



**(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**

***3.2.4- Number of departments having research projects funded by Government and Non-Government agencies during the year***

<b>Number of departments having research projects funded by Government and Non-Government agencies during the year</b>						
<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.S.Mariaamalraj	Biotechnology	IEI (India)	Non-Govt	0.6	Sep-19	6 Months
Dr.Anant Achary	Biotechnology	TNSCST	Government	0.075	Mar-20	3 Months
Dr.S.Mariaamalraj	Biotechnology	TNSCST	Government	0.075	Mar-20	3 Months
Dr.S.Karthikumar Dr.Anant Achary	Biotechnology	IEI (India)	Non-Govt	0.5	Jun-20	6 Months
Dr. D.Prince Winston	EEE	AICTE -RPS	Government	1.5	Nov-19	3 Years
Dr. J.Jeslin Drusila Nesamalar	EEE	DST- SERB	Government	28.644	Jan-20	2 Years
Mrs. C. Naga Devi	EEE	TNSCST	Government	0.07	Mar-20	3 Months
Dr. B.Guru Karthick Babu	EEE	TNSCST	Government	0.075	Mar-20	3 Months
Dr. S.Kalyani Dr. B.Guru Karthick Babu	EEE	IEI (India)	Non-Govt	0.16	Jun-20	3 Months

# The Institution of Engineers (India)

AN ISO 9001 : 2015 CERTIFIED ORGANISATION  
( ESTABLISHED 1920, INCORPORATED BY ROYAL CHARTER 1935 )  
8 GOKHALE ROAD, KOLKATA - 700 020



*"99 Years of Relentless Journey towards  
Engineering Advancement for Nation-building"*

Ref: R.5/2/PG/2019-20/PG2020007

Date: 23 September 2019

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

Dear Sir/Madam,

Sub: Intimation of Approval for R&D Project entitled: *"Design and Fabrication of Foam Separation Column to Remove Chromium Heavy Metal from Leather Tannery Effluent"*

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:

Project ID:	PG2020007	Category:	PG	Financial Year:	2019-20
Guide(s):	Dr S Mariaamalraj	Applicant(s):	A Brindha Jothi		
College / Institute / University:	Kamaraj College of Engineering and Technology	Total Grant Sanctioned:	₹60,000/-	Number of Instalment(s):	2

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) hardcopies of the Utilization Certificates in duplicate, (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 N Sengupta  
Director (Technical)

For Secretary & Director General

Encl: as stated.

cc: Guide(s) – Dr S Mariaamalraj



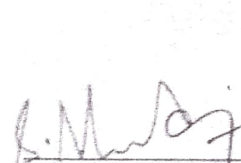
The Institution of Engineers (India)  
Technical Department  
R&D Grant-in-aid Scheme

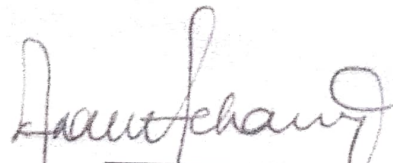
**UTILISATION CERTIFICATE**  
**(FROM 01.04.2020 to 12.10.2020)**

1. Project I.D : PG2020007
2. Title of the Project : Design and Fabrication of Foam Separation Column to Remove Chromium Heavy Metal from Leather Tannery Effluent.
3. Name of the Institution : Kamaraj College of Engineering and Technology
4. Name of the Project Guide : Dr.S.Mariaamalraj

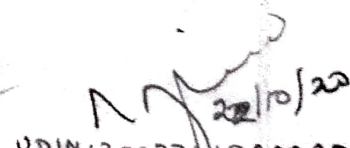
**UTILISATION CERTIFICATE**

Certified that out of Rs.50,000/- of grants-in-aid sanctioned during the year 2019 – 2020 in Favour of The Principal, Kamaraj College of Engineering & Technology under IET letter No. R.5/2/PG/2019-20/PG2020007 dated 23.09.2019. A sum of Rs.63,136/- has been utilized for the purpose of research on the project titled “*Design and Fabrication of Foam Separation Column to Remove Chromium Heavy Metal from Leather Tannery Effluent*” for which it was sanctioned during the year 2020-21 and that the balance of Rs.10,000/- is receivable as 2<sup>nd</sup> instalment as per your email dated 04.10.2019.

  
Signature of Guide  
with date & seal

  
Signature of Principal  
with date & seal

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

  
UDIN: 200274698AAEA9381  
Accounts Officer of the  
Institute with date & seal  
R. RAJKUMAR  
Chartered Accountant  
Membership No: 27469





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, Telefax : 044-22301552 [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/AR/2019-2020

*Seen*

18.03.2020

To  
 The Principal  
 Kamaraj College of Engineering and Technology  
 K. Vellakulam - 625 701

*Submitted to  
 The Secretary*

*for information*

Sir/Madam,

*Done  
 21/03/2020*

*Seen  
 21/3/20  
 Suitable action  
 may be taken by  
 Principal.*

Sub: TNSCST – Student Project Scheme – 2019-2020 – 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 in Time.

