



**(An Autonomous Institution** - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

## **Criterion III – Research, Innovations and Extension**

### **3.2 Resource Mobilization for Research**

***3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)***

**List of project and grant details:**

**3.2.1 Details of grants received from Government and Non-governmental agencies for research projects, endowments, Chairs in the institution during the year (INR in lakhs), 3.2.2 Details of teachers having research projects during the year & 3.2.4 Details of Departments having research projects funded by Government and/or Non-government agencies during the year**

<b>Name of the Principal Investigator/ Co-Investigator (if applicable)</b>	<b>Department of the Principal Investigator/ Co-Investigator</b>	<b>Name of the Funding Agency</b>	<b>Type (Government/Non-Government)</b>	<b>Funds provided (INR in lakhs)</b>	<b>Month and Year of receiving the grant</b>	<b>Duration of the Project</b>
Dr.R.Shyam Kumar	Biotechnology	TNSCST	Government	0.075	May-23	0.6
Dr.R.Shyam Kumar	Biotechnology	FEAR	Non-Government	0.075	Jul-23	0.6
Dr.R.Baskaran	Biotechnology	TNSCST	Government	0.075	May-23	0.6
Dr. D. Prince Winston	EEE	DST-NCSTC	Government	14.046	Jul-23	1
Dr. B. Gurukarthik Babu	EEE	IE India	Government	0.66	Jul-23	1
Mrs.S.Jothi Lakshmi	CSE	TNSCST	Government	0.075	May-23	0.6
Dr.P.Ganeshprabhu	Civil	TNSCST	Government	0.075	May-23	0.6

Dr. D. Prince Winston	EEE	TNSCST	Government	0.075	May-23	0.6
Mr. N. R. Madhan	MECH	TNSCST	Government	0.075	May-23	0.6

Total Amount in Lakhs **15.23**



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, [www.tanscst.nic.in](http://www.tanscst.nic.in)

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),

Member Secretary

Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To

The Principal

Kamaraj College of E&T  
K.Vellakulam-625 701

Sir/Madam,

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

*Submitted to Secretary.*

*copy to Dean Research & IQAC*

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Senoogajarajapani.M, Balaji.S, Hariharan G.S, Balakrishnan.S	CSE-669	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K. Akash, J. Kiruba, P. Karthickraja,	ECV-198	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr.R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco friendly battery balancing kit for Electrical vehicle applications	M. Praveen	EEE-277	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech. Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0351	The Principal	Rs 7500/-
<b>Total</b>						<b>Rs 45000/-</b>

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

*Dr. R. Srinivasan*  
3/3/23  
Member Secretary.

Encl: a) Terms & Conditions (T&C)

b) Format of Utilisation Certificate (UC)

c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI – 600 025

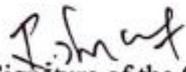
STUDENT PROJECT SCHEME (SPS) – 2022-23

UTILISATION CERTIFICATE

(TWO COPIES)

1. Name of the guide and address : Dr. R. SHYAM KUMAR  
Professor,  
Department of Biotechnology,  
Kamaraj College of Engineering and  
Technology,  
K. Vellakulam – 625 701,  
Near Virudhunagar.
2. Name of the Student : SUMANA. R
3. Title of the Project : BOILED RICE WATER AND PROTEIN-  
BASED BIO-FILM DEVELOPMENT  
BY INJECTION MOULDING FOR  
PACKAGING
4. Project Code : AS – 354

It is certified that a sum of Rs. 7,500/- (Rupees: Seven thousand and five hundred) sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs. – Nil-remaining unutilized is refunded.

  
Signature of the Guide

Dr. R. SHYAM KUMAR  
Professor - Dept. of Biotech.,  
Kamaraj College of Engg. & Tech.,  
Virudhunagar - 626 001.

  
Signature of the HOD

HOD  
DEPT. OF BIOTECHNOLOGY  
Kamaraj College of Engineering & Technology  
VIRUDHUNAGAR.

  
Signature of the REGISTRAR /  
PRINCIPAL / DEAN with seal

Dr. S. SENTHIL, M.E., Ph.D.  
PRINCIPAL (I/c)  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambaram Nagar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellakulam - 625 701.  
(Near VIRUDHUNAGAR).



Shyamkumar Rajaram &lt;kingshyam2003@gmail.com&gt;

**Announcement of Short-listed teams for FAER Integra Scholar Program 2023**

FAER Admin &lt;office@faer.ac.in&gt;

Mon, Dec 5, 2022 at 5:27 PM

To: mousi19ubte025@gmail.com, kingshyam2003@gmail.com

Cc: Dksubra &lt;dksubra@gmail.com&gt;

Dear Participants,

**Congratulations!** On behalf of FAER- Integra Scholar Program, we wish to congratulate you and your team. Your project proposal named "**P-06 Fabrication Of Thin Biofilm Using Boiled Rice Water Reinforced With Microalgae, "An Eco-Friendly Approach"**" was short listed in the first round for "**FAER-Integra Scholar Award Program 2023**".

General instructions to all- Students, Faculty and Colleges

1. Give us an undertaking stating that we will not submit this project for any other contest. Provide details like home address, email id and mobile no of all participating students (not one only) and faculty supervisor.
2. Please provide bonafide student certificate from principal for all students.
3. In-case signatures are not provided please resubmit the proposal with all required signatures ,other wise proposal will be disqualified. Where your proposal is not as per format please resubmit.
4. Resubmit your action plan including work time, procurement time, deliverables etc.
5. Submit monthly progress report. we want the students to maintain a journal and send us a report at the end of month.
6. Mentors will be appointed to advice you please follow the advice of your mentor to avoid disqualification and send regular monthly project reports with videos of work
7. Communicate regularly with the mentor and FAER office.
8. Compliance to rules, adherence to time are important.
9. Submit your PPT, four page summary with results and photos, and a Video of Demo to FAER office which will be used for final evaluation.
10. Budget is restricted to a max of Rs 6000 /- only. Equipment, software, devices, travel, printing charges, honorarium etc are not allowed, use it for consumables only. We will only reimburse those expenses which are approved by President.
11. **You need to complete the project ( as specified in your proposal) by May 2023 and a Final report to be submitted to FAER by 30 May 2023**
12. The Final evaluation will be done virtually.

