



NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

### 3.1.3 Percentage of departments having Research projects funded by government and non-government agencies during the last five years

3.1.3.1: Number of departments having Research projects funded by government and non-government agencies during the last five years

Year	2019-2020	2018-2019	2017-2018	2016-2017	2015-2016
Number	2	4	2	3	1
TOTAL				12	

True Copy Attested

DR. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, M.A., M.Sc., M.Phil, E.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy F.O.-679 531



CREATING TECHNOLOGY  
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N A & C Accredited College with NBA Accredited Programmes\*

Approved by AICTE & affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTI P.O., CHERUTHURUTHY, THRISSUR, PIN-679531 PH : +91- 4884-259000, 274423 FAX : 04884-274777



NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

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*Amrutha*  
Principal  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531





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*Amal*  
Dr. SUNNY JOSEPH KALAYATHANAKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
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Title of the Research project proposal : DRIVER CENTRIC SAFETY EVALUATION OF TWO-LANE RURAL HIGHWAY

Funding authority: Kerala State Council for Science, Technology and Environment, Thiruvananthapuram (Scheme - Engineering and Technology Programme)

Sanctioned amount : 12.7 Lakh

Project duration : 2 Years (2016-2018)

Application of the project: Development of safer road design and evaluation of safety of existing roads based on driver's workload.

Broad Subject Area: TRAFFIC ENGINEERING - ROAD SAFETY

Specific branch of Engineering: Civil Engineering and Electronics Engineering (Interdisciplinary)

**Project Summary:**

Safety, though a prime consideration of transportation, the statistics show that number of accidents and fatalities are increasing in which most of the accidents are taking place in rural highways. The comparatively less volume and high speed of traffic increases the severity of an accident in rural highways. Here, geometry and/or its consistency are the governing factors that guide a driver. Hence, this research work focuses on the effect of geometric design consistency on safety of two-lane rural highways, taking into consideration the amount of workload the geometry load up on a driver. Variation of workload from an optimum may result in erroneous driving action that may lead to an accident. The research aims to develop imperative measures for road safety auditing and to propose appropriate guidelines for geometric design of highways. Outcome of the project can be used as a tool by the engineers for analyzing alternative highway designs.

True Copy Attested

*Sunny*  
Dr. SUNNY JOSEPH KALAYAT  
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**KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND ENVIRONMENT**

An Autonomous body of the  
Government of Kerala

KSCSTE- Engineering & Technology Programme - Project entitled 'Driver Centric Safety Evaluation of Two Lane Rural Highway' submitted by Dr. Anitha Jacob, Associate Professor, Dept. of Civil Engineering, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur -financial grant-sanctioned- orders issued.

Council (P) Order No.141/2016/KSCSTE

Dated: Thiruvananthapuram, 02.05.2016

- Ref:-
- (1) File No. ETP/03/2014/KSCSTE.
  - (2) Project proposal dated: 01.07.2014.
  - (3) Minutes of the 14<sup>th</sup> meeting of RC-ETP, held on 29<sup>th</sup> February 2016.
  - (4) Letter No. ETP/03/2014/KSCSTE, dated: 15.03.2016.
  - (5) Agreement executed on 18.03.2016 by The Principal, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur.

**ORDER**

1. As per reference (1) cited above Dr. Anitha Jacob, Associate Professor, Department of Civil Engineering, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur submitted a proposal entitled 'Driver Centric Safety Evaluation of Two Lane Rural Highway' under the Engineering and Technology Programme (ETP). The Research Council for ETP (RC-ETP) evaluated the proposal and based on the recommendations, the Council has decided to support the project for an amount of Rs. 12,72,400/- as per reference (3 & 4) cited above. As per the guidelines, Dr. Anitha Jacob (PI) and The Principal, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur executed the agreement in a non-judicial stamp paper worth Rs 100/- agreeing to the Terms and Conditions stipulated under this programme.

2. Kerala State Council for Science, Technology and Environment (KSCSTE) is pleased to accord sanction for the project proposal entitled 'Driver Centric Safety Evaluation of Two Lane Rural Highway' submitted by Dr. Anitha Jacob, Associate Professor, Dept. of Civil Engineering, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur for a total cost of Rs 12,72,400/- (Rupees Twelve Lakh Seventy Two Thousand and Four Hundred Only). The duration of the project shall be two years. The sanctioned budget heads of the project are as follows:

Sl. No.	Item	1 <sup>st</sup> year (Rs.)	2 <sup>nd</sup> year (Rs.)	Total (Rs.)
1.	Manpower i) Project Fellow	2,11,200	2,11,200	4,22,400
2.	Consumables	40,000	35,000	75,000
3.	Travel	1,60,000	50,000	2,10,000
4.	Contingencies	40,000	10,000	50,000
5.	Equipment	4,15,000	-----	4,15,000
	Sub Total	8,66,200	3,06,200	11,72,400
6.	Institutional Overhead (10%)	-----	-----	1,00,000
	Grand Total			12,72,400

3. KSCSTE is pleased to accord sanction to release Rs. 8,66,200/- (Rupees Eight Lakh Sixty Six Thousand and Two Hundred only) towards the 1st year grant for the above mentioned project and the amount will be disbursed to The Principal, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur - 679 531 by account payee cheque for the above said purpose.

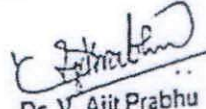
True Copy Attached

Ph.D (Computer Science)  
M. N. S. PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.- 679531



4. Head of the Institution should ensure that the Terms and Conditions executed are strictly followed in the purchase of the equipments as well as in the implementation of the project. 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. PI should submit Quarterly Progress Reports in the prescribed format with effect from date of start of the project.
5. The details and copy of appointment order of the Project Fellow employed in the project should be furnished. In case, if a vacancy arises in due course, due to relieving of the appointed personnel, the details of new project personnel appointed should also be reported promptly.
6. KSCSTE's name should be engraved or affixed permanently on all equipment/ instruments procured and also in the fabricated ones under the ETP programme of KSCSTE as Procured under the ETP project sanctioned from KSCSTE. It should be ensured that all the assets are acquired, strictly following the purchase procedure of the Institution.
7. Monitoring and assessment of the progress of the project will be done by RC-ETP meetings and the subsequent grant will be released, based on the recommendations of the RC-ETP. Audited Statement of Expenditure and Utilization Certificate (in the prescribed format) for the grants on a project year basis should be furnished. Institutional Overhead will be released only after the submission of Final Project Report.
8. The expenditure in this regard will be met from the Council's budget head III Schemes and Programmes of KSCSTE (24) Engineering & Technology Programme.


The above sanction has been issued under the delegated powers of the Council, with the approval of the Director, KSCSTE, vide sanction No. 124/DIR/2016-2017/ KSCSTE, dt: 02.05.2016

  
Dr. V. Ajit Prabhu  
Joint Director & Scientist F

To  
The Principal, Jyothi Engineering College, Jyothi Hills, Cheruthuruthi, Thrissur - 679 531.

Copy to:  
Dr. Anitha Jacob, Associate Professor, Dept. of Civil Engineering, Jyothi Engineering College,  
Jyothi Hills, Panjal Road, Vellikkattiri P.O, Cheruthuruthy, Thrissur-679 531.  
Cash Section-They may arrange the payment by account payee cheque.  
PS to Executive Vice President/ PA to Member Secretary/ PA to Director/ PA to Controller of  
Administration/ Administrative Officer/ Finance Officer/ Scientific Officer (BT)/ Stock File/ Office Copy.

True Copy Attested

  
Dr. S. C. S. Prasad  
M.Tech, MCA, M.Sc. in Phil. B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.- 679 531





KSCSTE - Engineering & Technology Programme - Project entitled 'Driver Centric Safety Evaluation of Two Lane Rural Highway submitted by Dr. Anitha Jacob, Associate Professor, Department of Civil Engineering, Jyothis Engineering College, Jyothis Hills, Cheruthuruthi, Thrissur - release of Institutional Overhead - orders issued.

Council (P) Order No 707/2020/KSCSTE Dated: Thiruvananthapuram, 24/11/2020

Ref. - 1. File No. ETP/03/2014/KSCSTE

2. Council (P) Order No. 141/2016/KSCSTE; dt: 02.06.2016

3. Council (P) Order No. 215/2018/KSCSTE; dt: 16.06.2018

4. Minutes of the 19<sup>th</sup> meeting of RC-ETP held on 23<sup>rd</sup> & 29<sup>th</sup> September 2020

**ORDER**

1. Kerala State Council for Science, Technology and Environment (KSCSTE) had accorded sanction for the project entitled 'Driver Centric Safety Evaluation of Two Lane Rural Highway submitted by Dr. Anitha Jacob, Associate Professor, Department of Civil Engineering, Jyothis Engineering College, Jyothis Hills, Cheruthuruthi, Thrissur, for a total budget of Rs. 12,72,400/-. The 1<sup>st</sup> and 2<sup>nd</sup> year grants were released as per the Council Order referred (2&3).

2. The progress of the project was reviewed in the 19<sup>th</sup> meeting of Research Council for Engineering and Technology Programme (RC-ETP). As the project is successfully completed, RC recommended to release Institutional Overhead subject to verification of audited financial statements and Project Completion Report.

3. KSCSTE examined the Project Completion Report and the consolidated audited financial statements. As per the Statement of Expenditure, the total expenses incurred is Rs. 9,59,178/- leaving an unspent balance of Rs. 1,42/-. Hence, it is decided to release an amount of Rs. 95,775/- (Rs 95,917/- - Rs 1,42/-) deducting the unspent balance of Rs. 1,42/- as Institutional Overhead for the above mentioned project.

4. KSCSTE is pleased to accord sanction to release an amount of Rs. 95,775/- (Rupees Ninety Five Thousand Seven Hundred and Seventy Five Only) towards Institutional overhead for the above mentioned project. The grant will be disbursed to The Principal, Jyothis Engineering College, Jyothis Hills, Cheruthuruthi, Thrissur - 679 531; through net banking / e-payment for the above said purpose.

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

Beneficiary Account Name	The Principal, Jyothis engineering College
Beneficiary Account Number (SB/CC)	15250100001019
Beneficiary IFSC code	FDRL0001699
Bank Name and Branch	Federal bank, Cheruthuruthy Branch
Beneficiary Address	The Principal, Jyothis Engineering College, Jyothis Hills, Cheruthuruthi, Thrissur
Beneficiary Mobile No:	9447092923

True Copy Attested

DR. SUNRI...  
M. Tech, MCA, M. Sc. M.  
Pn. D. Comput. Science, P.D. In...  
Principal  
Jyothis Engineering College  
Cheruthuruthy P.O.-679 531





കേരള ശാസ്ത്ര സാങ്കേതിക പരിസ്ഥിതി കൗൺസിൽ  
Kerala State Council for Science, Technology and Environment

'ഭരണഭാഷ-മാതൃഭാഷ'

Dr. Anilkumar C  
Principal Scientist and Head  
Science Education Division  
No.C-139 /NSD/2017/KSCSTE  
Sir/Madam,

09-02-2017

**Sub:- KSCSTE – National Science Day 2017- Celebrations – reg.**  
**Ref:- File No. 01/NSD2017/KSCSTE/2016**

With reference to your proposal, I am happy to inform that KSCSTE has approved to offer financial assistance of ₹20,000/- for organizing the National Science Day (NSD) 2017 celebrations, subject to the following conditions.