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-no.5&6) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
 18/3/20

Member Secretary.

*[Signature]*  
 18/3/20

- Encl: a) Terms & Conditions (T&C)  
 b) Format of Utilisation Certificate (UC)  
 c) Cheque for Rs.29500/- No: 852966 dt.18.03.2020

Copy to: Individual Guides

137. Kamaraj College of Engineering and Technology (4) – 29,500/-


Dr. S. Mariaamalraj Assistant Professor Dept. of Biotechnology Kamaraj College of Engineering and Technology Virudhunagar - 625 701	Design and Fabrication of Domestic Wastewater Recycler and Herbal based Drinking Water Purifier	U. Kavya G. Ramya Y. Swathi	ECV- 060	The Principal Kamaraj College of Engineering and Technology Virudhunagar - 625 701	7500/-
Mrs. C. Naga Devi Associate Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Graphene Battery (Future Battery)	A. Ameer Raja M. Praveen Raj M. Karthikeyan P. Vignesh	EEE- 011	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7000/-
Mr. B. Gurukarthik Babu Assistant Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Ecofriendly based water generation technique to harvest palatable water from green source	R. Vignesh A. Mohammed Nasrulla B. Ramkumar	ES-051	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7500/-
<b>Dr. Anant Achary</b> Professor Dept. of Biotechnology Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	Cytotoxic effect of fucoxanthin and phlorotannin isolated from sargassum tenerrimum against MCF-7 breast cancer cell line	A. Karthick	MS-017	The Principal Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	7500/-

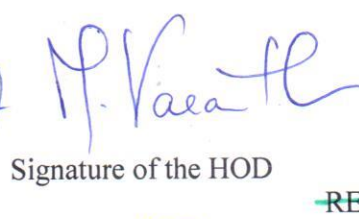
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI - 600 025

STUDENT PROJECT SCHEME  
2019-2020 UTILISATION  
CERTIFICATE

1. Name of the guide and address : **Dr. Anant Achary**  
Professor  
Department of Biotechnology  
Kamaraj College of Engineering and  
Technology  
S.P.G.C Nagar, K.Vellakulam -625701  
Near Virudhunagar, Madurai District
2. Name of the student(s) : A. Karthick
3. Title of the project : Cytotoxic Effect of Fucoxanthin and  
Phlorotannins isolated from *Sargassum  
tenerrimum* against MCF-7  
breast cancer cell line
4. Project code : MS-017

It is certified that a sum of Rs7500. (Rupees Seven Thousand Five Hundred Only) 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

  
Signature of the

REGISTRAR/PRINCIPAL/D  
EAN  
With SEAL

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

PRINCIPAL  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambaram Engineering College General Campus,  
S.P.C.C. Nagar, K. Vellakulam - 625 701,  
Near Virudhunagar, Madurai District.



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்  
**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**  
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Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA),  
 Member Secretary

Lr.No.TNSCST/SPS/AR/2019-2020

*Seen*

18.03.2020

To  
 The Principal  
 Kamaraj College of Engineering and Technology  
 K. Vellakulam - 625 701

*Submitted to  
 The Secretary*

*for information*

Sir/Madam,

*Done  
 21/03/2020*

*Seen  
 21/3/20  
 Suitable action  
 may be taken by  
 Principal.*

Sub: TNSCST – Student Project Scheme – 2019-2020 – 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 in Time.

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-no.5&6) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
 18/3/20

Member Secretary.

*[Signature]*  
 18/3/20

- Encl: a) Terms & Conditions (T&C)  
 b) Format of Utilisation Certificate (UC)  
 c) Cheque for Rs.29500/- No: 852966 dt.18.03.2020

Copy to: Individual Guides



137. Kamaraj College of Engineering and Technology (4) – 29,500/-

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Mrs. C. Naga Devi Associate Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Graphene Battery (Future Battery)	A. Ameer Raja M. Praveen Raj M. Karthikeyan P. Vignesh	EEE- 011	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7000/-
Mr. B. Gurukarthik Babu Assistant Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Ecofriendly based water generation technique to harvest palatable water from green source	R. Vignesh A. Mohammed Nasrulla B. Ramkumar	ES-051	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7500/-
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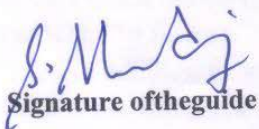
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI - 600 025

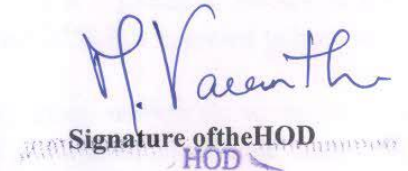
STUDENT PROJECT SCHEME 2019-2020  
UTILISATION CERTIFICATE


(TWO COPIES)

1. Name of the guide and address : **Dr. S. Mariaamalraj**, Assistant Professor,  
Department of Biotechnology,  
Kamaraj College of Engineering and  
Technology, K. Vellakulam, Madurai - 625701
2. Name of the student(s) : **U.KAVYA, G.RAMYA, Y.SWATHI**
3. Title of the project : **Design and Fabrication of Domestic  
Wastewater Recycler and Herbal Based  
Drinking Water Purifier**
4. Project code : **ECV060**

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. Nil** remaining unutilized is refunded.