The next course of action required from your side are : .

1. Please submit a one page write up for the project. it will go to mentors.
2. You may go ahead with your work. don't wait for anything.
3. Keep in touch with mentors once that is announced. listen and act according to mentors advice. mentor is there to help you.
4. PFA the **Agreement Letter format** for your reference, it should reach our office by **20th January 2023**

Please contact FAER Office if you need any further clarifications.

Thanking you,

Sincerely yours,

Sridhar Karra

Secretary

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**FAER- Integra Scholar Program - 2023**

**Short-Listed Project List**

<b>S.No</b>	<b>Project</b>	<b>College</b>	<b>City</b>	<b>State</b>	<b>Year</b>	<b>Branch</b>	<b>Student1</b>	<b>Student2</b>	<b>Student3</b>	<b>Student4</b>	<b>Faculty Guide</b>
P-01	Career Dendrogram	Dronacharya College Of Engineering	Gurugram	Haryana	BTechIII-Year	IT	Rahul Kushwaha				Prof Prema
P-02	Design of Ultrasound based Speed Detector and Indication of an Autonomous neighbourhood vehicles and Eye Blink Sensor based Speed limiter of our Vehicle in a National Highways for Avoiding Accidents	Mepco Schlenk Engineering College	Sivakasi	Tamilnadu	BE IV-Year	ECE	J.Jefina Miralin	B.Jeya Shalomi	Ms.R.Jeyaranjani	P.Bhavadharani	Dr.C.Kalyana Sundaram
P-03	Design and Fabrication of typical Seabin used in marine industries	Dronacharya College Of Engineering	Gurugram	Haryana	BTech II-Year	Mechanical +EEE	Shivam Kumar	Lakshya Gulati	Anup Kumar	Kishan Sengar, Rajaram Kumar	Dr. Kunal Arora
P-04	Automatic Identification of Intracardiac Tumor and Thrombi in ECG Based on Sparse Rep	Vel Tech Multi Tech Dr. Rangarajan Dr. Sakunthala Engineering College	Avadi	Tamilnadu	B.Tech IV Year	ECE	Afroze Aafrin M	Hemalatha V	Manisha P	Shamitha S	Mr Ruban Thomas
P-05	Smart Transport	Sri Ramakrishna Engineering College	Coimbatore	Tamilnadu	BTechIII-Year	EEE	Anjusha J	Ananya M	Amritha Sri S	Vigneshwar M	Deepa P
P-06	Fabrication Of Thin Biofilm Using Boiled Rice Water Reinforced With Microalgae, "An Eco-Friendly Approach"	Kamaraj College of Engineering and Technology	Madurai	Tamilnadu	BTech IV-Year	BioTechnology	R.Mousika	R.Niranjana Devi	G.Sudharshan		Dr.R.Shyam Kumar

**Foundation for Advancement of Education and Research**  
 G5, Swiss Complex, 33, Race Course Road, Bangalore- 560001  
 E-mail: office@faer.ac.in, Website: www.faar.ac.in

**FAER - Integra SCHOLAR PROGRAM: 2022-2023**

**Title: FABRICATION OF THIN BIOFILM USING BOILED RICE WATER  
 REINFORCED WITH MICROALGAE, "AN ECO-FRIENDLY APPROACH"**

**Project code: P- 06**

**Student Name: R.Niranjana Devi, R.Mousika,  
 G.Sudharshan**

**Sanctioned Amount: Rs.6000/-**

**Guide Name: Dr R.Shyam Kumar**

**Statement of Expenditure**

S. No	Date	Name of the participant	Particulars/ Characterization	Invoice/Bill No	Institution/Centre	Expense (Rs.)
1	06-01-2023	R.Niranjana Devi	Chlorella sp	T1787845	Bharathidasan University	1180
2	09-01-2023	G.Sudharshan	Tray Mold	FB 84369	Anantha and Anantha Shop	380
3	12-02-2023	R.Mousika	Miscellaneous	1901	Sri Saraswathi Traders	530
4	16-03-2023	R.Niranjana Devi	Tensile Strength	T-2223-29130	SITRA	774
5	06-03-2023	R.Niranjana Devi	SEM	178	Gandhigram	600
6	06-03-2023	R.Niranjana Devi	FTIR	KARE/22-23/47513	Kalasalingam academy	75
7	06-03-2023	R.Niranjana Devi	XRD	KARE/22-23/47514	Kalasalingam academy	300
8	07-03-2023	Dr.R.Shyam Kumar	Anti-Bacterial test	110	Sasaam Biologicals lab Services	2000
9	18-03-2023	Dr.R.Shyam Kumar	Anti-Fungal test	116	Sasaam Biologicals lab Services	2000
<b>Total</b>						<b>7839</b>

*R. Shyam Kumar*  
**Project Guide**

Dr. R. SHYAM KUMAR  
 Professor - Dept. of Biotech.,  
 Kamaraj College of Engg. & Tech.,  
 Virudhunagar - 626 001.

*S. Senthil*  
**Principal**  
**Dr. S. SENTHIL, M.E., Ph.D.,**

PRINCIPAL  
 KAMARAJ College of Engineering and Technology  
 (Autonomous)  
 S.P.G. Chidambaram Nadar - C. N. N. Campus,  
 S.P.G.C. Nagar, K. Velankulam - 625 701.  
 (Near VIRUDHUNAGAR).