1. Programme schedule should be sent to KSCSTE well in advance.
2. Activities should be based on the focal theme: "Science and Technology for specially abled persons". Eminent speakers/ experts may be invited to handle the sessions organized in connection with the programme.
3. Though February 28 is observed as National Science Day, the activities in your institution may be organized on any convenient date in the month of February, but on or before February 28, 2017. The activities organized after February 28, 2017 will not be considered for financial assistance.
4. Each activity should be documented. Detailed report on the various activities organized in connection with NSD - 2017 along with captioned photographs should be submitted to KSCSTE.
5. KSCSTE should be duly acknowledged in the programme and it should be written in all the brochures, banners, publicity materials, etc. 'Sponsored by Kerala State Council for Science, Technology and Environment' and supported by 'Department of Science & Technology, Govt. of India'.
6. The financial assistance may be utilized to cover the expenditure on organizing expenses, publicity materials, travel expenses, honoraria for resource persons and refreshment. Utilization of the grant for any other purpose other than the approved heads shall not be entertained.
7. Head of the Institution should forward the audited Statement of Expenditure and Utilization Certificate in the standard format available in the KSCSTE website.
8. The financial assistance will be disbursed to the Head of the Institution, only after the successful conduct of the programme, subject to the submission of satisfactory report and financial statements.
9. The required documents mentioned above should reach this office as early as possible after the conduct of the programme. However, the documents received after April 30, 2017 will not be entertained for release of payment and such request will be summarily rejected.

Kindly refer the Letter No and File No. in all future correspondence.

Name of the Programme Co-ordinator: **Mrs. Priya Jose, Asst. Professor, Department of Basic Science and humanities**

Thanking you,

Yours sincerely

True Copy Attested

Anilkumar C

Anilkumar C

To,

The Principal, Jyothi Engineering College, Jyothi Hills, Vettikkathiri P.O,  
Cheruthuruthy, Thrissur 679531  
Mrs. Priya Jose, Asst. Professor, Department of Basic Science and humanities, Jyothi  
Engineering College, Jyothi Hills, Vettikkathiri P.O, Cheruthuruthy, Thrissur 679531  
ശാസ്ത്രഭവൻ, പട്ടം. പി. ഒ., തിരുവനന്തപുരം, കേരളം, ഇന്ത്യ

Sasthra Nilayam, Pattom P.O., Thiruvananthapuram - 695 004, Kerala State, India

Tel: 0471-2548200-09, E.V.P - 2543557, 2548222, MS - 2542111, 2548220, CoA - 2543556, 2548248, Fax: 0471 2540085, 2533095

e-mail: mailto@kscste.org, web site: www.kscste.kerala.gov.in



# NATIONAL SCIENCE DAY

CELEBRATIONS- 2017

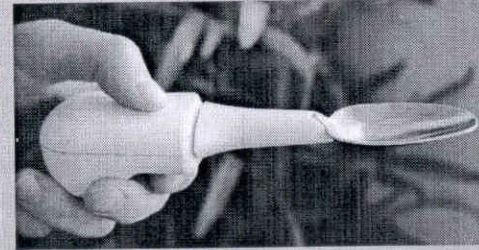
## Programme Schedule- Inaugural Function

Venue	: Decennial Hall
Date	: 28 <sup>th</sup> Feb. 2017
10.30 am	: Prayer
10.35 am Welcome Address	: <b>Rev.Fr. John Tharayil</b> HOD- Basic Science & Humanities
10.40 am Presidential Address	: <b>Dr. K.K. Babu, Principal</b>
10.50 am Inauguration & Inaugural Address	: <b>Dr. K.M. Durga Devi</b> Professor, Dept. of Soil Science & Agrl. Chemistry Kerala Agricultural University
11.05 am Special Address	: <b>Rev.Fr. Roy Joseph Vadakkan</b> Asst. Manager, Academics & Administration
11.15 am Felicitation	: <b>Er. Thomas Mathew</b> Administrator
11.20 am Prize distribution	:
11.25 am Vote of Thanks	: <b>Ms. Priya Jose</b> Coordinator, National Science Day-2017
11.30 am Science Lecture	: <b>Dr. K.M. Durga Devi</b>

*"Science and Technology for specially abled persons"*

### 4. Liftware

Liftware is a self stabilizing handle on which you can attach any eating utensil and it will work as a fork or



spoon. The device is helpful for mentally disabled people who suffer from Parkinson's disease or other type of disorder which causes hand tremors. Liftware helps in reducing the spilling of content before it reaches to patient's mouth. Liftware includes stabilizing handle, charger, utensils, fork, soup spoon and spoon that can be washed like normal utensils.

### 5. UNI

UNI provides a two-way communication for the deaf people using speech and gesture technology. The gadget detects the hands and figure gesture with its camera algorithms, then converts into text and provides the meaning of sign language. UNI uses a specialized camera to track your finger movement with incredible speed.



### 6. Vision Assisted Smart Glasses

The tech gadget Assisted Vision Smart Glasses is a pair of glasses that gives a little sight so that the blind people can walk around unfamiliar places, can recognize obstacles. This gadget gives a great independence, consists of two small cameras, gyroscope, compass, GPS unit, headphone and transparent OLED displays



Jyothsna

Approved by AICTE  
A CENTRE OF EXCELLENCE IN  
JYOTHSNA HILLS, VETTIKKATTUR, P.O. CHEERUPPETA

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SCI  
CELEB

28<sup>th</sup>

Kerala State Co  
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"SCIENCE A  
SPECIAL

D  
Professor  
T



## INGENIOUS INVENTIONS FOR SPECIALLY ABLED PERSONS

### 1. Finger Reader

The device helps visually impaired people to read any printed book or anything on any electronic device. Finger Reader includes a small camera that scans the text and provides real-time audio feedback of the detected words.



Finger Reader



Tactile Wand

### 2. Tactile Wand Electronic Stick

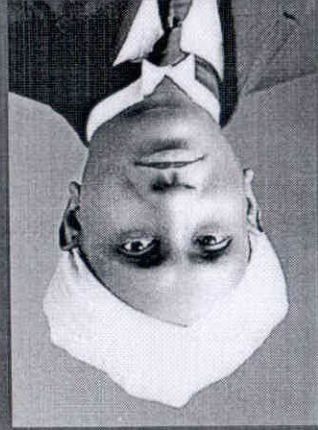
This electronic stick helps visually impaired people to determine the object that comes in their way. Tactile Wand Electronic Stick detects the object in front of the user and vibrates with the increasing intensity as soon as you get closer to it.

### 3. Dot

It is a wearable smart-watch that works for blind people and helps them to access tweets, messages anytime and anywhere right from their smart-phones. The device can connect with any smart-phone via Bluetooth and translate the text on its screen. The smart-phone features alarm, notifications, touch sensor, Bluetooth and Gyroscope.



**N**ational Science Day (NSD) is celebrated all over India with great enthusiasm on 28<sup>th</sup> of February every year in order to commemorate the invention of the Raman Effect in India by the Indian physicist, Sir Chandrasekhara Venkata Raman on the same day in the year 1928. For his great success in the field of science in India, Chandrasekhara Venkata Raman was awarded and honored with the Nobel Prize in Physics in the year 1930.



Sir Chandrasekhara Venkata Raman had worked from 1907 to 1933 at the Indian Association for the Cultivation of Science, Kolkata, West Bengal in India. He had researched on many topics in Physics from which the Raman Effect ("Change in the wavelength of light that occurs when a light beam is deflected by molecules. When a beam of light traverses a dust-free, transparent sample of a chemical compound, a small fraction of the light emerges in directions other than that of the incident beam.") became his great success and discovery. It has been marked in the Indian history of science. For his big invention he was honored Nobel Prize in the year 1930. From the year 2013, the "Raman Effect" has been designated as an International Historic Chemical Landmark by The American Chemical Society.

The focal theme of the Science Day Celebration for the current year, 2017 is "Science and Technology for specially abled persons".

DR. SANNY JOSEPH KALAYAT  
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(Computer Science), Ph.D.  
PRINCIPAL  
Jyothi Engineering Co  
Cheruthuruthy P.O.-67

*Shruthi*





16-02-2017

Dr. Anilkumar C  
Principal Scientist & Head  
Science Education Division

52/SPS 60/2016/KSCSTE

Dear Shri. Biju C V,

Sub:- Financial assistance from KSCSTE for student project 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 'Development of multiple sensor probes using error compensating algorithm for accurate measurement of fuel level in dynamic conditions for automobiles' submitted by Shri. Biju C Vas PI and Mr. Abijith Mani, Mr. Ashiq Thomas, Mr. Calvin J Kundukulam, Mr. Deepak Charles, Mr. Deepak Tomas student investigator(s) has been approved. An amount of Rs.6500/- is sanctioned by the Council. The budget estimate of the project will be as detailed below.

SL.NO.	ITEMS	AMOUNT(Rs.)
1.	Consumables	1500
2.	Travel	
3.	Research Literature & Documentation	1000
4.	Others ((for fabrication) )	4000
	<b>Total</b>	<b>6500</b>

The PI has to submit the signed 'Terms and Conditions' and the date of start of the project may be intimated to the Council. On completion of the project you should submit one hard copy and a soft copy of the final report (in pdf to [spkscste@gmail.com](mailto:spkscste@gmail.com)), 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 & UC can be downloaded from [www.kscste.kerala.gov.in](http://www.kscste.kerala.gov.in).

Thanking you,

Yours sincerely,

True Copy Attested

*Anilkumar C*  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531

*Anilkumar C*  
Anilkumar C

To,

Shri. Biju C V, Associate Professor, Department of Mechanical Engineering, Jyothi Engineering College Cheruthuruthy Thrissur 679531

Copy to:

The Principal, Jyothi Engineering College Cheruthuruthy Thrissur 679531  
Mr. Abijith Mani, Mr. Ashiq Thomas, Mr. Calvin J Kundukulam, Mr. Deepak Charles, Mr. Deepak Tom, Student(s), Department of Mechanical Engineering, Jyothi Engineering College Cheruthuruthy Thrissur 679531

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](mailto:kscste@gmail.com), [www.kscste.kerala.gov.in](http://www.kscste.kerala.gov.in)





# Kerala State Council for Science, Technology and Environment

Er. Sherin B.M.  
Scientist B

28.11.2017

No. C47/171/INNOVATE/2018/KSCSTE

Sir/Madam,

Sub: - KSCSTE - TEKON 2018- INNOVATE scheme - reg.

With reference to your proposal on the above subject, I am happy to inform that KSCSTE has approved your project proposal entitled 'Agni' for a financial support of Rs.5,000/- subject to the following conditions.

1. The products/prototypes developed under INNOVATE scheme shall be demonstrated in TEKON- 2018 of KSCSTE which is to be held during 23<sup>rd</sup> to 25<sup>th</sup> February 2018.
2. The Objectives, Methodology, Output, Application of the project to the society and other relevant details shall be displayed at TEKON in poster of size 120 cm (height) ×90cm (width).
3. Excess expenditure incurred (if any) shall be met from the internal funds of the Institution/ other sources.
4. The Institution shall be the custodian of the projects supported under the INNOVATE scheme. It is the responsibility of the Institution for safe handling and transportation of the projects to the TEKON venue, as it has to be taken into the stock of the Institution after the event.
5. The financial grant shall be released only based on the recommendation of an expert committee constituted by KSCSTE after evaluating the prototype of the project.
6. Head of the Institution should forward the project report with photographs of the product/ prototype, copy of the participation certificate at TEKON and audited Statement of Expenditure and Utilization Certificate in the standard format after the completion of the project and exhibition at TEKON.
  - In the case of Govt. Departments/Autonomous institutions under the Government and Universities, audited SE and UC of the Financial Head counter signed by the Head of the Institution is acceptable.
  - In the case of affiliated colleges/ institutions, the audited SE and UC signed by the registered Chartered Accountant, counter signed by the Head of the Institution is essential.