  
Signature of the guide

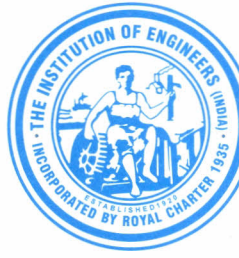
  
Signature of the HOD  
HOD  
DEPT. OF BIOTECHNOLOGY  
Kamaraj College of Engineering & Technology  
VIRUDHUNAGAR.

  
Signature of the  
REGISTRAR/PRINCIPAL  
/DEAN  
With SEAL  
PRINCIPAL  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambara Nedar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellakulam - 625 701,  
Near Virudhunagar, Madurai District.



# 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.5/2/PG/2019-20/PG2020012

Date: 11 June 2020

The Principal  
Kamaraj College of Engineering and Technology  
S P G Chidambara Nadar, C Nagammal Campus, Vellakulam  
Madurai District 625701 Tamil Nadu

Dear Sir/Madam,

**Sub: Intimation of Approval for R&D Project entitled: "Enzymatic Synthesis of Feruloyl Lipid as an Antioxidant Blend to Improve The Oxidative Stability of Biodiesel"**

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:

Project ID:	PG2020012	Category:	PG	Financial Year:	2019-20
Guide(s):	1. Dr S Karthikumar 2. Prof Anant Achary	Applicant(s):	C V Jemima Romola		
College / Institute / University:	Kamaraj College of Engineering and Technology	Total Grant Sanctioned:	₹50,000/-	Number of Instalment(s):	1

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, (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 N Sengupta)  
Director (Technical)  
For Secretary & Director General

Encl: as stated.

cc: Guide(s) – 1. Dr S Karthikumar  
2. Prof Anant Achary



# The Institution of Engineers (India)

Technical Department  
R&D Grant-in-aid Scheme

## UTILIZATION CERTIFICATE

(Two copies duly signed & sealed by all concern)

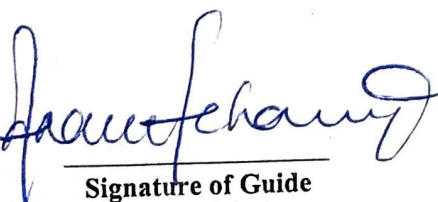

[THE FINANCIAL YEAR 2020-2021 (ENDING 31<sup>ST</sup> MARCH 2021)  
FOR THE PERIOD FROM 03/07/2020 TO 18/12/2020]

1. Project I.D : PG2020012
2. Title of the Project : Enzymatic Synthesis of feruloyl lipid as an antioxidant blend  
to improve the oxidative stability of biodiesel.
3. Name of the Institution : Kamaraj College of Engineering and Technology
4. Name of the Project Guide (PG) : 1. Dr.S.Karthikumar, 2. Prof. Anant Achary


## UTILIZATION CERTIFICATE

Certified that out of 50,000/- (Fifty Thousand only) of grants-in-aid sanctioned during the year 2020 in favour of The Principal, Kamaraj College of Engineering and Technology under IEI's letter No. R.5/2/PG/2019-20/PG2020012, dated 11/06/2020 and ₹ 50,000/-. A Sum of ₹50,000/- (Fifty Thousand only) has been utilized for the purpose of Completion of the Project for which it was sanctioned and that the balance of ₹ 0.00 remaining unutilized at the end of completion has been returned to IEI (vide Cheque / DD No.   dated).

1.   
20/12/20

2.    
Signature of Guide with date & seal  
Signature of Principal with date & seal  
PRINCIPAL

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, Madurai District.

  
Accounts Officer of the  
Institute with date & seal

Accounts Officer  
Kamaraj College of Engineering and Technology,  
S.P.G. Chidambara Nadar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellakulam - 625 701,  
Near Virudhunagar, Madurai District.