Ref. No. : KAMARAJ / AO / 2022-23 /

Date : 22/12/2022

## Agreement by the Students Team

We, the students of Kamaraj college of Engineering and Technology, studying in B.Tech. Biotechnology, 4<sup>th</sup> year have been selected in the first round of the FAER Scholar Award 2022-23 program, for the project proposal titled Fabrication Of Thin Biofilm Using Boiled Rice Water Reinforced With Microalgae, "An Eco-Friendly Approach" under the guidance of Dr.R.Shyam Kumar, Professor and Head of the Department.

We undertake to abide by the following conditions in order to qualify for the seminar and final selection:

1. We will not submit this project for any other contest. We understand that the violation of this rule will lead to disqualification of us and our college also.
2. We agree to perform the activities as per our original proposal. We assure you that we will communicate reports and progress videos as per timelines and as and when required by FAER and mentors
3. We seek the approval from FAER for any modifications.
4. We will construct the units proposed in our proposal. It will not be only simulation.
5. We will submit the final project by May 30, 2023 latest an extended summary of our activities, objectives, problem posed, modeling if any, design, construction, testing, applications if any, conclusions references
6. We will participate in the final presentation and demo as per the schedule announced by FAER.
7. We will submit full details of reports and videos after the completion or as required.
8. We are aware that:
  - i. The final grant is not for devices, equipment, travel expenses, honorarium, printing, books etc. it should be used for components and fabrication.
  - ii. The project team consists of a maximum of four members only.
  - iii. All members of the team play significant role in the project work.
  - iv. Maximum Amount of grant per project will be Rupees Six Thousand Only (6000/-)

Contd..2

# KAMARAJ

COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution

S.P.G. Chidambara Nadar - C.Nagamal Campus  
S.P.G.C. Nagar, K. Vellakulam - 625 701, (Near Virudhunagar), Madurai District.

E-mail : mail@kamarajengg.edu.in  
Website : www.kamarajengg.edu.in

Phone : 04549 - 278791  
278171

Ref. No. :

Date : .....

..2..

v. Certificate will be issued only if we complete the work successfully, prepare and submit an extended summary for publication and participate in the seminar.

9. We agree to abide by all the rules and conditions of the contest.

Name and Signature of the Students :

S.No	Name of the Students	USN No.	Mobile No	Email ID	Photograph
1	R.Mousika	920419214 020	7397078 097	19ubte025@kamarajengg .edu.in	 R. Mousika
2	R.Niranjana Devi	920419214 022	9600527 889	19ubte012@kamarajengg .edu.in	 R. Niranjana Devi
3	G.Sudharshan	920419214 029	9442473 436	19ubte004@kamarajengg .edu.in	 G. Sudharshan

*P. Senthil*  
Signature of Project Supervisor

HOD

DEPT. OF BIOTECHNOLOGY

Kamaraj College of Engineering & Technology

VIRUDHUNAGAR.

*S. Senthil*  
Signature of the Principal  
Sealand address  
of the Institution

Dr. S. SENTHIL, M.E., Ph.D.,

KAMARAJ College of Engineering and Technology

S.P.G. Chidambara Nadar - C. Nagamal Campus

S.P.G.C. Nagar, K. Vellakulam - 625 701.

(Near VIRUDHUNAGAR).

Note: USN No is the Unique Serial Number of Unique Identification Number given from the College to every individual Students.

Administrative  
Office

( Approved by AICTE, New Delhi and Govt. of Tamilnadu and Affiliated to Anna University, Chennai )



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)  
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Ph : 044-22301428, www.tanscst.nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),

Member Secretary

Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To  
The Principal  
Kamaraj College of E&T  
K.Vellakulam-625 701  
Sir/Madam,

*Submitted to Secretary.*

*copy to Dean Research & IQAC*

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Senoagarajapandi.M, Balaji.S, Hariharan G.S, Balakrishnan.S	CSE-609	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K. Akash, J. Kiruba, P. Karthickraja,	ECV-198	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr.R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco-friendly battery balancing kit for Electrical vehicle applications	M.Pravin	EEE-777	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech. Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0351	The Principal	Rs 7500/-
Total						Rs 45000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
3/3/23  
Member Secretary.

- Encl: a) Terms & Conditions (T&C)  
b) Format of Utilisation Certificate (UC)  
c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

**TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**

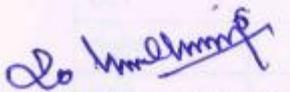
**Dote Campus, Chennai – 600 025**

**Students Project Scheme 2022 – 2023**

**Utilization Certificate**

1. Name of the Guide and address : Dr.R.Baskaran  
Associatet Professor,  
Department of BioTechnology,  
Kamaraj College of Engineering and  
Technology,  
Virudhunagar – 625701.
2. Name of the student(s) : P.Raakesh Kumar,  
D.Muhammed Aashik,  
D.Vignesh.
3. Title of the Project : Development of High Performance High  
Voltage Insulator for Power Transmission Line  
from Blends of EPDM Rubber/Ethylene Vinyl  
Acetate Copolymer Containing silica
4. Project Code : CHE 079

It is certified that a sum of Rs. 7,500/- (Rupees Seven Thousand and Five Hundred) Sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs.0/- remaining unutilized is refunded.