However, KSCSTE may demand for the original bills and vouchers for verification at random.

7. The financial assistance will be disbursed to the Head of the Institution concerned, subject to recommendation of the expert committee and verification of audited financial statements.

If the above conditions are agreeable, you are requested to start design and develop the project, so as to present in TEKON - 2018 of KSCSTE.

Kindly refer the File No. in all future correspondence. Wishing you and your team All the best and with regards,

*Anny*  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc. M.Phil. B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531

True Copy Attested

Yours Sincerely,

*Sherin*

Er. Sherin B. M.

Prof. Anil Antony.,

Assistant Professor, Dept. of Computer Science Engineering,

Jyothi Engineering College, Engineering College Road, Cheruthuruthy, Thrissur - 679531

Copy to: - The Principal, Jyothi Engineering College, Engineering College Road, Cheruthuruthy, Thrissur - 679531









BY 088112

കേരള KERALA

AND

Innovation and Entrepreneurship Development Centre at the Jyothi Engineering College, Cheruthuruthy, Vettikattiri P. O., Thrissur- 679531, Established with the support of the Kerala Startup Mission represented by Mr. Anil Antony Assistant Professor/IEDC Nodal Officer, Department of CSE, Jyothi Engineering College, Cheruthuruthy, Vettikattiri P. O., Thrissur- 679531, hereinafter referred to as the "IEDC" of the THIRD PART

WHEREAS Government of Kerala has a scheme to promote innovative idea by supporting through idea grant upto Rupees two lakhs for developing the prototype of the idea, productisation grant upto Rupees five lakh for converting the prototype into a marketable product and scale up the grant of Rupees Five lakh for scaling up of the product into a business. The ideas presented in the Idea days conducted by the Kerala Startup Mission will be evaluated by the Expert Committee and grants under the scheme will be released according to the recommendation.

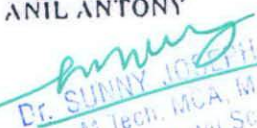
AND WHEREAS the Awardee has submitted a proposal to consider the idea "Braillex" in the idea day for giving them grants under the above mentioned scheme.

True Copy Attested

B. SREEKUMARAN NAIR

  
JESVIN JOSEPH PALATTY

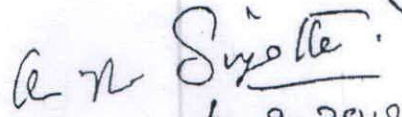
  
ANIL ANTONY

  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
679531

DIST. TREASURY STAMP DEPT  
Cheruthuruthy  
23 JUL 2018  
THRISSUR

2

നമ്പർ 2/3247 വിവര 100)  
IEDC കെ.എ.ജി.എ.സി.യുടെ കീഴിൽ  
പ്രഖ്യാപിച്ചിരിക്കുന്ന

  
6.8.2018

കേ.എ.ജി.എ.സി.യുടെ നിലവിലുള്ള  
കെ.എ.ജി.എ.സി.യുടെ



AND WHEREAS the idea submitted by the Awardee was placed in the idea day held on 12<sup>th</sup> May 2018 at Rajagiri Engineering college and the Expert Committee headed by the Secretary to Government, Electronics & Information Technology Department has recommended for a support of Rs. 2 lakhs against idea.

The amount of Rs. 2 lakhs will be released by the KSUM as installments. The 1<sup>st</sup> instalment as per the eligibility according to the requirements submitted by the awardee is Rs. 1 Lakh. The 1<sup>st</sup> instalment of Rs. 1 lakh will be released through the IEDC on execution of this agreement.

The IEDC agreed that the amount will be transferred in full to the Awardee immediately on receipt of the same from the KSUM

The amount of Rs. 2 lakhs sanctioned under the scheme will be utilised by the Awardee only for the purpose of prototyping/productisation/scaling up the idea and that the entire amount will be utilised for the purpose in accordance with the utilisation plan and milestones submitted by the awardee which will also form part of this agreement as Annexure.

The Awardee will submit the details of utilisation to the IEDC immediately on utilisation along with the details of utilization and on receipt of the same the IEDC will submit the utilization certificate certified by the IEDC to KSUM within three months from the date of receipt of the amount.

Further instalments will be released only after getting the Utilization Certificate on the previous instalments shall be submitted by the IEDC within three months of receipt of the previous instalments.

Signed, sealed and delivered on the same day written above.

B. SREEKUMARAN NAIR  
Secretary & Registrar  
Kerala Startup Mission

JESVIN JOSEPH PALATY  
Jyothi Engineering College  
Thrissur

ANIL ANTONY  
Asst. Professor  
Jyothi Engineering College  
Thrissur

True Copy Attested

Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531





# Kerala State Council for Science, Technology and Environment

Dr. Anilkumar C  
Principal Scientist and Head  
Science Education Division

12-02-2018  
CREDIT SLIP  
SI No. 245  
Date of Receipt 19/02/18

No.C-40 /NSD/2018/KSCSTE

Sir/Madam,

**Sub:- KSCSTE – National Science Day 2018- Celebrations – reg.**  
**Ref:- File No. KSCSTE/5231/2017/NSD**

With reference to your proposal, I am happy to inform that KSCSTE has approved to offer financial assistance of ₹15000/-for organizing the National Science Day (NSD) 2018 celebrations, subject to the following conditions

- 1.Programme schedule should be sent to KSCSTE well in advance.
2. Activities should be based on the focal theme: **“Science and Technology for sustainable future ”** Eminent speakers/ experts may be invited to handle the sessions organized in connection with the programme.
3. Though February 28 is observed as National Science Day, the activities in your institution may be organized on any convenient date in the month of February, but on or before February 28, 2018. The activities organized after February 28, 2018 will not be considered for financial assistance.
4. Each activity should be documented. Detailed report on the various activities organized in connection with NSD - 2018 along with captioned photographs should be submitted to KSCSTE.
5. KSCSTE should be duly acknowledged in the programme and it should be written in all the brochures, banners, publicity materials, etc. ‘Sponsored by Kerala State Council for Science, Technology and Environment and supported by: Department of Science & Technology, Govt. of India’.
6. The financial assistance may be utilized to cover the expenditure on organizing expenses, publicity materials, travel expenses, honoraria for resource persons and refreshment. Utilization of the grant for any other purpose other than the approved heads shall not be entertained.
7. On successful completion of the programme, the Head of the Institution should forward the following documents to The Director, KSCSTE - **Final report on the organized programme including necessary photographs, official bank account details of Head of the Institution, audited Statement of Expenditure and Utilization Certificate in the standard format available in the KSCSTE website. Also send soft copy for all**
8. The financial assistance will be disbursed to the Head of the Institution, only after the successful conduct of the programme, subject to the submission of satisfactory report and financial statements.
9. The required documents mentioned above should reach this office as early as possible after the conduct of the programme. However, the documents received after April 30, 2018 will not be entertained for release of payment and such request will be summarily rejected.

Kindly refer the Letter No and File No. in all future correspondence.  
Name of the Programme Co-ordinator:Ms.Smija Skaria

Thanking you,

*Anilkumar C*  
Dr. SUNNY JOSE, J. KALAKATTAN  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.- 679 531

Yours sincerely

*Anilkumar C*  
Anilkumar C

To  
The Principal, Jyothi Engineering College, Jyothi Hills, Cheruthuruthy, Thrissur 679531  
Ms.Smija Skaria, Assistant Professor, BSH, Jyothi Engineering College, Jyothi Hills, Cheruthuruthy, Thrissur 679531





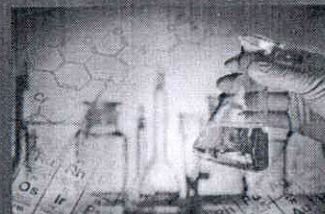
**N**ational Science Day (NSD) is celebrated all over India with great enthusiasm on 28<sup>th</sup> of February every year in order to commemorate the invention of the Raman Effect in India by the Indian physicist, Sir Chandrasekhara Venkata Raman on the same

day in the year 1928. For his great success in the field of science in India, Chandrasekhara Venkata Raman was awarded and honored with the Nobel Prize in Physics in the year 1930.

Sir Chandrasekhara Venkata Raman had worked from 1907 to 1933 at the Indian Association for the Cultivation of Science, Kolkata, West Bengal in India. He had researched on many topics in Physics from which the Raman Effect (*“Change in the wavelength of light that occurs when a light beam is deflected by molecules. When a beam of light traverses a dust-free, transparent sample of a chemical compound, a small fraction of the light emerges in directions other than that of the incident beam.”*) became his great success and discovery. It has been marked in the Indian history of science. For his big invention he was honored Nobel Prize in the year 1930. From the year 2013, the “Raman Effect” has been designated as an International Historic Chemical Landmark by The American Chemical Society.

The focal theme of the Science Day Celebration for the current year, 2018 is **“Science and Technology for Sustainable Future”**.

Creating knowledge and understanding through science and technology equips one to find solutions to today’s acute economic, social and environmental challenges and to achieving sustainable development.



In the present era, the thrust is for science and technology innovations for development of science policies, to reform science systems and to build capacity to monitor and evaluate performance through indicators and statistics taking into account the broad range of country-specific contexts.

Science policies are not enough. Science and engineering education at all levels and research capacity at highest level need to be built to allow countries to develop their own solutions to their specific problems and to play their part in the international scientific and technological arena.

*Amay*

UNIV. JOSEPH KAL  
M. Tech, MCA, M.Sc M.Ph  
D (Computer Science), P  
PRINCIPAL  
Jyothi Engineering  
Cheruthuruthy P.O.





# Kerala State Council for Science, Technology and Environment

Dr. Ajit Prabhu V.  
Chief Scientist (Scientist G)  
& Head (TDPMD)

22.01.2019

No. ECE18/231/INNOVATE/2019

Sir/Madam

Sub: - KSCSTE —TECHFEST – INNOVATE 2019 - reg.

With reference to your proposal on the above subject, I am happy to inform that KSCSTE has approved your project proposal entitled 'Brailleon-A Low Cost Braille Printer' for a financial support of. Rs. 8,000/- subject to the following conditions.

1. All the products/prototypes developed under INNOVATE scheme shall be demonstrated in TECHFEST-2019 which is to be held during 15<sup>th</sup> to 17<sup>th</sup> February 2019.
2. The financial assistance to the project selected under INNOVATE scheme shall be disbursed only after the successfully demonstrating the technology in TECHFEST – 2019 of KSCSTE.
3. The financial assistance is provided for covering the expenses for fabrication, consumables, contingencies and testing charges.
4. No financial assistance is extended for research literature, major equipment and travel (unless extensive travel is required for the work)
5. The Objectives, Methodology, Output, Application of the project to the society and other relevant details shall be displayed at TECHFEST-2019 in poster of size 120 cm (height) x90cm (width).
6. Excess expenditure incurred (if any) shall be met from the internal funds of the Institution/ other sources.
7. The Institution shall be the custodian of the projects supported under the INNOVATE scheme. It is the responsibility of the institution for safe handling and transportation of the projects to the TECHFEST-2019 venue as it has to be taken into the stock of the Institution after the event.
8. The financial grant shall be released only based on the recommendation of an expert committee constituted by KSCSTE after evaluating the prototype of the project.
9. Head of the Institution should forward the project report with photographs of the product/prototype, copy of the participation certificate at TECHFEST-2019 and audited Statement of Expenditure and Utilization Certificate in the standard format after the completion of the project and exhibition at TECHFEST-2019.
  - In the case of Govt. Departments/Autonomous institutions under the Government and Universities, audited SE and UC of the Financial Head counter signed by the Head of the Institution is acceptable.
  - In the case of affiliated colleges/institutions, the audited SE and UC signed by the registered Chartered Accountant counter signed by the Head of the Institution is essential.
10. The financial assistance will be disbursed to the Head of the Institution concerned, subject to recommendation of the expert committee and verification of audited financial statements.

