000	20,000	15,000
College of Engineering Trivandrum	Amount Sanctioned	80,000	1,55,000	2,00,000
f Engineer	1st 2nd Amount Instalment Instalment Instalment	30'000	000'59	50,000
College o	1st Instalment	50,000	000'06	l I
	Title of the Project	Shear Behaviour of reinforced concrete beams using treated recycled concrete aggregate and steel fibres.	Design and Implementation of an 90,000 Intelligent Fault Diagnosis System for multi phase PMSM.	Architectur An Assessment of Vulnerability of 1,50,000 e Fishermen community towards coastal hazards.
	Branch	Civil	EEE	Architectur e
	SL NO Name of Principal Investigator	Sreedevi A R Assistant Professor	Vijayasree G Assistant Professor	Smitha M V Assistant Professor
	ON 7S	н	7	m

					RIT Kottayam	ayam						
St no	SL NO Name of Principal Investigator	Branch	Title of the Project	1st Instalment	1st 2nd Amount Instalment Sanctioned		Consumables Equipments Travel	Equipments		Research Other Literature	!	Contingency
<u>ੂ</u> ਜ	Rejoice Aleyamma Abraham Assistant Professor	Civil	Influence of stabilizer on soil curling phenomena	1,40,000 15,000	15,000	1,55,000	15,000	1,20,000	10,000			10,000
2	Peter K Abraham Asst Professor	EEE	Ultracapacitor based range Extender for Electric Vehicle.	1,25,000 60,000		1,85,000	20,000	1,50,000	2000			10,000
ၕ	Michael George Assistant Professor	ECE	An automated video surveillance 1,90,000 system using deep learning.		10,000	2,00,000		1,88,000				12,000

1

	ontingency	
	0	
	Research Other Literature	
	Travel	
	Equipments	
	Consumables	
ınur	Amount Sanctioned	
GCE Kannur	1st 2nd Amount Instalment Sanctioned	
	1st Instalment	
	Title of the Project	
	Branch	
	No Name of Principal Investigator	
	SL NO	



2000			
2000 3000 2000			
2000			
1,65,000			
2,00,000 25,000			
20,000			
1,50,000			_
Design and development of a 1,50,000 50,000	reliable Cascaded H-bridge	multilevel inverter-fed induction	motor drive.
EEE			
Anjali Anand K	Assistant Professor		
1			

		Contingency	10,000
		Research Other Literature	
			10,000
		Equipments	1,00,000
200,100		Amount Consumables Equipments Travel	30,000
	kki	Amount Sanctioned	1,50,000 30,000
	GEC Idukki	1st 2nd Amount Instalment Instalment Sanctioned	
7,000		1st Instalment	1,35,000
reliable Cascaded H-bridge multilevel inverter-fed induction motor drive.		Title of the Project	Computer aided diagnosis and 1,35,000 15,000 characterization of brain
		Branch	ECE
Assistant Professor		SL NO Name of Principal Branch Investigator	Deepak S Assistant Professor
4		SL NO	ਜ

Contingency

Research Other Literature

Travel

Consumables Equipments

GEC Thrissur

1st 2nd Amount
Instalment Instalment Sanctioned

Title of the Project

Branch

St. NO Name of Principal Investigator

Saurabh Sahadev Assistant Professor	Chemical	Chemical Adsorption studies using chitosan 50,000 based nanosurbants.		1,30,000	1,80,000	40,000	1,00,000	20,000			20,000
				GEC Kozhikode	ikode						
le	SL NO Name of Principal Branch Investigator	Title of the Project	1st Instalment	1st 2nd Amount Instalment Instalment Sanctioned		Consumables Equipments Travel	Equipments		Research Other Literature	Other	Contingency
Adil Muhammed Assistant Professor	Chemical	Chemical Cost effective Packed bed column 70,000 with zinc oxide coated regenerated spent FCC catalyst system for the water treatment.		1,30,000 2,00,000		40,000	1,20,000	20,000			20,000

List of Research Seed Money Projects selected for funding-Government Controlled Engineering Colleges