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**

Nelson Mandela Marg, Vasant Kunj,  
New Delhi-110070

**RPS - Sanction Letter**

**File No. 8-218/RIFD/RPS (POLICY-1)/2018-19**

**Date: 22 November 2019**

**The Drawing and Disbursing Officer**

All India Council for Technical Education  
Nelson Mandela Marg,  
Vasant Kunj, New Delhi-110070,

**Sub: Release of a sum of Rs.147750/- being the 1<sup>st</sup> installment of the total grant of Rs.150000/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2019-20.**

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of **Rs. 147750/- (Rupees One Lakh FourtySeven Thousand Seven Hundred Fifty Only)** as 1<sup>st</sup> installment out of a total approved grant-in-aid of **Rs.150000/-** for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:-

I.	Name and address of the Beneficiary Institution (University / College / Institution)	:	<b>REGISTRAR / DIRECTOR / PRINCIPAL, KAMARAJ COLLEGE OF ENGINEERING &amp; TECHNOLOGY, S.P.G.C.NAGAR POST BOX 12 K. VELLAKULAM, VIRUDHUNAGAR TAMIL NADU -626001</b>
II.	Principal Investigator's Name & Dept./Course	:	<b>Dr. PRINCE WINSTON D Electrical Engineering</b>
III.	Grant-in-aid Sanctioned	:	<b>Rs.150000/- (Rs.127500/- for non-recurring and Rs.22500/- for recurring expenditure)</b>
IV.	<b>Amount to be Released during the year 2019-20 (as 1<sup>st</sup> installment)</b>	:	<b>Rs.147750/- (Rs.127500/- Full amount of non-recurring &amp; Rs.20250/-90 % of recurring sanctioned)</b>
V.	Project Duration	:	<b>3 Years</b>
VI.	Title of the Project	:	<b>Improvement of Power Generation in a 20kW Solar PV Power Plant through Bypass Diode Scanning Algorithm and Modified Couple Matching Algorithm</b>

**I. Release of funds:**

1. The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY, S.P.G.C.NAGAR POST BOX 12 K. VELLAKULAM, VIRUDHUNAGAR TAMIL NADU -626001 through **RTGS/PMFS**.
2. The sanctioned grant-in-aid is debitable to the **Major Head "601.12.a (RPS Plan)" Gen.** and is valid for payment during the financial year 2019-20.
3. The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
4. The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

**II. Maintenance of account by the Institute/PI:**

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

**Advisor (RIFD), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070**

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

Institute PAN No.	Bank Name	Bank Branch	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAATK14 31B	TAMILNAD MERCANTIL E BANK LTD.	Virudhunagar	Madurai Road Virudhunagar	Kamaraj College Of Engineering And Technology	Saving Account	004100050147438	TMBL0000 04

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

### III. General Instructions:

1. It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.
2. The duration of Project is 03 years and the **date of release of the grant by AICTE shall be taken as the date of commencement of the project.** The **Principal/Director/Registrar** shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take-up the project work **within 6 months** of the receipt of the grant, approval shall *ipso facto* lapse **and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it.** The grant has to be refunded to AICTE, by way of a demand draft in favor of 'Member Secretary, AICTE payable at New Delhi.
3. As AICTE needs adequate time for depositing the demand draft in the bank, the same be immediately dispatched to avoid any lapse of the validity period.
4. The Institute may constitute a Project Evaluation Committee (PEC) The composition of the PEC shall be as under:
  - i. Principal/Director of the institution (Chairperson)
  - ii. Two HODs from institute (Members)
  - iii. In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
  - iv. Coordinator of the project (Member Secretary)
5. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.
6. Similarly, the recurring grant shall be used for the items sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference **within the country**, the travel expenses may be met from the recurring grant.
7. No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.
8. The institute/University shall not charge any overheads on this Project and will provide all the administrative support **and timely release of grant to PI** for completion of the Project.

9. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. **The revised proposal should be within the total grant sanctioned and duly supported with reasons and recommendations of the Project Evaluation Committee.**
10. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
11. Each project sanctioned by AICTE is assigned a specific Reference Number which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.
12. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

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

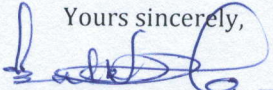
##### A. Documents to be submitted within one month of completion of each financial year:

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

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

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

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

Yours sincerely,  
  
(Dileep N. Malkhede)  
Advisor (RIFD)

1 2 DEC 2019


:: 4 ::

## Approved List of Items under Non-recurring grant:

S.No.	Approved Items (As per proposal)	Amount recommended
A.	<b>Non-recurring (equipments)</b>	
i)	Matrix Switching Circuit	
ii)	Pyranometer with data logger	
iii)	DC Energy meters	
iv)	Microcontroller	
v)	Battery Based Current Source Converter	
vi)	MPPT Converter for Solar PV	
B.	<b>Recurring (for contingencies &amp; consumables only)</b>	
		Rs. 127500/-
		Rs. 22500/-
	<b>Grand Total (A) + (B)</b>	<b>Rs. 150000/-</b>

Copy forwarded for information and necessary action to:

- REGISTRAR / DIRECTOR / PRINCIPAL,  
KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY,  
S.P.G.C.NAGAR POST BOX 12 K. VELLAKULAM,  
VIRUDHUNAGAR TAMIL NADU -626001
- NAME OF PRINCIPAL INVESTIGATOR,  
**Dr. PRINCE WINSTON D,**  
KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY,  
S.P.G.C.NAGAR POST BOX 12 K. VELLAKULAM,  
VIRUDHUNAGAR TAMIL NADU -626001
- OFFICE OF DIRECTOR GENERAL OF AUDIT  
GENERAL REVENUES, AGCR BUILDING  
I.P. ESTATE, NEW DELHI-110002.
- GUARD FILE

  
(Dileep N. Malkhede)  
Advisor (RIFD)

12 DEC 2019



**Research Promotion Scheme**  
**FORMAT FOR STATEMENT OF EXPENDITURE FROM**  
**10/01/2020 to 31/03/2020**

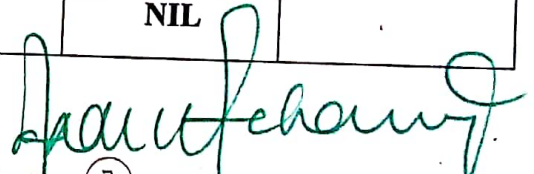
AICTE File No. : 8-218/RIFD/RPS(Policy-1)/2018-19, dt. 22.11.2019

Title of the RPS Project : Improvement of Power Generation in a 20KW Solar PV Power Plant through Bypass Diode Scanning Algorithm and modified Couple Matching Algorithm.

Name of the P.I. : Dr.D.Prince Winston, Professor / Department of Electrical and Electronics Engineering

Sanction Order No. & Date	Grant Sanctioned	Details of expenditure Incurred Item wise	Amount Rs. (In each head)
8-218/RIFD/RPS (POLICY-1)/2018-19 Date:22-11-2019	1,27,500/-		NIL
			NIL
			NIL
			NIL

(1) \_\_\_\_\_  
Signature of PI with Seal

(2)   
 ⑦ **PRINCIPAL**  
 Name and Signature of Head of Institution with Seal  
 (Autonomous)  
 Kamalajothi College of Engineering and Technology  
 Chidambara Nadar - C Nagammal Campus,  
 P.O.C. Nagar, K. Vellakulam - 625 701,  
 Near Virudhunagar, Madurai District.

(3) \_\_\_\_\_  
Signature (with Seal) of the Finance Officer/  
Auditor/Accounts Officer  
(If it is Govt./Govt. Aided Institute)

(4) Signature of Chartered Accountant:  
 Name of Chartered Accountant:  
 Membership No: **R. RAJKUMAR**  
 Rubberstamp: **Chartered Accountant**  
 Full Address of CA: **Membership No: 27469**  
 UDIN: 20027469AAAA CM6176

Note:-If it is more than one page, each page must be signed & Stamped in all annexure



**FORMAT**  
**For**  
**AUDITED UTILISATION CERTIFICATE**  
**(Period from 10/01/2020 to 31/03/2020)**

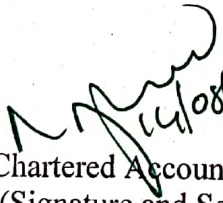
Certified that out of Rs.1,47,750/- of Grant- in-aid sanctioned during the year 2019-20 Letter No.8-218/RIFD/RPS (POLI CY-1)/2018-19, Rs.NIL has been utilized **for the purpose of equipments (non recurring)** For which it was sanctioned and the balance of Rs.1,47,750/- remaining unutilized at the end of the year, in addition to the amount of Rs.- on account of interest accrued on grant, will be adjusted towards the Grants – in – aid payable during the next year i.e.,2020-2021 as per the details attached.

Certified that the grant has been utilized as per laid down terms and conditions for which it was sanctioned.

Finance Officer  
(Signature and Seal)

  
Registrar/Principal/Director  
(Signature and Seal)  
⑧ **PRINCIPAL**

Dated:

  
Chartered Accountant  
(Signature and Seal)

**KAMARAJ College of Engineering and Technology**  
(Autonomous)  
P.G. Chidambaram Nedar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Valakulam - 625 701,  
Near Virudhunagar, Madurai District.