  
Signature of Guide

  
Signature of HOD

  
Signature of the PRINCIPAL  
with seal



# The Institution of Engineers (India)

AN ISO 9001 : 2015 CERTIFIED ORGANISATION  
(ESTABLISHED 1920, INCORPORATED BY ROYAL CHARTER 1935)  
8 Gokhale Road, Kolkata-700 020

*A Century of Service to the Nation*

Ref: R.6/2/DR/2023-24/DR2024003

Date: 24 July 2023

The Principal  
Kamaraj College of Engineering and Technology  
S P G C Nagar, K Vellakulam, Near Virudhunagar  
Madurai District 625701, Tamil Nadu

Dear Sir/Madam,

**Sub: Intimation of Approval for R&D Project entitled: "An Empirical Based Intelligent Safety Approach for Reducing Two Wheeler Crashes in Urban Area"**

This has reference to your subject project proposal submitted to The Institution of Engineers (India) for funding under IEI R&D Grant-in-Aid Scheme.

We are pleased to inform that the same has been approved by the competent authority as per the details mentioned below:

<b>Project ID:</b>	DR2024003	<b>Category:</b>	PhD	<b>Financial Year:</b>	2023-24
<b>Guide(s):</b>	1. Dr B Gurukarthik Babu 2. Dr D Prince Winston	<b>Applicant(s):</b>	R Santhiya		
<b>College / Institute / University:</b>	Kamaraj College of Engineering and Technology	<b>Total Grant Sanctioned:</b>	₹66,000/-	<b>Number of Instalment(s):</b>	2 (20% after Final Completion of the Project)

Kindly quote your project ID all your future correspondence.

Please note that the Terms & Conditions of the Grant (Copy enclosed) should be strictly followed. On successful completion of the project, the following documents are to be furnished: (1) hard and soft copy of the Project Report, (2) hard/soft copy of the Project Completion Report, (3) two hardcopies of the Utilization Certificates in original, (4) soft copy of the filled-in R&D Compendium pro-forma (in .doc/.docx format) and (5) an Audio/Visual Demonstration of the Prototype/Model/Process in CD or Google Drive File Link. The submission will be treated as successful and complete only on receipt of the above documents.

Kindly acknowledge receipt through email id [research@ieindia.org](mailto:research@ieindia.org).

Thanking you.

Yours faithfully,

(Dr Jitendra Saxena)  
Director (Technical) – I/C  
For Secretary & Director General

Encl: as stated.

cc: Guide(s) – 1. Dr B Gurukarthik Babu  
2. Dr D Prince Winston



GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
CO/B/FP/G162/2021 (G)  
(NCSTC)

Technology Bhawan, New Delhi  
Dated: 12/07/2023

**Sanction Order**

**Subject:** Financial assistance for the project entitled "AWARENESS PROGRAMME ON VARIOUS EMERGING TECHNOLOGIES FOR THE SCHOOL CHILDREN" submitted by Dr. PRINCE WINSTON D, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, VIRUDHUNAGAR, MADURAI, TAMILNADU, 625701 Release of the First installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of **Rs. 14,04,600/- (Rupees Forteen Lakh Four Thousand Six Hundred only)** for a duration of **9 Months**. The detailed breakup of the grant for General as well as Capital Components are given below:-

**General Component : ₹ 14,04,600/-**  
**Capital Component : ₹ 0.00/-**

Items	Budget Summary (in Rs.)	
	Year-I	Total
<b>1- Non-Recurring</b>		
<b>Subtotal (Capital)</b>	0	
<b>2- Recurring</b>		
<b>Overhead</b>	75000	75000
<b>Event Organising Expenses-1. Banners, pamphlet, stationary items, postal charges, certificates, photography, videography, News in dailies Rs. 25,000/- 2. Honorarium for resource persons @ Rs. 3000 x 2 persons x 4 days = Rs. 24,000/- 3. Travelling allowance for the resource persons @ Rs. 7000 x 2 Experts = Rs. 14,000/- 4. Boarding and lodging for the resource persons @ Rs. 3200 x 4 External expert/day x 4 days = Rs. 51,200/ 5. Travelling arrangement for participants including accompanying teachers @ Rs. 50,000/- 6. Prizes and certificates for winners and participants for Quiz and poster presentation 4 competitions @ Rs. 10000 x 4 = Rs. 40,000/- 7. Volunteers @ Rs. 750 x 3 staffs x 4 days = Rs. 9,000/- 8. Refreshment for the participants (Breakfast, Lunch, Dinner &amp; Snacks)120 participants @ Rs. 250 x 120 x 4 days = Rs. 1,20,000/- 9. Accommodation (approximately 30 participants) @ Rs. 500 x 30 x 4 days = Rs. 60,000/- 10. Registration kit (120 participants) @ Rs. 250 x 120 = Rs. 30,000/- 11. Contingency @ Rs. 20,000/- (Total for One Event = Rs. 4,43,200/-) (Total for 3 Events @Rs. 4,43,200/- x 3 =Rs. 13,29,600/-)</b>	1329600	1329600
<b>Subtotal (General)</b>	1404600	1404600
<b>Total Project Cost (Cap.+ Gen.)</b>	1404600	1404600

2. The sanction of the President is also accorded to the release of **Rs. 12,00,000/- (Rupees Twelve Lakh only)** to the "Director/Registrar/Principal/Controller/Comptroller, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY" being the **First** installment of grant as mentioned above table under "General Component" for the above mentioned project.

3. The expenditure involved is debitible to **Demand No. 89**, Department of Science & Technology for the year **2023-24**:

3425	Other Scientific Research(Major Head)
3425.60	Others : (Sub-Major Head)
3425.60.200	Assistance to Other Scientific Bodies(Minor Head)
3425.60.200.70	Innovation,Technology Development and Deployment
3425.60.200.70.00	Detailed Head
3425.60.200.70.00.31	Grants-in-aid General
	(Previous: 3425.60.200.08.05.31)

*Prince Winston D*

4. The amount of ₹ 1/- (Rupee One only) against the sanctioned amount of 12,00,000/- (Rupees Twelve Lakh only) will be drawn by DDO, DST and disbursed to the "CNA account of SERB in respect of Innovation, Technology Development and Deployment Scheme".