•				TKM Coll	ege of Eng	TKM College of Engineering Kollam	llam					•
2	SL NO Name of Principal Branch Investigator	Branch	Title of the Project	1st Instalment	1st 2nd Amount Instalment Instalment Instalment	2nd Amount Instalment Sanctioned	Consumables Equipments Travel Research Other Contingency Literature	Equipments	Travel	Research Literature	Other	Contingency
	Dr.Mubarak Ali M	ME	Direct solar heating aided	90,000	73,000	90,000 73,000 1,63,000 31,000	31,000	67,000	16,000 15,000 24,000 10,000	15,000	24,000	10,000
	Assistant Professor		vacuum bag curing process of									
			glass fibre reinforced composite						-			
			laminator									



10,000	10,000	20,000	10,000		Contingency	10,000		Contingency	20,000
								Other	
					Research Other Literature			Research Literature	
10,000	10,000	20,000	, 8000		Travel	10,000		Trave	20,000
1,60,000	1,60,000	1,45,000	1,43,000	E	luipments	1,50,000		Equipments	1,20,000
,20000	20000	15,000	8000	Mar Athanasius College of Engineering Kothamangalam	Consumables	15,000	kkad	Consumables	40,000
2,00,000	2,00,000	2,00,000	1,69,000	gineering Ko	Amount Sanctioned	1,85,000	NSS College of Engineering Palkkad		2,00,000
20,000	20,000	25,000	000'69	ege of Eng	1st 2nd Amount Instalment Instalment Sanctioned	35,000	ge of Engi	2nd Amount Instalment Sanctioned	. 000'09
1,80,000	1,80,000	1,75,000	1,00,000	nasius Col	1st Instalment	1,50,000	NSS Colle	1st Instalment	1,40,000
Evaluation of fatigue strength and durability of fibre reinforced lime stabilized Kuttanad soll.	Evaluation of Interface Shear Strength of Bituminous Layers.	Development of Trophic State Index for freshwater and brackish lake ecosystems of Southern Kerala.	pedence fault detection lavelet transform.	Mar Athar	Title of the Project	Design, fabrication and performance analysis of deciccant based evaporative cooler for humid climates.		Title of the Project	Development of an innovative evacuated tube heat pipe solar water heating system.
Civil	Civil	Civil	333		Branch	ME		Branch	ME
Romana Mariyam Rasheed Assistant Professor	Sai Niveditha M G Assistant Professor	Athul M Madhu Assistant Professor	Dr.Shihabudheen K V EEE Assistant Professor		SL NO Name of Principal Investigator	Thomas Jacob Assistant Professor		SL NO Name of Principal Investigator	Dr.Sajeesh P Assistant Professor
	m	4	5		SL NO	н		St NO	П

List of Research Seed Money Projects selected for funding-Government Supported Engineering Colleges

		1
	Contingency	10,000
	Other	5000 10,000
	Research Other Literature	
		10,000
	Equipments	71,000
lon	Amount Consumables Equipments Travel	20,000
College of Engineering Perumon	Amount Sanctioned	1,16,000 20,000
of Enginee	Lst Znd Amount Instalment Sanctioned	
College	1st Instalment	000'08
	Title of the Project	PV based Open well submersible 80,000 36,000 sensor less BLDC Motor drive.
		333
	SL NO Name of Principal Branch Investigator	Jasna Basheer Assistant Professor
	SL NO	1