**R. RAJKUMAR**  
Chartered Accountant  
Membership No: 27469

UDIN: 20027469 AAAA CM6176



**Research Promotion Scheme**  
**FORMAT FOR STATEMENT OF EXPENDITURE**

Period from 01/04/2020 to 31/03/2021

AICTE File No. : 8-218/RIFD/RPS(Policy-1)/2018-19, dt. 22.11.2019  
 Title of the RPS Project : Improvement of Power Generation in a 20 KW Solar PV Power Plant through Bypass Diode Scanning Algorithm and modified Couple Matching Algorithm.  
 Name of the P.I. : Dr.D.Prince Winston, Professor / Department of Electrical and Electronics Engineering

Sanction Order No. & Date	Grant Sanctioned	Details of expenditure Incurred Item wise	Amount Rs.	Amount Rs. (In each head)
8-218/RIFD/RPS (POLI CY-1)/2018-19 Date:22-11-2019	1,50,000/-	<b>By Equipment Purchase</b>		
		Microcontroller	18,246.40	1,27,393.65
		Matrix Switching Circuit	21,040.00	
		Battery Based Current Source Converter	60,344.25	
		MPPT Converter for Solar PV	2,070.00	
		DC Energy meters	5,397.00	
		Pyranometer with data logger	20,296.00	
		<b>By Consumable Purchase</b>	<b>2,230.00</b>	
		<b>Total</b>	<b>1,29,623.65</b>	<b>1,29,623.65</b>

(1)   
 Signature of PI  
**Dr. D. Prince Winston, M.E., Ph.D.,**  
 HoD, Department of EEE,  
 Kamaraj College of Engg. & Tech. (Autonomous)  
 K. Vellakulam - 625 701.

(3) \_\_\_\_\_  
 Signature (with Seal) of the Finance Officer/  
 Auditor/Accounts Officer  
 (If it is Govt./Govt. Aided Institute) or  
 \_\_\_\_\_  
 Date:



(2)   
 Name and Signature of  
 Head of Institution with Seal  
**KAMARAJ College of Engineering and Tech.**  
 (Autonomous)  
 S.P.G. Chidambara Nadar - C. Nagammal Campus,  
 S.P.G.C. Nagar, K. Vellakulam - 625 701,  
 Near Viruchunagar, Madurai District.

(4) Signature of Chartered Accountant:  
 Name of Chartered Accountant: **R. RAJKUMAR**  
 Membership No: **27469**  
 Rubberstamp: **UDIN: 2102769 AAAAAA**  
 Full Address of CA: **R. RAJKUMAR**  
 Chartered Accountant  
 Membership No: **27469**


Note:-If it is more than one page, each page must be signed & Stamped in all annexure.

**FORMAT**  
**For**  
**AUDITED UTILISATION CERTIFICATE**  
**Period from 01/04/2020 to 31/03/2021**

Certified that out of Rs.1,47,750/- of Grant- in-aid sanctioned during the year 2020-21 Letter No. 8-218/RIFD/RPS (POLI CY-1)/2018-19, Rs.1,27,393.65 has been utilized for the purpose of equipments (non recurring) For which it was sanctioned and the balance of Rs.106.35 remaining unutilized at the end of the year, in addition to the amount of Rs. 3,225/- on account of interest accrued on grant, will be adjusted towards the Grants – in – aid payable during the next year i.e., 2021-2022 as per the details attached.

Certified that the grant has been utilized as per laid down terms and conditions for which it was sanctioned.

Finance Officer  
(Signature and Seal)

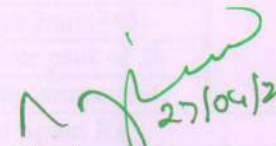
  
Registrar/Principal/Director  
(Signature and Seal)

**PRINCIPAL**

**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 Viruchunagar, Madurai District**

Dated:

  
27/04/20  
Chartered Accountant  
(Signature and Seal)

UDIN: 21027469 AAAA DU/562

**R. RAJKUMAR**  
Chartered Accountant  
Membership No: 27469



FILE NO. SRG/2019/001946  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
 (A statutory body of the Department of Science & Technology, Government of India)  
 5 & 5A, Lower Ground Floor  
 Vasant Square Mall  
 Plot No. A, Community Centre  
 Sector-B, Pocket-5, Vasant Kunj  
 New Delhi-110070

Dated: 20-Jan-2020

**ORDER**

Subject: Financial Sanction of the research project titled "**Optimal Design and Development of Machine Learning Model for Remote Monitoring and Control of Hybrid Microgrid in Educational Institutions using Smart Sensor Network and IoT**" under the guidance of Dr. **JESLIN DRUSILANESAMALAR J**, ELECTRICAL AND ELECTRONICS, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, Kamaraj college of engineering and technology, s.p.g.chidambara nadar- c.nagammal campus, s.p.g.c.nagar, post box no. 12, virudhunagar, Virudhunagar, Tamil nadu-626001 - Release of 1st grant.