If the above conditions are agreeable, you are requested to start design and develop the project, so as to present in TECHFEST-2019. You have to register separately to participate in the TECHFEST – 2019 of which the details are available in the Website: [techfest.ktu.edu.in](http://techfest.ktu.edu.in). Kindly refer the File No. in all future correspondence. Wishing you and your team All the best and with warm regards.

Thanking you.

Dr. SPINNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531

Yours Sincerely,

Dr. Ajit Prabhu V.

True Copy Attested

Shri. Jinesh K.J.

Asst. Professor, Dept. of Electronics & Communication Engg., Jyothi Engg College Cheruthurithi, Thrissur- 679531  
Copy to: 1. The Principal, Jyothi Engg College Cheruthurithi, Thrissur- 679531  
2. Dr. Thajuddin Ahamed V. I, General Convenor, TECHFEST- 2019, Email: [thajud.in88@gmail.com](mailto:thajud.in88@gmail.com)

Sasthra Bhavan, Pattom P.O, Thiruvananthapuram - 695 004, Kerala State, India.  
Tel: 0471- 2548252, 2543234, 2548211. Fax : 0471-2543234 e-mail : [to.drprabhu@gmail.com](mailto:to.drprabhu@gmail.com)  
Website : [www.kscste.kerala.gov.in](http://www.kscste.kerala.gov.in)





# Kerala State Council for Science, Technology and Environment

Dr. Ajit Prabhu V.  
Chief Scientist (Scientist G)  
& Head (TDPMD)  
No. CSE6/21/INNOVATE/2019

22.01.2019

Sir/Madam

Sub: - KSCSTE —TECHFEST – INNOVATE 2019 - reg.

With reference to your proposal on the above subject, I am happy to inform that KSCSTE has approved your project proposal entitled 'Currency Recognition Spectacles for Blinds' for a financial support of. Rs. 5,000/- subject to the following conditions.


1. All the products/prototypes developed under INNOVATE scheme shall be demonstrated in TECHFEST-2019 which is to be held during 15<sup>th</sup> to 17<sup>th</sup> February 2019.
2. The financial assistance to the project selected under INNOVATE scheme shall be disbursed only after the successfully demonstrating the technology in TECHFEST – 2019 of KSCSTE.
3. The financial assistance is provided for covering the expenses for fabrication, consumables, contingencies and testing charges.
4. No financial assistance is extended for research literature, major equipment and travel (unless extensive travel is required for the work)
5. The Objectives, Methodology, Output, Application of the project to the society and other relevant details shall be displayed at TECHFEST-2019 in poster of size 120 cm (height) x90cm (width).
6. Excess expenditure incurred (if any) shall be met from the internal funds of the Institution/ other sources.
7. The Institution shall be the custodian of the projects supported under the INNOVATE scheme. It is the responsibility of the institution for safe handling and transportation of the projects to the TECHFEST-2019 venue, as it has to be taken into the stock of the Institution after the event.
8. The financial grant shall be released only based on the recommendation of an expert committee constituted by KSCSTE after evaluating the prototype of the project.
9. Head of the Institution should forward the project report with photographs of the product/prototype, copy of the participation certificate at TECHFEST-2019 and audited Statement of Expenditure and Utilization Certificate in the standard format after the completion of the project and exhibition at TECHFEST-2019.
  - > In the case of Govt. Departments/Autonomous institutions under the Government and Universities, audited SE and UC of the Financial Head counter signed by the Head of the Institution is acceptable.
  - > In the case of affiliated colleges/institutions, the audited SE and UC signed by the registered Chartered Accountant counter signed by the Head of the Institution is essential.
10. The financial assistance will be disbursed to the Head of the Institution concerned, subject to recommendation of the expert committee and verification of audited financial statements.

If the above conditions are agreeable, you are requested to start design and develop the project, so as to present in TECHFEST-2019. You have to register separately to participate in the TECHFEST – 2019 of which the details are available in the Website: techfest.ktu.edu.in. Kindly refer the File No. in all future correspondence. Wishing you and your team All the best and with warm regards.

Thanking you,

Yours Sincerely,

True Copy Attested

  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthurithy, Thrissur - 679531

  
Dr. Ajit Prabhu V.

Shri Fapsilin Athish Mon,

Asst. Professor, Dept. of Computer & Science Engg., Jyothi Engg. College Cheruthurithy, Thrissur - 679531

Copy to: 1. The Principal Jyothi Engg. College Cheruthurithy, Thrissur - 679531  
2. Dr. Thajuddin Ahamed V. I. General Convenor, TECHFEST- 2019, Email: thajud in88@gmail.com

Sasthra Bhavan, Pattom P.O, Thiruvananthapuram - 695 004, Kerala State, India.  
Tel: 0471- 2548252, 2543234, 2548211. Fax : 0471-2543234 e-mail : to.drprabhu@gmail.com  
Website : www.kscste.kerala.gov.in





# Kerala State Council for Science, Technology and Environment

Dr. Ajit Prabhu V.  
Chief Scientist (Scientist G)  
& Head (TDPMD)

No. CSE3/124/INNOVATE/2019

22.01.2019

Sir/Madam

**Sub: - KSCSTE —TECHFEST – INNOVATE 2019 - reg.**

With reference to your proposal on the above subject, I am happy to inform that KSCSTE has approved your project proposal entitled 'Speed Limiter' for a financial support of. Rs. 7,000/- subject to the following conditions.

1. All the products/prototypes developed under INNOVATE scheme shall be demonstrated in TECHFEST-2019 which is to be held during 15<sup>th</sup> to 17<sup>th</sup> February 2019.
2. The financial assistance to the project selected under INNOVATE scheme shall be disbursed only after the successfully demonstrating the technology in TECHFEST – 2019 of KSCSTE.
3. The financial assistance is provided for covering the expenses for fabrication, consumables, contingencies and testing charges.
4. No financial assistance is extended for research literature, major equipment and travel (unless extensive travel is required for the work)
5. The Objectives, Methodology, Output, Application of the project to the society and other relevant details shall be displayed at TECHFEST-2019 in poster of size 120 cm (height) x90cm (width).
6. Excess expenditure incurred (if any) shall be met from the internal funds of the Institution/ other sources.
7. The Institution shall be the custodian of the projects supported under the INNOVATE scheme. It is the responsibility of the institution for safe handling and transportation of the projects to the TECHFEST-2019 venue, as it has to be taken into the stock of the Institution after the event.
8. The financial grant shall be released only based on the recommendation of an expert committee constituted by KSCSTE after evaluating the prototype of the project.
9. Head of the Institution should forward the project report with photographs of the product/prototype, copy of the participation certificate at TECHFEST-2019 and audited Statement of Expenditure and Utilization Certificate in the standard format after the completion of the project and exhibition at TECHFEST-2019.
  - In the case of Govt. Departments/Autonomous institutions under the Government and Universities, audited SE and UC of the Financial Head counter signed by the Head of the Institution is acceptable.
  - In the case of affiliated colleges/institutions, the audited SE and UC signed by the registered Chartered Accountant counter signed by the Head of the Institution is essential.However, KSCSTE may demand for the original bills and vouchers for verification at random.
10. The financial assistance will be disbursed to the Head of the Institution concerned, subject to recommendation of the expert committee and verification of audited financial statements.

If the above conditions are agreeable, you are requested to start design and develop the project, so as to present in TECHFEST-2019. You have to register separately to participate in the TECHFEST – 2019 of which the details are available in the Website: [techfest.ktu.edu.in](http://techfest.ktu.edu.in). Kindly refer the File No. in all future correspondence. Wishing you and your team All the best and with warm regards.

Thanking you,

Yours Sincerely,

Dr. Ajit Prabhu V.

Ms. Aswathy Wilson,

Asst. Professor, Dept. of Computer & Science Engg., Jyothi Engg. College, Cheruthuruthi, Thrissur- 679531  
Copy to: 1. The Principal, Jyothi Engg. College, Cheruthuruthi, Thrissur- 679531  
2. Dr. Thajuddin Ahamed V. I, General Convenor, TECHFEST- 2019, Email: [thajud.in88@gmail.com](mailto:thajud.in88@gmail.com)

Sasthra Bhavan, Pattom P.O, Thiruvananthapuram - 695 004, Kerala State, India.  
Tel: 0471- 2548252, 2543234, 2548211. Fax: 0471-2543234 e-mail: [to.drprabhu@gmail.com](mailto:to.drprabhu@gmail.com)  
Website: [www.kscste.kerala.gov.in](http://www.kscste.kerala.gov.in)



ORDER

Subject: Financial assistance for the project entitled "Intelligent CPS Data Analytics Platform for a Metro Rail Transport System" submitted by Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.

Sanction of the President is hereby accorded to the approval of the above mentioned project at a total cost of ₹.24,96,000/- (Rupees Twenty Four Lakh Ninety Six Thousand only) for a duration of three years (36 months). The detailed breakup of the DST grant for General as well as Capital Components are given below:-

General Component: ₹.19,66,000/-  
 Capital Component : ₹.5,30,000/-

The sanction of the President is also accorded to the release of Rs. 7,65,000/- (Rupees Seven Lakh Sixty Five Thousand only) under the recurring budget being the first installment of grant under "General Component" for implementation of the above mentioned project. The item of expenditure for which the total allocation of ₹.24,96,000/- has been approved for a period of 36 months are given below:

Non-recurring (Capital Items)

	HEAD	1 <sup>st</sup> Year DST	Total
1.	EQUIPMENT: Workstation with display	₹.5,30,000/-	₹.5,30,000/-
	TOTAL	₹.5,30,000/-	₹.5,30,000/-

Recurring Items (General-DST component)

Sl.No	Item	BUDGET (in Rupees)			TOTAL
		1st Year	2nd Year	3rd year	
	Project Staff				
	JRF-02 @ Rs. 25,000/- pm for two years and SRF-01 @ Rs. 28,000/- for 3 <sup>rd</sup> year.	600000	600000	336000	1536000
2.	Consumables	35000	35000	30000	100000
3.	Travel	50000	50000	50000	150000
4.	Contingency	50000	25000	25000	100000
	Total	735000	710000	441000	1886000
5.	Overheads	30000	25000	25000	80000
	Grand Total	765000	735000	466000	1966000

*(Signature)*  
 DR. SUNNY JOSEPH KALAYATHIL  
 M.Tech, MCA, M.Sc., M.Phil., Ph.D.  
 Ph.D (Computer Science), Pn. D.  
 PRINCIPAL  
 Jyothi Engineering College  
 P.O.-679 531

*(Signature)*  
 R. S. K...

P.T.O.

True Copy Attested



prescribed as per... 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 and 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 entry of previous Utilization Certificate in the PFMS.

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

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

(a) A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/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 Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grant 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 account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalisation of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure / Utilisation 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 GRF 2017), shall not be disposed of without obtaining the prior approval of DST.