				College o	f Engineer	College of Engineering Chengannur	ınnur					
SL NC	SL NO Name of Principal Investigator	Branch	Title of the Project	1st Instalment	1st 2nd Instalment Instalment	Amount Sanctioned	Consumables	Equipments	Travel	Research Literature	Other	Contingency
H	Darsana.S Assistant Professor	ECE	Nondestructive real time montoring of nitrate in water using mobile phone	1,80,000	20,000	2,00,000	30,000	1,50,000	10,000			10,000
				College (of Enginee	College of Engineering Kidangoor	goor					
ST NC	SL NO Name of Principal Investigator	Branch	Title of the Project	1st Instalment	2nd Instalment	Amount Sanctioned	Consumables	Equipments	Travel	Research Literature	Other	Contingency
ਜ	Shihabudeen H Assistant Professor	33	Deep learning based Fusion on infrared and visible images for intelligent traffic management in smart cities.	1,30,000	28,000	1,58,000	20,000	1,20,000	2000	10,000		3000
				LBS Colleg	e of Engin	LBS College of Enginering, Kasaragod	ragod					
SL NC	SL NO Name of Principal Investigator	Branch	Title of the Project	1st Instalment	1st 2nd Instalment Instalment	Amount Sanctioned	Consumables	Equipments	Travel	Research Literature	Other	Contingency
ਜ	Dr.Arathi T Assistant Professor	CSE	Deep Learning based Optimized Computer Aided Detection for Retinal Disease Screening	80,000	20,000	1,00,000	17,000	73,000	5000			2000
List	of Research Se	ed Mone	List of Research Seed Money Projects selected for funding-NBA Accredited Private Amal Jyothi College of Engineering	funding-f Amal Jyo	VBA Accr thi College	unding-NBA Accredited Private Amal Jyothi College of Engineering		Engineering Colleges	eges			
ST NC	SL NO Name of Principal Investigator	Branch	Title of the Project	1st Instalment	1st 2nd Instalment Instalment	Amount Sanctioned	Consumables	Equipments	Travel	Research Literature	Other	Contingency
Н	Richu Zachariah Assistant Professor	ME	Development of a 24/7 solar dryer for domestic applications.	000'09	10,000	70,000	10,000	50,000	2000			.0005
7	Dr.Nimi Ann Vincent Assistant Professor	Civil	A Study on Potential Utilization of 26,000 MICP on Weak Solids and A Preliminary Investigation on Application of MICP in Stabilisation of Foreshore Slopes.	126,000	0009	32,000	(6,000	20,000	3000			3000
			Adi Shankara	Institue c	of Engineer	ring & Tech	Adi Shankara Institue of Engineering & Technology, Ernakulam	ulam				

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	ON	Name of Delivering	Denneh		1ct	2nd	Amount	Concumables	Equipmonte	Travol	Docoorch	Other	Contingency
70	2	Investigator	branch	וומה סו נעה אנס)פרנ	Instalment	Instalment Instalment Sanctioned	Sanctioned	Consumables	Equipments	i ave	Literature		Commission
-		Dr.Kiran jJoy Irimpan ME Associate Professor	ME	Needleless drug injector	000'09	71,000	1,31,000	37,000	34,000	20,000		20,000	20,000
7		Anuroop K B Assistant Professor	ECE	Implementation of a Deep learning based Waste segregation system using Computer vision and Robotics.	1,30,000	54,500	1,84,500	30,000	1,34,500	10,000			10,000
m		Arya Paul Assistant Professor	ECE	Development of a smart portable 1,10,000 IoT device for better diagnosis and control of asthma and COPD.	1,10,000	58,662	1,68,662	8000	1,37,662	12,000			11,000
4		Sreerag M Assistant Professor	ECE	Isolation Enhancement in multi antenna systems used for 5G systems using metamaterials.	1,60,000	32,000	1,92,000	10,000	1,60,000	10,000		2	12,000
				St.Joseph	's College	of Engine	ering & Tec	St.Joseph's College of Engineering & Technology Palai	ai				
SL	NO	SL NO Name of Principal	Branch	Title of the Project	1st	2nd	Amount	Consumables Equipments	Equipments	Travel	Research Other	Other	Contingency

St. Joseph's College of Engineering & Technology Palai	Title of the Project 1st 2nd Amount Consumables Equipments Travel Research Other Contingency	Instalment Instalment Sanctioned Literature	Additive Manufacturing of 80,000 60,000 40,000 60,000 20,000 20,000 20,000 composites.	Investigations on Heat Transfer 85,000 50,000 30,000 65,000 20,000 20,000 Enhancement in Micro Channel Heat sinks.	Phase change material (PCM) 60,000 40,000 40,000 20,000 20,000 based Thermal Management of Linon Battery:An experimental investigation. 1.20,000 40,000 20,000 20,000	Efficient Big Data Processing 45,000 15,000 10,000 40,000 5000 5000	A THE CONTRACT OF THE PROPERTY
St.Jose	Title of the Project		Additive Manufacturing of biodegradable and photocurable elastometer and polymer-based composites.	Investigations on Heat Transfer Enhancement in Micro Channel Heat sinks.	Phase change material (PCM) based Thermal Management of ion Battery:An experimental investigation.	Efficient Big Data Procesing Technique	V 3
	Branch		ME	ME	ME	CSE	
	SL NO Name of Principal	Investigator	Pradeep P V Assistant Professor	Shiblemon K V Assistant Professor	Anooplal B Assistant Professor	Alphonsa Johny Assistant Professor	
	SL NO		н	2	m	4	