Name of A/C Holder	Innovation Technology Development and Deployment
Bank A/C No	349902010051240
Name of the Bank & branch	Union Bank of India, Safdarjang Enclave - New Delhi
RTGS/IFSC code	UBIN0534994

5. CNA shall assign/allocate the amount of Rs. 12,00,000/- (Rupees Twelve Lakh only) to the Director/Registrar/Principal/Controller/Comptroller, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY" as per details given below:-

Name of A/C Holder	Kamaraj College of Engineering and Technology
Bank A/C No	561502010018939
Name of the Bank & branch	Union Bank of India
RTGS/IFSC code	UBIN0556157

6. As per Rule 234 of GFR 2017, the sanction has been entered at S. No 145 . in the register of grants maintained in the NCSTC for the scheme CHILDREN CENTRIC OUTREACH PROGRAMME .

7. This issues with the concurrence of IFD vide their Concurrence Dy. No. IFD/C/III/120723/31/01193 dated 12/07/2023.

8. The GI will keep all the funds received in the Central Nodal Account only and shall not transfer the funds to any other account or not divert the same to Fixed Deposits/ Flexi-Account/ Multi-Option Deposit Account/ Corporate Liquid Term Deposit (CLTD) account etc. The funds released to GI shall not be parked in bank account of any other agency.

9. The GI will ensure the compliance of OM. No. F. No. 1/(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.

10. The organization is registered on NGO Darpan Portal and their Unique ID is TN/2017/0152414

11. This sanction order is subject to the Terms & Conditions as annexed .

  
Dr. Prabhat K Rai  
(Scientist - 'C')  
prabhatk.rai@gov.in

To,  
The Pay & Accounts Officer,  
Department of Science & Technology,  
New Delhi – 110 016.

Copy of information and necessary action to:

1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.
2. The Financial Advisor, Integrated Finance Division, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
3. The Internal Audit Wing, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016
4. Drawing and Disbursing Officer, DST, Cash Section. (two copies)
5. Dr. PRINCE WINSTON D, PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, Virudhunagar, Madurai, Tamilnadu - 625701
6. The Director/Registrar/Principal/Controller/Comptroller/Chief Executive Officer(CEO), KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, Virudhunagar, Madurai, Tamilnadu - 625701
7. Secretary, SERB, New Delhi ( for allocation of limits to implementing agency )
8. Head (NCSTC) DST
9. Sanction Folder (NCSTC)

  
Dr. Prabhat K Rai  
(Scientist - 'C')  
prabhatk.rai@gov.in



GOVERNMENT OF INDIA  
Ministry of Science & Technology  
Department of Science & Technology  
**CO/B/FP/G162/2021 (G)**  
**Terms & Conditions**

1. 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 (Vis-a-Vis Target Vs-Achievement) at the end of each financial year duly reflecting the interest earned / accrued on the grant 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.
2. 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.
3. 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.
4. The grant-in-aid being released is subject to the condition that:-
  - a) A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of 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 of the 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.
5. As per the GFR 2017 Rule 230 (8) the Grantee Institute should ensure that all the interests or other earnings against Grant-in-Aid or advances (other than reimbursement) released to any Grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances will not be allowed to be adjusted against future releases.
6. As per the GFR 2017 Rule 230 (17) "the Grantee Institute should agree to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India"
7. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](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. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.
9. 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.
10. 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 publication / media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
11. 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.
12. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.
13. Goods (Consumable/Equipment) available in GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
14. The Grantee Institute should follow Global Tendering Enquiry (GTE) conditions as per Department of Expenditure ID Note No:4/1/2021-PPD dated 10.09.2021.
15. If One time assistance or non-recurring grant as Grant-in-Aid for Rs. 10.00 lakhs to Rs. 50.00 lakhs, it should be included in the Annual Report of the Institute.
16. The Grantee Institute must ensure any other provisions of GFR-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) and guidelines/amendments issued from Govt. of India from time to time.



भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
CO/B/FP/G162/2021 (G)  
**निबंधन और शर्तें**