Sanction of **Science and Engineering Research Board (SERB)** is hereby accorded to the above mentioned project at a total cost of **Rs. 2864400/- (Rs. Twenty Eight Lakh Sixty Four Thousand Four Hundred Only)** with break-up of **Rs. 1615000/- under Capital (Non-recurring) head and Rs.1249400/- under General (Recurring) head** for a duration of 24 months. The items of expenditure for which the total allocation of **Rs. 2864400/-** has been approved are given below:

S. No	Head	Total (in Rs.)
<b>A</b>	<b>Non-recurring</b>	
1	Equipment -> Power Sever Module -> Hardware and Software Integration -> Solar PV Module -> DC Multi function Smart Meter -> DC Bus & Switching arrangement	1615000
A'	<i>Total (Non-Recurring)</i>	<b>1615000</b>
<b>B</b>	<b>Recurring Items</b>	
1	Recurring - I : (Manpower) Recurring - II : ( Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	744000 220000 25000
2	Recurring - IV : (Overhead Charges)	260400
B'	<i>Total (Recurring)</i>	<b>1249400</b>
<b>C</b>	<b>Total cost of the project (A' + B')</b>	<b>2864400</b>

2. Sanction of the **SERB** is also accorded to the payment of **Rs. 1615000/-** (Rupees Sixteen Lakh Fifteen Thousand only) under 'Grants for creation of capital assets' and **Rs. 637200/-** (Rupees Six Lakh Thirty Seven Thousand Two Hundred only) under 'Grants-in-aid General' to **PRINCIPAL, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, S.P.G.CHIDAMBARA NADAR- C.NAGAMMAL CAMPUS, S.P.G.C.NAGAR, Post Box No. 12, VIRUDHUNAGAR** being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to **Fund for Science & Engineering Research (FSER)**  
**This release is being made under Start-up Research Grant. (EC Engineering Sciences)**

4. The Sanction has been issued to **KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, S.P.G.CHIDAMBARA NADAR- C.NAGAMMAL CAMPUS, S.P.G.C.NAGAR, Post Box No. 12, VIRUDHUNAGAR** with the approval of the competent authority under delegated powers on **17 December, 2019** and vide Diary No. **SERB/F/7839/2019-2020** dated **19 December, 2019**

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

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

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

11. The release amount of Rs. 2252200/- (Rupees Twenty Two Lakh Fifty Two Thousand Two Hundred only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

<b>PFMS Unique Code</b>	<b>KCET</b>
<b>Account Name</b>	<b>PRINCIPAL, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY</b>
<b>Account Number</b>	<b>6614892310</b>
<b>Bank Name &amp; Branch</b>	<b>INDIAN BANK VIRUDHUNAGAR, Post Box No.21, 176, Ramamoorthy Road, Virudhunagar.</b>
<b>IFSC/RTGS Code</b>	<b>IDIB000V025</b>
<b>Email id of A/C Holder</b>	<b>mail@kamarajengg.edu.in</b>
<b>Email id of PI</b>	<b>jeslindrusila@gmail.com</b>

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. SRG/2019/001946 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

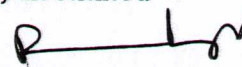
15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project

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

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

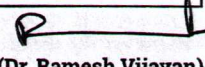
19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

  
(Dr. Ramesh Vijayan)  
SCIENTIST-C  
drvramesh@serb.gov.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB, New Delhi.
3.	File Copy
4.	<b>Dr. JESLIN DRUSILANESAMALAR J</b> <b>ELECTRICAL AND ELECTRONICS</b> <b>KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, Kamaraj college of engineering and technology, s.p.g.chidambara nadar- c.nagammal campus, s.p.g.c.nagar, post box no. 12, virudhunagar, Virudhunagar, Tamil nadu-626001</b> <b>Email: jeslindrusila@gmail.com</b> <b>Mobile: 919994271727</b> (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a> .)
5.	<b>PRINCIPAL,</b> <b>KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, S.P.G.CHIDAMBARA NADAR- C.NAGAMMAL CAMPUS, S.P.G.C.NAGAR, Post Box No. 12, VIRUDHUNAGAR</b>  (Receipt of Grant may be intimated by name to the undersigned)

  
(Dr. Ramesh Vijayan)  
SCIENTIST-C  
drvramesh@serb.gov.in

**GFR 12 - A**  
**[(See Rule 238 (1))]**  
**UTILIZATION CERTIFICATE (UC) FOR THE YEAR 2019-20**  
**In respect of NON-RECURRING**  
**as on 31.03.2020 to be submitted to SERB**  
**Is the UC Provisional**  
*(To be given separately for each financial year ending on 31st March)*

1. Name of the grant receiving Organization : KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY,
2. Name of Principal Investigator(PI): Dr. J. JESLIN DRUSILA NESAMALAR
3. SERB Sanction order no. & date: SRG/2019/001946, Dated 20-01-2020
4. Title of the Project: Optimal Design and Development of Machine Learning Model for Remote Monitoring and Control of Hybrid Microgrid in Educational Institutions using Smart Sensor Network and IoT
5. Name of the SERB Scheme : Start-up Research Grant (SRG)
6. Whether recurring or non-recurring grants : Non - Recurring
7. Grants position at the beginning of the Financial year (Grants released by SERB)