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Contingency	1,00,000	19,000	20,000	10,000	10,000	10,000	2000
Other	19,500						
Research Literature							
Travel	19,500	19,000	20,000	10,000	10,000	20000	2000
Equipments		57,000	000'09	1,00,000	75,000	20,000	30,000
Consumables	39,000	38,000	40,000		20,000	1,30,000	10,000
Amount Sanctioned	1,78,000	1,33,000	1,40,000	1,20,000	1,15,000	1,80,000	50,000
1st 2nd Amount Instalment Instalment Instalment	78,000	53,000	40,000	30,000	40,000	70,000	15,000
1st Instalment	1,00,000	000'08	1,00,000	000'06	75,000	1,10,000	35,000
Title of the Project	Experimental Investigations on Nano-based Natural Fibre Composites for Commercial Applications:Development,Mechanical and tribological Property Estimation.	Characterization and formulation 80,000 of an environment friendly lubricant from Pongamia (Millettia Pinnata) oil using biodegradable additives.	Effect of Interference of Embankments when subjected to Loading.	ment of an online ng scheme for partial e detection in ner windings.	Harmonic reduction in Solar Photo Voltaic System using packed U cell Multilevel Inverter.	Design and Development of a Temperature Controlled Micro Chamber with precise monitoring and control for Lab-on-chip applications using MEMS.	Nightingale:Technology enabled portable assist system for nurses in Kerala.
Branch	ME	ME	Civil	EEE	EEE	ECE	CSE
of Nome of Principal Investigator	Rittin Abraham Kurien Assistant Professor	Dr.Sabarinath S Assistant Professor	Hannna Paul Assistant Professor	Jineeth Joseph Assistant Professor	Elizabeth Rajan Assistant Professor	Dr.Rahul Antony Associate Professor	Dr.Anju Pratap Assiociate Professor
or no	1	2	m	4	2	9	7

-		2000	III COIICEC OI		b, ration					
	Title of the Project	1st	Znd	Amount	Consumables	Equipments	Travel	Research	Other	Contingency
		Instaln	nent Instalment	Sanctioned	-			Literature		

20,000	20,000	20,000
2	2	2
00	00	00
20,000	20,000	20,000
1,20,000	80,000	2,40,000
40,000	000009	40,000
2,00,000	1,80,000	2,00,000
	1,00,000 1,80,000	1
1,40,000	80,000	1,60,000
Concrete roof cooling using 1,40,000 60,000 nanoparticle coated heat plipes for sustainability.	Dr.Jaya Mary Jacob Biotechnol Development of biogenic carbon 80,000 Assistant Professor ogy quantum dot based smart nanobionic systems for enhanced photosynthetic CO2 reduction	Nano Chemical Stabilization of 1,60,000 40,000 expansive Kuttanad Clays.
ME	Biotechnol	Civil
Dr. Trijo Tharayil Associate Professor	Dr.Jaya Mary Jacob Biot Assistant Professor ogy	Regi P Mohan Assistant Professor
] -	2	N.