1. अनुदानग्राही संस्थान प्रत्येक वित्त वर्ष के अंत में इस परियोजना के अंतर्गत प्राप्त अनुदान पर अर्जित प्रोद्भूत ब्याज को विधिवत रूप से दर्शाते हुए अद्यतन प्रगति रिपोर्ट (लक्ष्य बनाम उपलब्धि) के साथ जीएफआर 2017 में विनिर्दिष्ट प्ररूप में वित्तीय वर्ष-वार उपयोग प्रमाण पत्र (यूसी) और व्यय का लेखापरीक्षित विवरण (एसई) विज्ञान और प्रौद्योगिकी विभाग को प्रस्तुत करेगा। यह परियोजना की समाप्ति की निर्धारित तारीख से एक वर्ष भीतर व्यय का अंतिम विवरण, उपयोग प्रमाण-पत्र और परियोजना समाप्ति रिपोर्ट प्रस्तुत करने की शर्त के भी अधधीन है।
2. अनुदानग्राही संस्थान को उपयोग प्रमाण-पत्र इस प्रभाग में भौतिक रूप में भेजने के साथ-साथ पीएफएमएस पोर्टल पर प्रविष्ट और अपलोड करना होगा। अनुवर्ती/अंतिम किस्त प्रभाग द्वारा यूसी की स्वीकृति की पुष्टि और पीएफएमएस में पूर्ववर्ती उपयोग प्रमाण-पत्र की प्रविष्टि के बाद ही जारी की जाएगी।
3. यदि अनुदान एक ही परियोजना के अंतर्गत उपस्कर (रों) की खरीद के लिए पृथक संस्वीकृति आदेश के माध्यम से पूंजी-शीर्ष के अंतर्गत जारी किया गया है तो जारी किया गया पूंजी-शीर्ष अनुदान के लिए पृथक एसई/यूसी प्रस्तुत करना होगा।
4. जारी किया जा रहा सहायता अनुदान निम्नलिखित शर्तों के अधधीन है-
  - क) उपर्युक्त परियोजना के लिए संस्वीकृत पूंजी आस्तियों की खरीद करते समय अनुदानग्राही संस्थान के उचित नियमों के तहत संस्थान/संगठन द्वारा सामान्य वित्तीय नियमावली 2017 के उपबंधों के अनुरूप पारदर्शी खरीद प्रक्रिया का अनुपालन किया जाए और अनुदान प्राप्ति पर तुरंत प्रभाव से अनुदानग्राही संगठन द्वारा इस आशय का प्रमाण-पत्र प्रस्तुत किया जाए।
  - ख) उपयोग प्रमाण-पत्र/ व्यय विवरण प्रस्तुत करते समय, संगठन को जीएफआर 2017 के उपबंधों के अनुसरण में उपस्कर/पूंजी आस्तियों की खरीद के संबंध में संबंधित दस्तावेज़-साक्ष्य प्रस्तुत करना सुनिश्चित करना होता है।
5. जीएफआर नियमावली 2017 के नियम 230 (8) के अनुसार अनुदानग्राही संस्थान को सुनिश्चित करना चाहिए कि किसी भी अनुदानग्राही संस्थान को जारी किए गए सहायता अनुदान या अग्रिम (प्रतिपूर्ति से भिन्न) पर प्राप्त समस्त प्रकार के ब्याज या अन्य आय को लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में अनिवार्य रूप से विप्रेषित किया जाए। ऐसे अग्रिमों को भविष्य में जारी की जाने वाली निधियों में समायोजित करने की अनुमति नहीं दी जाएगी।
6. जीएफआर नियमावली 2017 के नियम 230 (17) के अनुसार, "अनुदानग्राही संस्थान को भारत सरकार के निर्देशानुसार अपने नियंत्रणाधीन पदों या सेवाओं में अनुसूचित जाति या अनुसूचित जनजाति या ओबीसी के लिए आरक्षण रखने पर सहमत होना चाहिए।"
7. अनुदानग्राही संस्थान परियोजना का पृथक परीक्षित लेखा रखेगा और अनुदान की समस्त राशि बैंक खाते में सव्याज रखी जाएगी। वित्तीय वर्ष 2017-18 के दौरान और उसके बाद जारी अनुदान के लिए, अनुदान के लिए सभी प्रकार के ब्याज या अन्य आय ऐसे लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में गैर कर प्राप्ति पोर्टल (एनटीआरपी) अर्थात् [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in) के माध्यम से विप्रेषित की जाएगी, क्योंकि यह राशि भविष्य में जारी की जाने वाली राशि में समायोजित नहीं की जाएगी। अनुवर्ती अनुदान के निर्गम/ परियोजना खाते को बंद करने पर विचार किए जाने के लिए, व्यय विवरण/ उपयोग प्रमाण-पत्र के साथ इस आशय का प्रमाण पत्र प्रस्तुत करना होगा।
8. डीएसटी, अनुदान से सृजित परिसंपत्तियों पर एकमात्र सुरक्षित अधिकार रखता है। सरकारी अनुदानों से पूरी तरह से या पर्याप्त रूप से अर्जित संपत्ति (जीएफआर 2017 में निर्धारित प्रक्रिया के अनुसार अप्रचलित और अनुप्रयोज्य, अनुपयोगी घोषित अनुदानों से इतर), का निपटारा डीएसटी का पूर्व अनुमोदन प्राप्त किए बिना नहीं किया जाएगा।
9. जैसा कि सामान्य वित्तीय नियमावली 2017 के नियम 236 (1) के तहत निर्धारित किया गया है, अनुदानग्राही संगठन का लेखा स्वीकृति प्रदाता प्राधिकारी और लेखा परीक्षक (भारत के नियंत्रक एवं महालेखापरीक्षक और डीएसटी के प्रधान लेखा कार्यालय दोनों द्वारा आंतरिक लेखा परीक्षा) द्वारा निरीक्षण किए जाने, जब भी संगठन को ऐसा करने के लिए कहा जाता है, हेतु अभिगम्य होगा।
10. इस परियोजना अनुदान से प्राप्त तकनीकी सहायता/वित्तीय सहायता की उचित पावती को अनुदानग्राही संगठन द्वारा सभी प्रकाशनों/मिडिया प्रकाशनी में मोटे अक्षरों में और परियोजना के पूरा होने के दौरान और तदुपरांत उनकी वार्षिक रिपोर्टों के शुरुआती पैराग्राफों में अनिवार्य रूप से दिखाया किया जाना चाहिए।
11. बॉन्ड के नियमों और शर्तों का पालन करने में असफल होने पर जीएफआर 2017 के नियम 231 (2) के अनुसार पूरी राशि सव्याज वापस करनी होगी।
12. पीएफएमएस में ईएटी मॉड्यूल का उपयोग करना अनिवार्य है, ऐसा न करने पर अन्य कोई भी आगामी निधि जारी नहीं की जाएगी।
13. जीएफआर के नियम 149 के उपबंधों के अनुसार जीईएम पोर्टल पर उपलब्ध वस्तुओं (उपभोज्य वस्तु /उपस्कर) का अनिवार्यतया आर्न लाइन प्रापण जैम (जीईएम) ही के माध्यम से किया जाना है।
14. अनुदान ग्राही संस्थान को व्यय विभाग के आईडी नोट संख्या: 4/1/2021-पीपीडी दिनांक 10.09.2021 के अनुसार वैश्विक निविदाकरण जांच-पड़ताल (जीटीई) नियमों का पालन करना चाहिए।
15. यदि एकबारगी सहायता या गैर-आवर्ती अनुदान 10.00 लाख रुपये से 50.00 लाख रुपये के सहायता अनुदान का हो तो इसे संस्थान की वार्षिक रिपोर्ट में दर्ज किया जाना चाहिए।
16. अनुदान ग्राही संस्थान को जीएफआर-2017 (<https://doe.gov.in/order-circular/general-financial-rules2017-0>) के किसी भी अन्य उपबंध और समय-समय पर भारत सरकार द्वारा जारी दिशा-निर्देश/संशोधन का अनुपालन सुनिश्चित करना चाहिए।