9. In case the scheme provides for payment of honorarium/remuneration/fellowships/scholarship to the PI, a para may suitably be incorporated in the DST 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.

True Copy Attested

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 completion of the project.

Dr. SUNNY JOSHI, KALAM, B.Ed.,  
M.Tech., MCA, M.S., Ph.D. (India)  
Ph.D. (Computer Science), Ph.D. (Japan)  
Principal  
Jyothi Engineering College  
Chennai

Dr. Sunny Joshi

100 Contd/-



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 overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc.

14. 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 : Others  
60 200 : Assistance to Other Scientific Bodies (Minor Head)  
69 : Research & Development (S&T).  
69.00.31 : Grants-in-Aid General for the year 2018-19 (Plan)  
(Previous:TDP-NRDMS-3425.60.200.26.01.31)

15. The amount of Rs. 7,65,000/- (Rupees Seven Lakh Sixty Five Thousand only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to the Principal, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala. The bank details for electronic transfer of funds through RTGS are given below:-

1. Name of the Account Holder : Principal, Jyothi Engineering College  
2. Name of Bank : Federal Bank Limited  
3. Bank Account Number : 15250100001019  
4. IFSC Code : FDRL0001525


NITI Aayog NGO Darpan Unique ID : KL/2018/0198849

16. As per Rule 234 of GFR 2017, this sanction has been entered at Sl.No. 8 in the register of grants maintained in the Division for the scheme (Innovation, Technology Development and Deployment).


17. This issues with the concurrence of IFD vide their Concurrence Dy. No. C/3951/IFD/2018-19 dated 07.12.2018.

18. It is certified that all the Utilization Certificate in regard of all schemes/programmes/projects, present and previous pertaining to the institute have been received and no UC is pending against the organization as per the details in the PFMS also.

The Pay & Accounts Officer  
Department of Science & Technology  
New Delhi -110 016.

  
Dr. SUNNY JOSEPH KALAYATH  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL

Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531

  
Dr. Rajeev Sharma,  
Scientist-E  
Tele:26590310

True Copy Attested

Copy for information and necessary action:

1. Cash Section (3 copies) for preparing the bill and remitting the amount to the above grantee.
2. Accounts Section, DST, New Delhi.
3. IFD, DST, New Delhi.
4. Director of audit (CW&M-II) AGCR Building, IP Estate, New Delhi.



- 5. Principal, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.
- 6. Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.
- 7. Head, ICPS, DST
- 8. Sanction folder.

  
 Dr. Rajeev Sharma,  
 Scientist-E  
 Tele:26590310

*Sunny*

**Dr. SUNNY JOSEPH KALAYATHANKAL**  
 M.Tech. MCA, M.Sc, M.Phil, B.Ed  
 Ph.D (Computer Science), Ph.D (Maths)  
 PRINCIPAL  
 Jyothi Engineering College  
 Cheruthuruthy P.O.-679 531

True Copy Attested

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**ORDER**

Subject: Financial assistance for the project entitled " Intelligent CPS Data Analytics Platform for a Metro Rail Transport System " submitted by Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.

With reference to the Sanction Order No. DST/ICPS/CPS-Individual/2018/1091(G) dated 07.12.2018, sanction of the President is accorded for the sanctioning of ₹. 5,30,000/- (Rupees Five Lakh Thirty Thousand only) under the 'Grant for creation of capital assets' in the above mentioned project.

2. Sanction of the President is also accorded for the release of ₹. 5,30,000/- (Rupees Five Lakh Thirty Thousand only) towards the Creation of Capital Assets Head for the purchase of equipment's under the project. The details of which is as given under:-

**Non-recurring (Capital Items)**

	HEAD	1 <sup>st</sup> Year DST	Total
1.	EQUIPMENT: Workstation with display	₹. 5,30,000/-	₹. 5,30,000/-
	TOTAL	₹. 5,30,000/-	₹. 5,30,000/-

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

4. The grantee organization will have to enter and 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 entry of previous Utilization Certificate in the PFMS.

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

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

(a) A transparent procurement procedure in line with the Provisions of General Financial Rules 2017 will be followed by the Institute/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 Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent

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SUNNY JOSEPH K  
M.Tech, MCA, M.Phil, B.L  
Ph.D (Computer Science), P.H.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 533

R. Sharmy



release of grants under the project shall be considered only on receipt of the said documents.

7. "The grantee organisation will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalisation of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure / Utilisation 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 GRF 2017), shall not be disposed of without obtaining the prior approval of DST.

9. In case the scheme provides for payment of honorarium/remuneration/fellowships/scholarship to the PI, a para may suitably be incorporated in the DST 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.

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 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	:	Others
60.200	:	Assistance to Other Scientific Bodies (Minor Head)
69	:	Research & Development (S&T).
69.00.35	:	Grants for creation of Capital Assets for the year 2018-19 (Plan) (Previous:TDP-NRDMS-3425.60.200.26.01.35)

14. The amount of ₹. 5,30,000/- (Rupees Five Lakh Thirty Thousand only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to Principal, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala. The bank details for electronic transfer of funds through RTGS are given below:-

1.	Name of the Account Holder :	Principal, Jyothi Engineering College
2.	Name of Bank :	Federal Bank Limited
3.	Bank Account Number :	15250100001019
4.	IFSC Code :	FDRL0001525

NITI Aayog NGO Darpan Unique ID : KL/2018/0198849

15. As per Rule 234 of GFR 2017, this sanction has been entered at Sl.No. 9 in the register of grants maintained in the Division for the scheme (Innovation, Technology Development and Deployment).

*R. Sharma*

True Copy Attested!

*Romy*  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531



16. This issues with the concurrence of IFD vide their Concurrence Dy No C/3950/IFD/2018-19 dated 07.12.2018.


17. It is certified that all the Utilization Certificate in regard of all schemes/programmes/projects, present and previous pertaining to the institute have been received and no UC is pending against the organization as per the details in the PFMS also.

  
Dr. Rajeev Sharma,  
Scientist-E  
Tele:26590310


The Pay & Accounts Officer  
Department of Science & Technology  
New Delhi -110 016.

Copy for information and necessary action:

1. Cash Section (3 copies) for preparing the bill and remitting the amount to the above grantee.
2. Accounts Section, DST, New Delhi.
3. IFD, DST, New Delhi.
4. Director of audit (CW&M-II) AGCR Building, IP Estate, New Delhi.
5. Principal, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.
6. Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur - 682 039, Kerala.
7. Head, ICPS, DST.
8. Sanction folder.

  
Dr. Rajeev Sharma,  
Scientist-E  
Tele:26590310

True Copy Attested

  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.- 679 531



ORDER

Subject: Financial assistance for the project entitled "Intelligent CPS Data Analytics Platform for a Metro Rail Transport System " sponsored to Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala.

In continuation of this Department's Sanction Order dated 07.12.2018, sanction of the President is conveyed to the payment of **Rs.7,35,000/-** (Rupees Seven Lakh Thirty Five Thousand only) to Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala being the **second** instalment of grant for implementation of the said project during 2020-21.

2. The project also stands transferred from Jyothi Engineering College, Jyothi Hills, Panjal Road, Vettikattiri PO, Cheruthuruthy, Thrissur-679531, Kerala to Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala.

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

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 entry of previous Utilization Certificate in the PFMS.

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

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

(a) a transparent procurement procedure in line with the Provision 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 Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

Dr. SUNNY JOSE  
M. Tech, M.Sc., M.Phil., Ph.D. (Maths)  
Ph.D. (Computer Science), Ph.D. (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.-679 531.

R. Sharma

... Contd/-



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 account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure / Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts".

8. Continuation of project beyond 31.03.2021 will be subject to appraisal and approval of the continuation of the scheme under which the project is funded.

9. (a). DST reserves sole rights on the assets 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.

(b). DST reserves rights to close the project activity any time based on the review of progress of the project.

(c). A prior intimation to DST by grantee is must before leaving the country for attending conference/availing any short term fellowship abroad during the project tenure.

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.

11. Due acknowledgment 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. The expenditure involved is dubitable to Demand No.87, 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)
71	:	Research & Development.
71.03.31	:	Grants-in-aid General for the year 2020-21 (Plan)
*( Previous:3425.60.200.63.01.31-Super Computing Facility & Capacity Building)		

13. The amount of **Rs.7,35,000/-** (Rupees Seven Lakh Thirty Five Thousand only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to the Principal, Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala. The bank details for electronic transfer of funds through RTGS are given below:

Institution Account Name	Principal, Rajagiri School of Engineering and Technology, Kochi-682039, Kerala.
Saving Bank Account Number	920010048169239
Name of Bank	Axis Bank
Branch Name	Palarivattom
IFSC Code	UTIB0000691
MICR Code	682211005

14. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 13 in the register of grants maintained in the Division for the scheme.

Dr. SUNNY JOSEPH, Ph.D.  
 Mr. Ishan, M.Sc., M.Phil. & Ph.D.  
 Ph.D (Computer Science), Ph.D (Maths)  
 PRINCIPAL  
 Jyothi Engineering College  
 Cheruthuruthy P.O.- 679 531

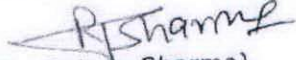
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15. This issues with the concurrence of IFD Vide their Concurrence Dy. No. C/1992/IFD/2020-21 dated 21.09.2020.

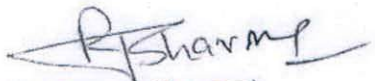
16. It is certified that all the Utilization Certificate in regard of all schemes/programmes/projects, present and previous pertaining to the institute have been received and no UC is pending against the organization as per the details in the PFMS also.

  
(Dr. Rajeev Sharma)  
Scientist-'E'  
011-26590310


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

Copy for information and necessary action to: -

1. Cash Section (3 copies) for making the payment to the grantee.
2. Account Section.
3. Director of Audit, (Scientific Department), AGCR Building, New Delhi - 110 002.
4. Principal, Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala.
5. Dr. Jaison Paul Mulerikkal, Professor, Department of Computer Science & Engineering, Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039, Ernakulam, Kerala.
6. Head, ICPS, DST (FFT Division)
7. Sanction Folder

  
(Dr. Rajeev Sharma)  
Scientist-'E'  
011-26590310

True Copy Attested

  
Dr. SUNNY JOSEPH KALAYALIL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531



31-Mar-17

To

Dr. Jaison Paul Mulerikkal  
Professor  
Department of Computer Science & Engineering  
Rajagiri School of Engineering & Technology  
Kakkanad, Ernakulam- 682 039, Kerala

Sir,

Sub: Letter of support for the research project, "INTELLIGENT CPS DATA ANALYTICS PLATFORM FOR A METRO RAIL TRANSPORT SYSTEM"

Ref: MoU signed between KMRL& RSET, dated 06-Oct-2016

We thank RSET for the presentation on research project, "INTELLIGENT CPS DATA ANALYTICS PLATFORM FOR A METRO RAIL TRANSPORT SYSTEM" and proposal for associating KMRL with the research project on the said subject.

Since, KMRL intends to implement an intelligent, integrated public transport system for the city of Kochi, we are pleased to associate with you as a research partner, in accordance with the terms of the MoU cited above so as to share with you the available platforms and human resource hours within KMRL for the said project. Subject to the technical feasibility, confidentiality and commercial aspects, required data for the project would be made available by KMRL. We understand this association is at no extra cost to KMRL. The results of the research shall be shared with KMRL and KMRL is free to use the results and related data without any restrictions.


This letter is issued to RSET for submitting the "INTELLIGENT CPS DATA ANALYTICS PLATFORM FOR A METRO RAIL TRANSPORT SYSTEM" project to Department of Science and Technology.