	Contingency	2000	2000		Contingency	5000
ToC H Institute of Science & Technology, Ernakulam						30,000
	Research Other Literature				Research Other Literature	
	Travel	2000	2000		Travel	2000
	Equipments	52,500	30,000	am	Equipments	
	Consumables	10,000	0006	Rajagiri School of Engineering and Technology, Ernakulam	Consumables	10,000
	Amount Sanctioned	72,500	49,000	ind Techno	Amount Sanctioned	20,000
	1st 2nd Amount Instalment Instalment Sanctioned	20,500	0006	gineering a	1st 2nd Amount Instalment Instalment Sanctioned	10,000
	1st Instalment	52,000	40,000	ool of Eng	1st Instalment	40,000
	Title of the Project	Design and Development of a Wearable Antenna for Non- Invasive Glucose Monitoring	Al Based Smart Irrigation System. 40,000	Rajagiri Sch	Title of the Project	Medical Image Synthesis Using Deep Learning
	Branch	ECE	ECE		Branch	CSE
	SL NO Name of Principal Investigator	Sreelekshmi S Assistant Professor	Neethu George Assistant Professor		SL NO Name of Principal Investigator	Meharban M S Assistant Professor
	SL NO	П	2		SL NO	1



Annexure II

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY Centre for Engineering Research and Development Request for releasing RSM grant

	Request for releasing RSM grant	^ .	
Title of Project:			
Date of sanction:			

Account No and bank details:

Amount sanctioned:

Terms & Conditions for Research Seed Money Scheme

- 1. The amount sanctioned for the project shall be deposited in a separate joint A/c of Principal Investigator and Head of the institution where the Principal Investigator works. (Name of A/c: CERD Research Seed Money File No.)
- 2. The maximum duration of the project will be three years from the date of start of the project
- 3. The amount has to be utilized as per budget provision under each head. It is the discretion of the University to settle amount towards the purchase of those items not clearly mentioned, if any, in the project proposal.
- 4. The purchase of equipments shall be in accordance with the store purchase rules. All equipment purchased will be the property of CERD and the stock entry of the items purchased shall be maintained in the College signed by the Investigator, Lab in charge and Principal. Purchase of computers/peripherals is not allowed unless specifically mentioned in the sanction order.
- 5. For Private self financing Colleges, 50% of the actual Equipment cost subjected to the maximum of sanctioned amount will be reimbursed by KTU if and only if the proof of remittance of other 50% is produced by the college.
- 6. The stock entries of consumables purchased shall also be done in the consumables stock register of College. Purchase of stationery shall be for project purpose only.
- 7. Books and literature purchased should be taken into the Stock Register of Central Library or Department library and then distributed to the investigators.



- 8. The interest accrued will also be accounted in the project.
- 9. On completion of the project, detailed report of the research work (hard and soft copies), audited statement of accounts and Utilization Certificate in the prescribed format duly attested by the head of the institution shall be submitted within one month on completion of the project for settlement of accounts.
- 10. If the project is not completed within the time limit, the grant amount should be reimbursed along with the interest accrued.
- 11. The CERD reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilized or appropriate progress is not being made. In addition, the CERD may designate Scientist/Specialist or an Expert Panel to periodically review the work done. The Principal Investigator has to appear for the periodic review meetings.
- 12. If the PI to whom the project has been sanctioned, leaves the Institution, the Head of Institution/PI shall inform the same to the CERD and in consultation with the CERD, evolve steps to ensure successful completion of the project, before relieving the PI.
- 13. Investigators must acknowledge the CERD in reports and technical/scientific papers published based on the research work done under the project. Investigators are requested to publish some of the research papers emerging out of the project work in leading Journals.
- 14. If the results of research are to be legally protected by way of patent/copy rights etc. the results should not be published without action being taken to secure legal protection for the research results.
- 15. The knowledge generated from the project will be the property of the CERD and should be properly acknowledged. Transfer of technology generated shall be done in consultation with the CERD.

We agree to the terms and conditions stated above. Please transfer the amount to the above bank account.

Signature of Principal Investigator:

Name:

Designation:

Signature of Head of Institution:





Name:

Office Address:

Seal





Annexure III

(Stamp paper Rs 200) MEMORANDUM OF UNDERSTANDING [MOU]

BETWEEN

-Name of Self Financing Engineering College-

AND

APJ Abdul Kalam Technological University (KTU),
THIRUVANANTHAPURAM

This Memorandum of Understanding is entered into at Thiruvananthapuram on this --- Day of Month Year

BETWEEN

-Name of Self Financing Engineering College- affiliated to APJ Abdul Kalam Technological University (herein after referred to as COLLEGE) which expression shall unless it be repugnant to the context or meaning thereof to be deemed to mean and include its successors and assigns, represented by The Principal, ---Name of college- place of college -, of the ONE PART.