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, [www.tnscst.nic.in](http://www.tnscst.nic.in)

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),  
Member Secretary  
Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To  
The Principal  
Kamaraj College of E&T  
K.Vellakulam-625 701  
Sir/Madam,

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Senejarajapani.M, Balaji.S, Hariharan G.S, Balakrishnan.S	CSE-668	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K.Keash, J. Kiruba, P. Karthickraja,	ECV-108	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco-friendly battery balancing kit for Electrical vehicle applications	M.Pravin	EEE-777	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech. Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0351	The Principal	Rs 7500/-
Total						Rs 45000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

3/3/23  
Member Secretary.

- Encl: a) Terms & Conditions (T&C)  
b) Format of Utilisation Certificate (UC)  
c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

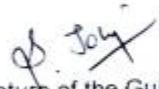
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI - 600 025

STUDENT PROJECT SCHEME 2022-2023  
UTILISATION CERTIFICATE

(TWO COPIES)

1. Name of the guide and address : S. JOTHI LAKSHMI,  
ASSISTANT PROFESSOR, CSE  
KAMARAJ COLLEGE OF ENGINEERING  
AND TECHNOLOGY, VIRUDHUNAGAR
2. Name of the student(s) : 1) SENBAGARAJAPANDI . M  
2) BALAJI . S 4) BALAKRISHNAN  
3) HARIHARAN G. S
3. Title of the project : MEALS ON WHEELS
4. Project code : CSE - 669

It is certified that a sum of Rs. 7500 (Rupees <sup>Seven thousand and</sup> <sub>five hundred</sub> )  
sanctioned by the Council for carrying out above mentioned student project has been  
utilized for the purpose for which it was sanctioned and sum of Rs. ....  
remaining unutilized is refunded.

  
Signature of the Guide

  
Signature of the HOD  
Head of the Department  
Department of Computer Science & Engg  
Kamaraj College of Engg. & Tech.  
Virudhunagar - 626 004.

  
Signature of the  
REGISTRAR / PRINCIPAL / DEAN  
with seal  
Dr. S. SENTHIL M.E., Ph.D.,  
KAMARAJ College of Engineering and Technology  
S.P.G. Chidambaram Regional Campus,  
S.P.G.C. Nagar, Virudhunagar - 625 701.  
(Near VIRUDHUNAGAR).



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, www.tanscst.nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),  
Member Secretary  
Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To  
The Principal  
Kamaraj College of E&T  
K.Vellakulam-625 701  
Sir/Madam,

*Submitted to Secretary*

*copy to Dean Research & IQAC*

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Senoagarajapani.M, Balaji.S, Hariharan G.S, Balakrishnan.S	CSE-669	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K.Akash, J.Kiruba, P.Karthickraja,	ECV-198	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr.R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco-friendly battery balancing kit for Electrical vehicle applications	M.Pravin	EEE-777	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech, Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0351	The Principal	Rs 7500/-
Total						Rs 45000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

*Dr. R. Srinivasan*  
3/3/23  
Member Secretary.

- Encl: a) Terms & Conditions (T&C)  
b) Format of Utilisation Certificate (UC)  
c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**  
DOTE CAMPUS, CHENNAI - 600 025

**STUDENT PROJECT SCHEME 2022-2023**  
**UTILIZATION CERTIFICATE**

Name of the Guide and address : Dr.P.Ganeshprabhu,  
Assistant Professor,  
Department of Civil Engineering,  
Kamaraj College of Engineering and Technology,  
Virudhunagar.

Name of the student(s) : Akash K, Kirubha J and Karthickraja P

Title of the Project : Study on Performance of Scrap Steel Slag As Partial  
Replacement of Fine Aggregate in Piezoelectric Cement  
Concrete Paver Block

Project code : ECV-198

It is certified that a sum of **Rs.7500** (Rupees Seven Thousand and Five hundred) sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs. **0.00/-** (Rupees zero only) remaining unutilized is refunded.

  
Signature of the Guide

  
Signature of the HOD

  
Signature of the Principal

with seal  
**Dr. S. SENTHIL, M.E., Ph.D.,**  
PRINCIPAL  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambara Nadar - C. Nagaraj Campus,  
S.P.G.C. Nagar, K. Veilakulam - 625 701.  
(Near VIRUDHUNAGAR).



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, [www.tnscst.nic.in](http://www.tnscst.nic.in)

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),  
Member Secretary  
Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To  
The Principal  
Kamaraj College of E&T  
K.Vellakulam-625 701  
Sir/Madam,

*Submitted to Secretary.*

*copy to Dean Research & IQAC*

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Seneagarajapandi.M, Balaji S, Hariharan G.S, Balakrishnan.S	CSE-668	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K. Akash, J. Kiruba, P. Karthickraja,	ECV-198	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco-friendly battery balancing kit for Electrical vehicle applications	M.Pravin	EEE-777	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech. Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0301	The Principal	Rs 7500/-
Total						Rs 45000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

*Dr. R. Srinivasan*  
3/3/23  
Member Secretary.