Thanking you,



Addl. General Manager (Finance & IT)



  
Dr. SUNNY JOSEPH KALAYAT  
M.Tech, MCA, M.Sc, M.Phil,  
Ph.D (Computer Science), Ph.D (Finance)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O.- 679 651

True Copy Attested





Dr. Rajeev Sharma  
Scientist "F", ICPS (FFT) Division  
Room No : 2, Hall-C  
Telephone : 26602187, 26590310  
26562135, 26567373, 310  
E-mail: rajeev.sharma@nic.in  
Mobile : 09971888229, 099108933 89

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
TECHNOLOGY BHAVAN  
NEW METRAULI ROAD  
NEW DELHI - 110 016

Reference No: DST/ICPS/CPS-Individual/2018/1091

Dated : 22.02.2021

Subject: Project entitled "Intelligent CPS Data Analytics Platform for a Metro Rail Transport System".

Dear Dr Sunny Joseph Kalayathankal,

As you may be aware that the above project was sponsored to Dr. Jaison Paul Mulerikkal at a total cost of Rs. 24,96,000/- with the initial release of Rs. 7,65,000/- under the Recurring grant and Rs. 5,30,000/- under the Non-recurring grant during the financial year 2018-19 to Jyothi Engineering College.

As per the request received from Dr. Jaison, the project has now been transferred to Rajagiri School of Engineering and Technology, Rajagiri Valley, Kakkanad, Kochi-682039 on 23.09.2020 after obtaining necessary consent documents from both the institutes.


Department has received a request from Dr. Jaison Paul for the permission to transfer the computing resources - the computing cluster and the desktops - associated with the project from Jyothi Engineering College to Rajagiri School of Engineering and Technology.

As per the terms and conditions of the project, all the assets procured under the project should also be transferred to the new institute along with the project where the PI has been transferred.

In view of the above, you are requested to kindly make necessary arrangements to transfer the assets procured under the above project from Jyothi Engineering College to Rajagiri School of Engineering and Technology for utilizing the same in the project activities.

With regards,


Yours Sincerely,

  
(Rajeev Sharma)

**Dr Sunny Joseph Kalayathankal,**  
Principal (Professor & Dean-Research)  
Jyothi Engineering College,  
Jyothi Hills, Vettikattiri P.O.,  
Cheruthuruthy,  
Thrissur-679531, Kerala.

Copy to : **Fr Dr Jaison Paul Mulerikkal**, Vice Principal & Professor, Computer Science, Rajagiri School of Engineering & Technology (Autonomous), Rajagiri Valley, Kakkanad, Kochi, India - 682 039

True Copy Attested

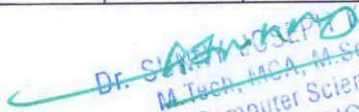
  
Dr. SUNNY JOSEPH KALAYATHANKAL  
M.Tech, MCA, M.Sc, M.Phil, B.Ed  
Ph.D (Computer Science), Ph.D (Maths)  
PRINCIPAL  
Jyothi Engineering College  
Cheruthuruthy P.O. - 679 531



**LIST OF STUDENT PROJECTS SELECTED - 2019 - 2020**

Sl No	Name of Principal Investigator	Name of Student Investigators	College	Branch	Title of the Project	Amount Sanctioned	Consumables	Equipments	Travel	Contingency	Miscellaneous
1	Dr. Ranjith S. Kumar Assistant Professor	Ajmal A R Akhildev V T K Akhil Bedhoonraj	CET	ME	Ground mobility device for disabled.	50,000	20,000	15,000	5000	9000	1,000
2	Dr. Jayasree P. K. Professor	Athira Bismi N A Mohammed Shikaf Ali S Sreesha N P	CET	Civil	Effect of vetiver roots on erosion control in slopes.	50,000	10,000	28,000	2000	5000	5000
3	Dr. Jayasree P. K. Professor	Dilshan P Ghanasyam J Jesbin John Vishnu Jacob Suresh	CET	Civil	Green Bricks for Sustainable Future.	50,000	10,000	28,000	2000	5000	5000
4	Sreedevi A. R. Assistant Professor	Althaf Hussain N Anand Solomon K Binoy K Cyril G Thottumkal	CET	Civil	Development of Sustainable Particle Boards from Water Hyacinth and Pineapple Leaf Pulp.	40,000	10,000	20,000	5000	5000	
5	Dr. Sumi S. Assistant Professor	Akshay Ranjith Alisha P M Binoy P T Catherine Chakkakakkal	CET	Civil	Performance assessment of constructed wetland in treatment of wastewater.	49,000	10,000	20,000	3000	5000	11,000
6	Dr. Dinesh Gopinath Associate Professor	Sujeesh B Sachin K Aravind Adwaith M K Akarsh A M	CET	EEE	Design and development of a high frequency power supply for magnetic hyperthermia based cancer treatment	50,000	10,000	30,000	5000	5000	
7	Dr. Dinesh Gopinath Associate Professor Dr. Shereef R. M. (Co-Investigator)	Archana Govindan Malavika Jayakumar Parvathy G Ajay Pavithra P Venu	CET	EEE	SiC MOSFET based bi-directional DC-DC power converter for EV applications.	50,000	10,000	30,000	5000	5000	
8	Dr. Mayadevi N. Associate Professor	Rohit G Midhun Satheesh Aswin A S	CET	EEE	Portable bio signal detector-brain computer interface	50,000	10,000	35,000		5000	
9	Dr.Sreeja S. Associate Professor	Adharsh K Tom Justin Jose P Joseph Kurian Nithin Philip Joseph	CET	EEE	Emergency response rover for disaster mitigation with reconfigurable antenna	47467	44,267	1700	500	1000	

**True Copy Attested**

  
 Dr. Sreeja S. M.Tech, MCA, M.Sc., M.Phil., B.Ed  
 Ph.D (Computer Science), Ph.D (Maths)  
 PRINCIPAL  
 Muthi Engineering College  
 Muthy P.O. - 679 531







20	Riyas K. S. Associate Professor Anjana G (Co-Investigator)	Francis T J	RIT Kottayam	ECE	Semi-Autonomous Hoverboard	40,000	5000	30,000	1000	4000	
21	Dr. Sunil Kumar P. R. Associate Professor Dr. Abhilash T Vijayan (Co-Investigator)	Aadarsh G Krishnan Anil Kumar M H Ramsankar Ranjana R Krishnan	RIT Kottayam	EEE	Eco-friendly hybrid tricycle for handicapped	50,000	7500	40,000	2000	500	
22	Dr. Sobhana N. V. Professor	Jalumedi Shashank Babu George Thomas Anuvind Krishna	RIT Kottayam	CSE	Adaptive traffic signals with real time feed back.	15,000	6000	5000		4000	
23	Ajini A. Assistant Professor Praveen A N (Co-Investigator)	Else Paul Isac Vinod Krishnan R H Atul Madhusudhana Panicker Ashrith M V	GEC Idukki	CSE	A GPS-GSM predicated KSRTC bus tracking system monitored in a mobile application.	13,000	5000	5000	500	2500	
24	Shibily Joseph Associate Professor Prof. Anuraj N	Anjali Raj K Musthafa O M Navaneeth Krishnan P Nikhil P	GEC Sreekrishnapuram	CSE	VARUNA (AI-ROBOT) a.k.a Autonomous Marine debris detection and collection robot	38500	2000	29,000	2500	5000	
25	Anwar Hussain M. Associate Professor	Abhijith A Aiswarya Ghosh Ajith V Aravind R Krishnan	GEC Sreekrishnapuram	ECE	ROVIZ the service robot	31,000	2000	25,000	2000	2000	
26	Vijeesh V. Assistant Professor	Farzeen K M Jayan C Varsha P Suhail Mohammed J	GEC Sreekrishnapuram	ECE	24 * 7 electric scooter service	29,000	5000	20,000	3000	1000	
27	R. Jayadevan Assistant Professor	Manjusha p T Drisyia Krishna K Athira P N Dharmishta K	GEC Sreekrishnapuram	ECE	Automatic e-ticketing system	18,000	4000	10,000	2000	2000	
28	Dr. Vinita Chellappan Associate Professor Muhammedali Shafeeque K (Co-Investigator)	Jishnu R Fasweehullisaan M K Abhijith M S Ashfakh A K Muhammed Naseem K	GEC Sreekrishnapuram	EEE	Optimal path planning for UAV (Unmanned Aerial Vehicle)	47,000	9000	30,000	3000	5000	
29	Dr. Alice Mathai Professor Prof. Geeja K. George (Co-Investigator)	Ameena Kareem Raiza K M Vismaya Wilson M Krishna K P	MACE Kothamangalm	Civil	Numerical Investigation on the Structural Behaviour of Idukki Arch Dam in view of Catastrophic Failure of Mullaperiyar Dam.	36,000	7200	21,600	3600	3600	

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30	Basil Jaimon Assistant Professor	Aswathy K B Keerthana V Rahul Raj Sachin Mithra J M	MACE Kothamangalam	Civil	Early warning system for shallow landslides in data sparse region using rainfall threshold and slope stability analysis.	50,000	5000			15,500	29,500
31	Dr.Biju B. Professor	Adarsh Vijayan P V Allen Saju Godson Kunjumon Vaishnav K V	MACE Kothamangalam	ME	Self balancing robot for logistic application.	50,000	6000	43,000		1000	
32	Dr. Aji Joy Professor. Jiss Paul (Co-Investigator)	Baslin Abraham James Deepthi Daniel Jaseem K P Joseph Ben	MACE Kothamangalam	ECE	Automated Peltier Heat & Cool Jacket	23,350	3000	16,350	2000	1500	500
33	Prof. Jiss Paul AssociateProfessor.	Geethu Rose Joseph Milda Vincent Renjith Sadanandan Vysakh R	MACE Kothamangalam	ECE	Help Aside-A Disaster management System	21,300	4800	15,000		1500	
34	Dr. Vinodkumar Jacob Professor	Ashlin Antony Basil Chacko Alias Bony Tom Owan Shaji	MACE Kothamangalam	ECE	IoT Based Smart Greenhouse Automation System.	15,140	3000	10,640		1500	
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	ECE	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 Paichadathil 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 Muralreedharan 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	50,000	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	

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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	
43	Dr. Ramaswamy K. P. Assistant Professor Dr. Anu V. Thomas (Co-Investigator)	Naeem Remya S Chandran Sera Rachel Varghese Sreelekshmi S	TKM College of Engineering Kollam	Civil	Development of Innovative Alkali Activated Concrete for Rebuilding Resilient Kerala Post Floods.	45,000	5000	30,000	5000	5000	
44	Althaf M. Assistant Professor	C A Navaneeth Noel Varghese Muhammed Navvar K Gowtham Prakash	TKM College of Engineering Kollam	Civil	Computation of stress concentration factor of tubular joints for the fatigue analysis of steel structures.	46,000	28,000	10,000	2000		6000
45	Dr. Sabeena Beevi .K Assistant Professor Dr. Usha Devi Amma C (Co-Investigator)	Harikrishnan S Sona Subair Pooja Sunil Mammen Vargese Puthukkeril	TKM College of Engineering Kollam	EEE	Design & development of an early detection framework for lung cancer using high speed gigapixel coherent computational microscope	50,000	10,000	33,000	2000	5000	
46	Dr. Shihabudheen K. V. Assistant Professor Dr. Bijuna Kunju K. (Co-Investigator)	Ajmy Jalal Anna Sunny Aswathy Ajay Sariga S	TKM College of Engineering Kollam	EEE	High impedance fault detection using frequency transform	49,500	1800	43,500	1200	3000	
47	Dr. Nissan Kunju Assistant Professor. Shafi M N (Co-Investigator)	Anandhu Santhosh Melvin Abraham Nadeem Mohammed Shajahan Rohan Prakash	TKM College of Engg Kollam	ECE	Indoor Swarm UAVs Localisation by Feature extraction using VSLAM & ROS	38,000	5000	30,000	1000	2000	
48	Reshna S. Associate Professor. Sajeena A (Co-Investigator)	Jikkumon Jams Kishor Kumar K Arjun B Shravan S Mohan	TKM College of Engg Kollam	ECE	Design & Development of Sign Language Recognition Sysytem for Hearing Impaired People.	36,000	5000	25,000	1000	5000	
49	Sreelekshmy Pillai G. Assistant Professor Biju M. S. (Co-Investigator)	Asif Ali S Cincy Jose Akhila N Agil Abraham Thomas	NSS College of Engineering Palakkad.	Civil	Impact of flooding in the performance characteristics of bituminous roads- a case study of Koduvayur-Nenmara road in Palakkad district.	50,000	8450	31,550	5000	5000	