AND

APJ Abdul Kalam Technological University, CET campus, Thiruvananthapuram-695016 (herein after referred to as KTU) which expression shall, unless it be repugnant to or inconsistent with subject or context thereof, include and be deemed to include their heirs, successors and assigns, represented by The Dean (Research), APJ Abdul Kalam Technological University, Thiruvananthapuram 695016 of the OTHER PART.

1. TERMS OF UNDERSTANDING

- 1.1. This memorandum of understanding lists out the terms of releasing and utilization of CERD research seed money fund sanctioned to a faculty of COLLEGE for the year ------.
- 1.2. The scheme is constituted for the purpose of providing assistance in the form of grants to initiate research work in Engineering and Technology with particular relevance to the State of Kerala in the economic and industrial development.



- 1.3. Grant will be released to the principal investigator of the project through the Head of the institution.
- 1.4. The maximum duration of the project will be three years from the date of start of the project
- 1.5. On completion of the project, one copy of the final project report on the work done should be sent to the CERD along with the utilization certificate (UC) and statement of expenditure (SE).
- 1.6. The institute will maintain separate audited accounts for the project.
- 1.7. The institute will not entrust the implementation of the work for which the grant is being sanctioned to another institution nor will it divert the grant receipts to other institute as assistance.
- 1.8. The CERD reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilized or appropriate progress is not being made. In addition, the CERD may designate a Scientist/Specialist or an Expert Panel to review the work done.
- 1.9. If the PI to whom the project has been sanctioned leaves the Institution, the Head of Institution/PI will inform the same to the CERD and in consultation with the CERD, evolve steps to ensure successful completion of the project, before relieving the PI.
- 1.10. Investigators must acknowledge the CERD in reports and technical/scientific papers published based on the research work done under the project. Investigators are requested to publish some of the research papers emerging out of the project work in leading Journals.
- 1. 11. If the results of research are to be legally protected by way of patent/copy rights etc. the results should not be published without action being taken to secure legal protection for the research results.
- 1.12. The knowledge generated from the project will be the property of the CERD and should be properly acknowledged. Transfer of technology generated shall be done in consultation with the CERD.
- 1.13. For Private self financing Colleges, 50% of the actual Equipment cost subjected to the maximum of sanctioned amount will be reimbursed by KTU if and only if the proof of remittance of other 50% is produced by the COLLEGE.
- 1.14. The equipment details must be entered in the stock register of the college and signed by the Investigator, Lab in charge and Principal.
- 1.15. The college should submit annually the status and details of earlier grants received from KTU with pending statement if any.



- 1.16. The grant amount should be deposited in a separate bank account in the name of the Principal investigator and Head of Institution jointly.
- 1.17. The interest accrued shall also be accounted in the project.
- 1.18. If the project is not completed within the time limit, the grant amount should be reimbursed along with interest accrued.

We agree to the terms and conditions stated above.

2. SCOPE OF MOU

Nothing in this Memorandum is intended to or shall be deemed to establish an exclusive relationship between the parties or to restrict any activities that either party would otherwise be able to undertake. Nothing in this Memorandum is intended to or shall be deemed to establish any partnership or joint venture between the parties or constitute any activities that either party would otherwise be able to undertake.

3. PERIOD

This MOU shall be perpetual. This agreement will be amended or modified by the University at any time.

4. DISPUTE RESOLUTION AND ARBITRATION

This memorandum of understanding shall be governed by the laws of Union of India and State of Kerala. Any dispute arising with this MOU shall be brought to the notice of the Vice-chancellors of the parties who shall try to resolve them, failing which legal reasoning be taken in the jurisdiction of court in Thiruvananthapuram.

The terms and conditions of this memorandum of understanding shall not be disclosed to any third parties by any party of this memorandum of understanding without the prior written consent of both parties.