- Encl: a) Terms & Conditions (T&C)  
b) Format of Utilisation Certificate (UC)  
c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

# TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Dote Campus, Chennai – 600 025

## Student Project Scheme 2023 – 2024

### Utilization Certificate

- 1. Name of the Guide and address:** Dr.D.Prince Winston  
Professor & Head,  
Department of Electrical and Electronics  
Engineering,  
Kamaraj College of Engineering and  
Technology,  
Near Virudhunagar, Madurai – 625 701.
- 2. Name of the student:** M.Pravin
- 3. Title of the project:** DEVELOPMENT OF ECO-FRIENDLY  
BATTERY BALANCING KIT FOR ELECTRIC  
VEHICLES
- 4. Project Code:** EEE - 777

It is certified that a sum of **Rs.7500** (Seven Thousand and Five Hundred) sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned.



Signature of the Guide

**Dr. D. Prince Winston, M.E., Ph.D.,**  
HoD Department of EEE,  
Kamaraj College of Engg. & Tech. (Autonomous)  
K. Vellakulam - 625 701.



Signature of the HOD

**Dr. D. Prince Winston, M.E., Ph.D.,**  
HoD Department of EEE,  
Kamaraj College of Engg. & Tech. (Autonomous)  
K. Vellakulam - 625 701.



Signature of the Principal  
**Dr. S. SENTHIL, M.E., Ph.D.**

**PRINCIPAL (ic)**  
**KAMARAJ College of Engineering and Technology**  
(Autonomous)  
S.P.G. Chidambara Nadar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellakulam - 625 701.  
(Near VIRUDHUNAGAR).



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TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, [www.tanscst.nic.in](http://www.tanscst.nic.in)

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),

Member Secretary

Lr.No.TNSCST/SPS/BS/2022-2023

03.03.2023

To

The Principal

Kamaraj College of E&T

K.Vellakulam-625 701

Sir/Madam,

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant release- reg.

*Submitted to Secretary.*

*copy to Dean Research & IQAC*

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Ms.Jothi Lakshmi.S, Assistant Professor, Department of CSE, Kamaraj College of E&T K.Vellakulam-625 701	Meals on Wheels	Senogajarajapandi.M, Balaji.S, Hariharan G.S, Balakrishnan.S	CSE-669	The Principal	Rs 7500/-
2.	Dr.P.Ganesh Prabhu, Assistant Professor, Department of Civil Engg, Kamaraj College of E&T K.Vellakulam-625 701	Study on Performance of Scrap Steel Slag as Partial replacement of Fine Aggregate in Piezoelectric Cement Concrete Paver Block	K. Akash, J. Kiruba, P. Karthickraja,	ECV-198	The Principal	Rs 7500/-
3.	Dr.R.Baskaran, Associate Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Development of high performance high voltage insulator for power transmission line from blends of EPDM rubber/ethylene vinyl acetate copolymer containing silica	P.Raakesh Kumar, D.Muhammed Aashik, D.Vignesh,	CHE-079	The Principal	Rs 7500/-
4.	Dr.R.Shyam Kumar, Professor, Department of Biotechnology, Kamaraj College of E&T K.Vellakulam-625 701	Boiled Rice water and protein-based bio-film development by Injection Moulding for Packaging	Sumana . R,	AS-354	The Principal	Rs 7500/-
5.	Dr. D. Prince Winston, Professor, Dept. of EEE, Kamaraj College of E&T K.Vellakulam-625 701	Development of Eco-friendly battery balancing kit for Electrical vehicle applications	M.Pravin	EEE-777	The Principal	Rs 7500/-
6.	Mr.N.R.Madhan, Assistant Professor, Department of Mech. Engg, Kamaraj College of E&T K.Vellakulam-625 701	Energy conservation in industries by end effector active ball joint mechanism	R. Praveen Raj, C. Aravindan, K.B. Vignesh,	EME-0351	The Principal	Rs 7500/-
Total						Rs 45000/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
3/3/23  
Member Secretary.

Encl: a) Terms & Conditions (T&C)

b) Format of Utilisation Certificate (UC)

c) Cheque for Rs.45000/- Cheque No:574857 dt.03.03.2023

TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

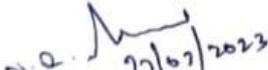
Dote Campus, Chennai – 600 025

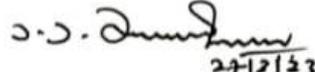
Students Project Scheme 2022 – 2023

Utilization Certificate

1. Name of the Guide and address : Mr. N. R. Madhan.  
Assistant Professor,  
Department of Mechanical Engineering,  
Kamaraj College of Engineering and  
Technology, Near Virudhunagar,  
Madurai – 625 701.
2. Name of the student(s) : R. Praveen raj,  
K. B. Vignesh,  
C. Aravindan.
3. Title of the Project : ENERGY CONSERVATION IN  
INDUSTRIES BY END EFFECTOR ACTIVE  
BALL JOINT MECHANISM
4. Project Code : EME-0351

It is certified that a sum of Rs. 7,500/- (Rupees Seven Thousand and Five Hundred) Sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs. 0/- remaining unutilized is refunded.

  
27/07/2023  
Signature of Guide

  
27/7/23  
Signature of HOD

  
Signature of the  
PRINCIPAL  
with seal

Dr. S. SENTHIL, M.E., Ph.D.,  
PRINCIPAL (i/c)  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambara Nadar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellakulam - 626 701.  
(Near VIRUDHUNAGAR).

[N. R. MADHAN]