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50	Sreelekshmy Pillai G. Assistant Professor Sulakshna T. P. Assistant Professor (Co-Investigator)	Greeshma P S Aswathi P Ajil B S Ashiq Rahman P K	NSS College of Engineering Palakkad.	Civil	Prediction of road traffic noise levels by using regression analysis and artificial neural network.	40,000	4000	30,000	4000	2000
51	Dr. Retheep Raj Assistant Professor Nikhil Binoy C (Co-Investigator)	Akshay V J Amarnath k Athulya S Miswar Ali N B	NSS College of Engineering Palakkad.	ECE	Surface electromyography Based Prosthetic Limb	40,000	5000	32,000	2000	1000
52	SivaKumar K. S. Assistant Professor Dr. Anish M N (Co-Investigator)	Muhammed Anees K Sruthi N P Shahana Beegam A P Megha K	NSS College of Engineering Palakkad.	ECE	Automated Swimming Trainer Suit For Beginners.	50,000	10,000	30,000	5000	5000
53	Dr. Venugopal G. HOD Sidharth N (Co-Investigator)	Shamli Fathima P Dolbin Jojo Sandhra C Gayathri A V	NSS College of Engineering Palakkad.	ECE	FPGA Based Portable Device For Analysing Neuromuscular Conditions using Surface EMG Signals.	30,000	3000	23,000	2000	2000
54	Dr. Anish M. N. Associate Professor. Sivakumar K S (Co-Investigator)	Anaswara S Arun M Shijin V	NSS College of Engineering Palakkad.	ECE	Wearable Gadget for Navigation of Blind People	22,500	5000	12,500	1000	4000
55	Nimitha Muraleedharan Assistant Professor Dr. Sujith S. (Co-Investigator)	Sarath P Sruthi Sojan Sabarinath K K Yedhukrishna K S	NSS College of Engineering Palakkad	EEE	Suppression of time varying harmonics in non-linear load by HAPF system	37,000	10,000	20,000	2000	5000
56	Leena N. Assistant Professor Dr. Sujith S. (Co-Investigator)	Krishnapriya Sasikumar Navya P Rohith M Vyshnav T S	NSS College of Engineering Palakkad	EEE	Sign language interpreter-slint	21,000	3000	15,000	1500	1500
57	Suja Markose Assistant Professor	Dinakaran P S Swetha T S Rayeez Naushad Mahesh S Nair	Model Engineering college	ECE	CPR monitor with cardiac ouput monitoring	22,000	4000	10,000	3000	5000
58	Reeju Vargese Assistant Professor	Gopika K M Merin Jose Sethulakshmy P J Sibin Babu	Model Engineering college	ECE	Glove based health monitoring system	21,000	5000	10,000	2000	4000
59	Jayadas C. K. Associate Professor	Yadu Krishnan J	Model Engineering College , Thrikkakara	ECE	Window Painting Drone	35,000	10,000	20,000	2000	3000

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60	Leena Silvester Assistant Professor Dancy Kurian (Co-Investigator)	Abhijith A Adeeb Ashraf T P Akhil Raj R S Renjith R S	College of Engineering Attingal	CSE	Obstacle detecting walking stick for blind	16,900	4200	6700	1000	5000	
61	Dancy Kurian HOD& Assistant Professor Leena Silvester (Co- Investigator)	Jean Johnson Dinesh S Arshaj S H Sheethal Joseph	College of Engineering Attingal	CSE	Project GreenX	20,000	5000	10,000		5000	
62	Sreejith S. Assistant Professor Salins S S (Co-Investigator)	Adarsh Prasanth Akhil P S Faisana M Lekshmy J R	College of Engineering Attingal	EEE	Wireless long-range sensor mesh network for environment surveillance and disaster prediction in remote areas	30,000	6000	20,000	2000	2000	
63	Remya R. S. Assistant Professor Manoj Ray D (Co-Investigator)	Siddharth P S Amal O P Abhijith U G Jithin Raj	College of Engineering Karunagappally	CSE	Realtime detection of helmetless riders using CCTV	14,500	5000	5000		4500	
64	Arjun M Assistant Professor	Rithulkrishnan V R Anagh P Athul Babu N K Gokul V	College of Engineering Thalassery	ME	Small scale unit of drinking water production from rooftop rain water harvesting.	50,000	10,000	36,000	2000	2000	
65	Dr. Rini Jones S. B. Associate Professor. Jinesh S (Co- Investigator)	Jugin Dinesh Krishnapriya Vinod Rahul M Layana I V	College of Engineering Thalassery.	ECE	Smart shield for Women Safety.	20,000	4000	12,000	2000	2000	
66	Jithendra K. B. Assistant Professor Anoop K (Co-Investigator)	Adarsh Madhusoodanan Abhinand E Athira Manoharan Amaya Sudhakar	College of Engineering, Thalassery	ECE	Irregular Land/Water Resources Surveying Equipment	18,000	3000	10,000	2000	3000	
67	Dr. Tina P. G. Assistant Professor. Saji Justus (Co-Investigator)	Amal S Austin J Srampickal Harikrishna R Sarang P P	College Of Engineering Kidangoor	ECE	Automated River Surface Cleaning Robot	31,000	5000	20,000	1000	5000	
68	Muhammed Ameen P. P. Assistant Professor. Priya M (Co-Investigator)	Archana Venugopal Athira Manoj Daniya Annamma Abraham Riya Soney	College Of Engineering Kidangoor	ECE	Chuckhole Tracker & Advanced Road Safety	15,000	2000	10,000	1000	2000	
69	Maneesha Krishnan Assistant Professor. Alkajith Jyothika (Co-Investigator)	Sreelekshmi R S Pooja Thulasi Haripriya Ajith Akshaya S	College of Engineering Karunagapally	ECE	An IoT Based Urban Airpollution Monitoring System.	16,000		14,000	1000	1000	

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70	Shejina V Assistant Professor Varun Chand H (Co-Investigator)	Bebeuo Babulazar Athulraj P M Safvan Khaleel V Athul S Prakash	College of Engineering Vadakara	CSE	Animal identification with facial images using score level fusion	5000	4000	1000		
71	Prapu Premnath Assistant Professor Lalji Cyriac (Co-Investigator)	Aswin R S Mohamed Anas K M Arjun Anand Varun A	College of Engineering Vadakara.	ECE	Landslide Early Warning System.	10,000	3000	3000	1000	3000
72	Vishnu Mohan Assistant Professor. Sukhanya K (Co-Investigator)	Athuljith S P Mohamed Sadiqu K V Yadu Krishnan t Yobin Bobby	College of Engineering Vadakara.	ECE	Non Destructive Type Qualitative & Structural Analysis Of Flexible Pavement.(Road)	14,000	3000	8000	2000	1000
73	Abhilash B. L. Assistant Professor Anoopkumar N. (Co-Investigator)	Daheeb S Dev Neethu M S Anandhu B Athulya Babu	College of Engineering Pathanapuram	EEE	Ferrite position identification system operating with wireless power transfer for intelligent train position detection	25,000		20,000	3000	2000
74	Dr. Mohanalin Raja Rathnam Associate Professor & HOD Sudhin Govind (Co-Investigator)	Akhil K Amritha Chandran M Gokul Krishna P P Vishal Ravikumar	College of Engineering Trikaripur	EEE	Landslide Monitoring and Early Warning System Using a Cluster of Sensor Network and Feedback neural network	28000	6000	21,000	1000	
75	Ajisha S Assistant Professor Kannan S A (Co-Investigator)	Akhila A Cereena S Jackson Rahul R Krishnan Vignesh Manoj	College of Engineering Perumon	EEE	Solar powered aqua ro-boat	25500	5000	12,500	3000	5000
76	Sheron George Assistant Professor Adil Nasser (Co-Investigator)	Rijo Mathew Ashmy G S Sudeesh Kumar M	College of Engineering Aranmula	EEE	Self balancing off-road electric wheelchair	17,000	7000	7500	1000	1500
77	Dr. Aboobacker Kadengal Dean (PG)	Navaneeth B K Pranav Palari Nidhin K Nambiar Sreejish P V	LBS College of Engineering Kasaragod	ME	Design fabrication and investigation on a concentrated solar power desalination system using fresnal lens	49850	27750	21100		1000
78	Rajashree Raghavan Associate Professor Arun S Mathew (Co-Investigator)	Hassainar Ashir P H Parvathiraj Balakka Zainal Abdeen Hameed Roshan K	LBS College of Engineering Kasaragod	EEE	Eco-driven self balanced electric bike using machine learning, gyroscope and recycled batteries.	32,000	8000	17,000	2000	5000
79	Radhika P. Nair Assistant Professor Dr.Jayamohan J (Co-Investigator)	Amrutha U A Anjana S Kumar Gopika Chandran Jaseena Amsaj	LBS Institute of Technology for Women,TVM	Civil	Influence of mineralogy on the engineering properties of lateritic soils	50,000	5000	30,000	7000	8000