5. FORCE MAJEURE

Without prejudice to accrued liabilities and rights, no party shall have any liability whatsoever to the other Party or be deemed to be in default by reason of delay or failure in performance under this memorandum of understanding to the extent that such delay or failure is caused by or arises from acts or circumstance or events beyond the reasonable control of that party, including but not limited to acts of god, acts or regulations of any governmental authority, war or national emergency, accident, fire, riot, strikes, lock-outs, industrial disputes, natural catastrophes or epidemics.



Each Party shall bear its own losses arising from such force majeure event(s), if any.

6. INTELLECTUAL PROPERTY

All prior information, design and data existing with either party before the signing of this MoU (pre-existing IP) shall be the sole property of the concerned party. All Intellectual Property including design information, designs, source codes and data generated through the collaboration under this MOU shall be as mutually agreed in writing and also as per the guide line of the funding agency, if such an agency is involved. Any IPR arising specifically out of this collaboration will be owned by both parties, except when mutually agreed in writing otherwise.

IN WITNESS WHEREOF, the parties hereto have caused this memorandum of understanding to be executed in duplicate, through their representatives at Thiruvananthapuram in the day and year first above written:

Now the memorandum of understanding witnesses as follows.

Principal Name of College University Place Dean (Research)
APJ Abdul Kalam Technological

Thiruvananthapuram 695016

Witness: 1

Witness: 1

Signature:

Signature :

Name

Name

Witness: 2

Witness: 2

Signature :

Signature:



Certified that out of Rs. 60,000 sanctioned by Center for Engineering Research and Development of APJ Abdul Kalam Technological University towards financial assistance for the project titled Efficient Big Data Processing Technique (File No. /Letter No.: KTU/RESEARCH 2/4068/2019) an amount of Rs. 44,943 was utilized for the purpose for which it was sanctioned, leaving a balance of Rs. 15,057 at end of the financial year 2020-2021 for utilization in subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer Name and signature of Head of the Institution



Certified that out of Rs. 60,000 sanctioned by Center for Engineering Research and Development of APJ Abdul Kalam Technological University towards financial assistance for the project titled Efficient Big Data Processing Technique (File No. /Letter No.: KTU/RESEARCH 2/4068/2019) an amount of Rs.0 was utilized from an available fund of Rs. 15,057 (from the previous financial year) for the purpose for which it was sanctioned, leaving a balance of Rs. 15,057 at the end of the financial year 2021-22 for utilization in the subsequent year.

Name and signature of Principal Investigator Name and signature of Finance Officer

Name and signature of Head of the Institution



Certified that out of Rs. 60,000 sanctioned by Center for Engineering Research and Development of APJ Abdul Kalam Technological University towards financial assistance for the project titled Efficient Big Data Processing Technique (File No. /Letter No.: KTU/RESEARCH 2/4068/2019) an amount of Rs.0 was utilized from an available fund of Rs. 15,057 (from the previous financial year) for the purpose for which it was sanctioned, leaving a balance of Rs. 15,057 at the end of the financial year 2022-23 for utilization in the subsequent year.

Name and signature of Principal Investigator

Name and signature Finance Officer Name and signature of Head of the Institution

DR. V.P. DEVASSIA
Principal
St. Joseph's College of Engg. & Technology
Palai, Kerala - 686 579



Certified that out of Rs.1,35,000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Investigation on Heat transfer Enhancement in Micro channel Heat sinks" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs. 0 was utilized from an available fund of Rs. 85,000 from the first installment received for the purpose for which it was sanctioned, leaving a balance of Rs. 85,000 at the end of the financial year 2020-21 for utilization in the subsequent year.

Shiblemon K.V Name and signature of

Principal Investigator

Name and signature of Finance Officer Name and signature of Head of the Institution



Certified that out of Rs.1,35,000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Investigation on Heat transfer Enhancement in Micro channel Heat sinks" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs 73,000 was utilized from an available fund of Rs. 85,000 (from the previous financial year balance) for the purpose for which it was sanctioned, leaving a balance of Rs. 12,000 at the end of the financial year 2021-22 for utilization in the subsequent year.