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80	Dr. Naveen S Assistant Professor Shijitha R (Co-Investigator)	Aiswarya S. S Architha V. M Asiya Nizam Parvathy Devi R	LBS Institute of Technology for Women,TVM	ECE	SPI-D: Spider Inspired Wall Climbing Robot	11,000	1500	7500	1000	1000	
81	Akhila K. Assistant Professor Rajitha A R (Co-Investigator)	Fathima Parveen A S Hidha Fathima Babu Priyanka Devassy Thanziya K J	Adishankara Institute of Engineering & Technology, Kalady	EEE	Universal mind read # DOF bed for rehabilitation.	22,000	5000	12,500	3000	1500	
82	Divya V Chandran Assistant Professor. Arya Paul (Co-Investigator)	Abhilash G Panicker Aswany Thilakan DonDavis Gayathri G Shenoy	Adishankara Institute of Engineering and Technology.	ECE	Doily	26,000	8000	15,000	1000	2000	
83	Dr. Aju Mathew George Assistant Professor	Kevin Emmanuel Lismol Scaria Tresa Rose Vignesh O S	Amal Jyothi College of Engineering, Kottayam	Civil	Adsorptive Removal of Arsenic from Water Using Chemically Treated Biosorbents:Evaluation of Equilibrium and Kinetic Parameters.	23,000	8000		2000	5000	8000
84	Midhun Joy Assistant Professor Therese Yamuna Mahesh (Co- Investigator)	Thomson Sunny Sneha Margret Abraham Sneha Mariam Thomas Tanniamol K Parambil	Amal Jyothi College of Engineering	ECE	Smart Agro-Incubator	23,000	4000	15,000	1000	3000	
85	Dr. Therese Yamuna Mahesh Associate Professor Midhun Joy (Co-Investigator)	Parvathy S S Shibin Thomas Shilpa Rachel	Amal Jyothi College of Engineering	ECE	Cicerone - A Real Time Object and Path Detection for Visually Impaired People.	22,500	5000	12,000	2000	3500	
86	Dr. Godwinraj D. Assistant Professor. Godfrey D (Co-Investigator)	Akhil K V Anjana N Anagha Santhosh Anitta roy Njavallil	Amal Jyothi College of Engineering	ECE	Design Microscale Laser Controlled PCB Engraver & Solder Dispenser Unit	25,000	5000	15,000	1000	4000	
87	Reeju Elisa Baby Assistant Professor Godwin Raj D (Co-Investigator)	Leah Sibi Lija Mariam Biju Sahi Ann George Shalu Shaji	Amal Jyothi College of Engineering	ECE	Self-Driving Car using Optical Flow & Gridding System	15,000	5000	5000	1000	4000	
88	Dr.Biju P L HOD Manoj Kumar V K (Co- Investigator)	Albin Mathew Ajilas V R Ajay Wilson Harith H Flewin Johnson	Jyothi Engineering college Thrissur	ME	Eco-friendly and effective management of used diapers and napkins.	49,000	7000	33,000	4500	4500	

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89	Aswathy Ravikummar Assistant Professor	Tom Joseph Amith Abraham Rajan Steve Maria Waltin Savio Rajan K	Mar Baselios College of Engineering and Technology, Trivandrum	CSE	Food computer project	12,000	3000	6000		3000	
90	Dr. Jayakumari J. Professor Dr. Jayashree M. J. (Co- Investigator)	Daniel C Rohith Satheesan Sandra Jeeva Shamil Shamsudeen	Mar Baselious College of Engineering and Technology, Nalanchira	ECE	Portable Brain Computer interface for Medical Applications.	32,500	10,000	15,000	2500	5000	
91	Joisy M. B. Professor Dr.Narayanan S (Co-Investigator)	Karthik G Lekshmi V R Nabeel N S Nice M Basheer R U Dhanusree	Marian Engineering College, Kazhakoottam	Civil	Desalination of seawater	27500	3000	12,000	3000	9500	
92	Asha Davood Z. Assistant Professor Dr.Narayanan S Professor & HOD (Co-Investigator)	Ashiq Rashid Hepsy Hamlet Praveen Peter Gomez Shilpa Cecil	Marian Engineering College, Kazhakoottam	Civil	Autofarm Water Regulator	34,000	2000	30,000	1000	1000	
93	Dr. Shalini A. Nair Associate Professor Dr. P. Roopa (Co-Investigator)	munshida P Sradha S Aswathy A Akshay S	Mohandas College of Engineering, Nedumangad	BT&BCE	Comparative analysis of co-digestion of waste glycerol with biomass	20,000	4000	12,000	2000	2000	
94	Dr. K. M. Usha HoD Prathibha S Nair (Co-Investigator)	Aiswarya K S Ardra V Sunil Parvathy Visakh	Mohandas College of Engg & Technology.	BT&BCE	Mathematical Modelling & Simulation of Fluidized Bed Reactor for the decomposition of Ammonium Nitrate & reduction of oxides of Nitrogen emissions.	30,000	2000	15,000	5000	5000	3000
95	Dr.Amith Aravind Associate Professor Dr.M D Mathew (Co-Investigator)	Rahul Nair Josemon N Sumesh Prasanth O P Justin Raju	Saintgits College of Engineering Kottayam	ME	Development of biodegradable cutting fluid from esterified rubber seed oil and estimation of its rheological, tribological and other cutting parameters.	45,000	10,000	25,000	5000	5000	
96	Boby Paul Assistant Professor Harinarayanan Nampoothiri M G	Jacob George Amal S Aromal Jayaprakash Alex Shiji	Saintgits College of Engineering Kottayam	ME	SAMPARAYA	45500	7500	25000	5000	8000	
97	C. K. Cherian Assistant Professor Jithin Kurian Andrews (Co-Investigator)	Jithin Rajan Nithin Skariah Vineeth K S Zacharia Issac	Saintgits College of Engineering, Kottayam	Civil	Floating wave breakers	30,000	5000	15,000	5000	5000	

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98	Dr. Reebu Z. Koshy Assistant Professor Jithin Kurian Andrews (Co-Investigator)	Joel Jacob Jose Mathews Stephens Sreekkuttan Vipin S Kumar	Saintgits College of Engineering, Kottayam	Civil	Development of low cost mechanism for pavement performance evaluation	34,000	10,000	14,000	5000	5000
99	Beena A. C Assistant Professor Roshni Oommen (Co-Investigator)	Rose Mol James Akshitha Saji Alwin Emmanuel Reema James	SAINTGITS College of Engineering	ECE	IoT Enabled Cost Effective Braille Printer with an Efficient Embosser	26,000	8000	15,000	1000	2000
100	Ashly John Assistant Professor Ashwin P. V (Co-Investigator)	Arjun Shankar P. B Arunima C. V	SAINTGITS College of Engineering	ECE	AI Based Spectacles for Blinds	24,500	5000	15,000	1000	3500
101	Dr. Riboy Cheriyan Professor & HoD Dr Ansal K A (Co-Investigator)	Joel Abraham Sree Sankar E Reuben George Mathai Sandeep Narayanan	SAINTGITS College of Engineering	ECE	Machine Learning-Based Fingerprinting for Accurate Positioning of Things in GPS denied Environmental using Lora WAN-Long Range Wide Area Networks	32,000	5000	20,000	2000	5000
102	Ashly John Assistant Professor Hanna Mathew (Co-Investigator)	Aiswarya Satheesh Akhila Vinod Arya R Anil Sreya M James	SAINTGITS College of Engineering	ECE	Automated wheelchair and Human automation.	13,547	900	9647	1000	2000
103	Abraham George Assistant Professor Jineeth Joseph (Co-Investigator)	Akash Kalluvilayil Venugopal Sharon K Varghese Sheba Merin Jacob	Saintgits College of Engineering, Kottayam	EEE	Development of embedded system for speaker identification and recognition using AI method.	10,600	5400	1000	2700	1500
104	Sarju S. Assistant Professor Mereen Thomas (Co-Investigator)	Joel James Alka Augustine Ashna Saji Irene Treesa Jose Aksa Reji Daibin Raju	St. Joseph's College of Engineering & Technology Palai	CSE	Black box logging system for drones	11,000	4000	4000		3000
105	Dr. Rajesh Baby & Associate Professor	Josevin Joseph Sajo Mathew Sen Babu S Harish	St. Joseph's College of Engineering & Technology Palai	ME	Design and fabrication of gasifier stove	50,000	15,000	25,000	5000	5000
106	Anup Kumar Prof Sebastian (Co-Investigator)	Asst Dr. Jijse Akshay Oommen Santhosh Bijo George P Aneesh George Jijo Jose	St. Joseph's College of Engineering & Technology Palai	ME	Performance and emission analysis of diesel engine fuelled with blend of biodiesel from waste cooking oil, pyrolysis plastic oil and diesel.	44783	10,000	24,783	5000	5000

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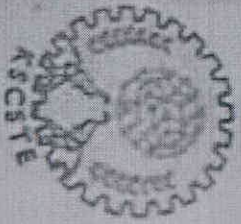


107	Jesna Anver Associate Professor Sara Cherian (Co-Investigator)	Ceira Yadev Jayachandran Rahul Murali Ansa N Varkey Varsha Hari	ToC H Institute of Science & Technology	CSE	Sbox-Intelligent automobile blackbox	13,000	3000	7500	500	2000
108	Surej Rajan C Prof Stephy James (Co- Investigator)	Asst Arundas C Jassir Hussain	ToC H Institute of Science & Technology Ernakulam	ME	Development of fire retardent hydrogels using starch-g- acrylonitrile/polyacrylamide- alginate for fire fighters protective clothing	38124	7624	22900	3800	3800
109	Dhanya R Assistant Professor. Swathy Satheesh (Co-Investigator)	Malavika Balagopal Nayana John Nimmy Yohannan Sreeparvathy Vinodkumar	TOC H Institute Of Science and Technology.	ECE	AUTOBEE POLLINATOR- Autonomous cross Pollinator for Future Farming.	15,000	3000	5000	2000	5000
110	Deepthi Thomas (Co-Investigator) Assistant Professor. Annie Paul	Shelsha Shelji Shilpa P S Megha V Kumar Pretty Varghese	TOC H Institute of Science & Technology	ECE	GYRO GLOVE: The Hand Tremor Suppressor	17,000	2000	10,000	2000	3000
111	Teena George Assistant Professor	Raveena M Shibin Sujith Vishnusree P K Jaseela Subair	Vimal Jyothi Engineering College Kannur	EEE	Virtual eye for blind	28000	6000	15,000	2000	5000
112	Dr. Glan Devadhas G Professor	Navami Manoharan Harinand K Shahabas P P	Vimal Jyothi Engineering College.	ECE	Disaster Monitoring & Alerting System for Flood & Landslide Prone areas of Kerala state Using SCADA.	14,000	1000	10,000	1000	2000
113	Neenu Thomas Assistant Professor Dr.Mary P V (Co- Investigator)	Alwin Baby A Anurag N A Jasmin James Jebin V	Vidya Academy of Science & Technology Thrissur	EEE	Automobile black box system	12500	5000	2500	3000	2000
114	Neena Alex Assistant Professor Jane Maria S (Co-Investigator)	Alwin Eldho Jaison Kuriakose Tinu George Varsha Antony	Viswajyothi College of Engineering Ernakulam	EEE	Eye controled wheelchair	29500	10,000	13,000	2000	4500

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# Kerala State Council for Science, Technology and Environment

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

Letter No. 01181 /SPS 64/2019/KSCSTE

Dear Prof. Biju CV,

*[Handwritten Signature]*  
116  
Date of receipt 22/11/2022

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

This is to invite your attention to the reference cited and to inform that the project **"Development of Constant Power discharging battery, using super capacitor"** submitted by as PI and Ms. Suprabha Hyman, Mr. Alith C, Mr. Ashik M.S. as student investigator(s) has been amount of **₹9750/-** sanctioned by the Council. The budget estimate of the project is as detailed

SL.NO.	ITEMS	AMOUNT
1	Consumables	3500
2	Minor equipments	2750
3	Travel	1250
4	Research literature & Documentation	750
5	Others (for analysts)	1500
	<b>Total</b>	<b>9750</b>

The PI has to submit the signed Terms and Conditions (as per the guidelines) and the date of project within two weeks to the undersigned. The project should be completed within six submit the certified soft copy of the final report (in pdf to [scd.kscste@kerala.gov.in](mailto:scd.kscste@kerala.gov.in)), audited Expenditure and Utilization Certificate counter signed by the Head of the Institution for release. The format for final report, SF and UC can be downloaded from [www.kscste.kerala.gov.in](http://www.kscste.kerala.gov.in).

Thanking you,

True Copy Attested

*[Handwritten Signature]*  
Dr. Sudeeep K.P.  
Executive Vice President  
KSCSTE, Pattom

Dr. Biju CV  
Computer  
Department  
Chemistry P.O.-679 531

Prof (Dr.)

To