Shiblemon K'V Name and signature of

Principal Investigator

Name and signature of Finance Officer Name and signature of Head of the Institution



Certified that out of Rs.1,35,000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Investigation on Heat transfer Enhancement in Micro channel Heat sinks" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs 12,000 was utilized from an available fund of Rs. 12,000 (from the previous financial year balance) for the purpose for which it was sanctioned, leaving a balance of Rs. 0 at the end of the financial year 2022-23 for utilization in the subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of
Head of the Institution
DR. V.P. DEVASSIA
Principal

St. Joseph's College of Engg. & Technolog.
Palai, Kerala - 686 579



Certified that out of Rs: 1,20,000 (One lakh twenty thousand) sanctioned by CERD-APJ Abdul Kalam Technological University towards financial assistance for the project titled Phase Change Material (PCM)-based Thermal Management of Li-Ion Batteries: An Experimental Investigation (File No./Letter No.KTU/RESEARCH/2/4068/2019) an amount of Rs: 60,000 (first installment) was credited for the purpose for which it was sanctioned, no amount is utilized and leaving a balance of Rs:60,000 (sixty thousand) at end of the financial year 2020-2021 for utilization in the subsequent year.

Anoptal 13
Name and signature of
Principal Investigator

Name and signature of
Finance Officer

Name and signature of Head of the Institution

Certified that out of Rs: 1,20,000 (One lakh twenty thousand) sanctioned by CERD- APJ Abdul Kalam Technological University towards financial assistance for the project titled "Phase Change Material (PCM)-based Thermal Management of Li-Ion Batteries: An Experimental Investigation" (File No./Letter No.KTU/RESEARCH/2/4068/2019) an amount of Rs: 60,000 (first installment) was credited for the purpose for which it was sanctioned, no amount is utilized and leaving a balance of Rs: 60,000 (sixty thousand) at end of the financial year 2021-2022 for utilization in the subsequent year.

Anoppul-B Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution



Certified that out of Rs: 1,20,000 (One lakh twenty thousand) sanctioned by CERD- APJ Abdul Kalam Technological University towards financial assistance for the project titled "Phase Change Material (PCM)-based Thermal Management of Li-Ion Batteries: An Experimental Investigation" (File No./Letter No.KTU/RESEARCH/2/4068/2019) an amount of Rs: 60,000 (first installment) was credited for the purpose for which it was sanctioned, total credited amount is utilized and leaving a balance of Rs: 0 at the end of the financial year 2022-2023 for utilization in the subsequent year.

Name and signature of Principal Investigator

Name and signature of Finance Officer

Name and signature of Head of the Institution

DR. V.P. DEVASSIA
Principal
St. Joseph's College of Engg. & Technology
Palai, Kerala - 686 579

Certified that out of Rs.140000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Additive Manufacturing of biodegradable and photocurable elastomer and polymer based composites" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs 0 was utilized from an available fund of Rs. 80000 from the first installment received for the purpose for which it was sanctioned, leaving a balance of Rs. 80000 at end of the financial year 2020-21 for utilization in subsequent year.

Name and signature of Principal Investigator Name and signature of Finance Officer Name and signature of Head of the Institution



Certified that out of Rs.140000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Additive Manufacturing of biodegradable and photocurable elastomer and polymer based composites" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs 80000 was utilized from an available fund of Rs. 80000 from the first installment received for the purpose for which it was sanctioned, leaving a balance of Rs. 0 at end of the financial year 2021-22 for utilization in subsequent year.

Name and signature of Principal Investigator Name and signature of

Name and signature of Head of the Institution



Certified that out of Rs.140000 sanctioned by CERD APJKTU towards financial assistance for the project titled "Additive Manufacturing of biodegradable and photocurable elastomer and polymer based composites" (File No./Letter No: KTU/RESEARCH 2/4068/2019) an amount of Rs 0 was utilized from an available fund from the first installment received of Rs. 0 for the purpose for which it was sanctioned, leaving a balance of Rs. 0 at end of the financial year 2022-23 for utilization in subsequent year.

Name and signature of Principal Investigator Name and signature of Finance Officer Name and signature of Head of the Institution

DR. V.P. DEVASSIA
Principal
St. Joseph's College of Engg. & Technology
Palai, Kerala - 686 579