- (iv) Cash In Hand/Bank /Carry forward from previous financial year (2018-19) : Nil
- (v) Others, If any : Nil.
- (vi) **Total** : Nil

8. Details of grants received, expenditure incurred and closing balances:(Actuals)

Unspent Balance of Grants received previous years [figure as at Sl. No. 7(iii)]	Interest Earned thereon	Interest deposited back to the SERB	Grants received during the year (2019-20)			Total Available funds (1+2-3+4)	Expenditure incurred	Closing Balances (5-6)
			Sanction No. (i)	Date (ii)	Amount (iii)			
1	2	3	4			5	6	7
Nil	Nil	Nil	SRG/2019/00194, Dated 20-01-2020  (RTGS/NEFT UTR/Transaction no.:000075649355 dated 27 January, 2020.)	27.01.2020	Rs.16,15,000/-	Rs.16,15,000/-	Nil	Rs. 16,15,000/-

Component wise utilization of grants:

Grants-in-aid- General	Grant-in-aid-creation for capital assets	Total
Equipment	Nil	Nil

Details of grants position at the end of the year

- (i) Cash in Hand/Bank :Rs. 16,15,000/-
- (ii) Refunds to SERB, If any : NIL
- (iii) Balance (Carry forward to next financial year 2020-21) : Rs. 16,15,000/-



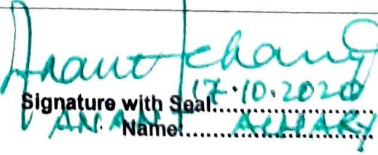
GFR 12 - A  
[(See Rule 238 (1))]  
**UTILIZATION CERTIFICATE (UC) FOR THE YEAR 2019-20**  
In respect of **NON-RECURRING**  
As on **31.03.2020** to be submitted to SERB  
Is the UC **Provisional**  
(To be given separately for each financial year ending on 31st March)

Certified that I have satisfied that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (x) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (xi) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- (xii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- (xiii) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (xiv) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (xv) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (xvi) It has been ensured that the physical and financial performance under **Start-up Research Grant (SRG)** (Name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure - I duly enclosed.
- (xvii) The utilization of the fund resulted in outcomes given at Annexure - II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
- (xviii) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure -II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date: 17.10.2020

Place: Madurai

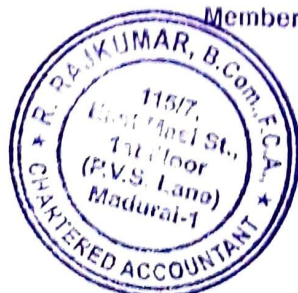
 Signature of PI : .....	 UAN: 200274-9AAADV1553 Signature with Seal : .....	 Signature with Seal : .....
	Name: .....	Name: .....
	Chief Finance Officer (Head of Finance)	Head of Organisation

**T. RAJKUMAR**  
Chartered Accountant  
Membership No: 27469

**PRINCIPAL**

**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, Madurai District

(Strike out inapplicable terms)





**GFR 12 – A [(See Rule 238 (1))]  
UTILIZATION CERTIFICATE (UC) FOR THE YEAR 2020-21  
in respect of NON-RECURRING  
as on 31.03.2021 to be submitted to SERB  
Is the UC Audited**

(To be given separately for each financial year ending on 31st March)

1. Name of the grant receiving Organization : KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY,
2. Name of Principal Investigator(PI): Dr. J. JESLIN DRUSILA NESAMALAR
3. SERB Sanction order no. & date: SRG/2019/001946, Dated 20-01-2020
4. Title of the Project: Optimal Design and Development of Machine Learning Model for Remote Monitoring and Control of Hybrid Microgrid in Educational Institutions using Smart Sensor Network and IoT
5. Name of the SERB Scheme : Start-up Research Grant (SRG)
6. Whether recurring or non-recurring grants : Non - Recurring
7. Grants position at the beginning of the Financial year (Grants released by SERB)
  - (iv) Cash In Hand/Bank /Carry forward from previous financial year (2019-20) : Rs. 16,15,000/-
  - (v) Others, If any : Nil.
  - (vi) Total :Rs. 16,15,000/-
8. Details of grants received, expenditure incurred and closing balances:(Actuals)

Unspent Balance of Grants received previous years [figure as at Sl.No. 7(iii)]	Interest Earned thereon	Interest deposited back to the SERB	Grants received during the year (2020-21)			Total Available funds (1+2-3+4)	Expenditure incurred	Closing Balances (5-6)
			Sanction No. (i)	Date (ii)	Amount (iii)			
1	2	3	4			5	6	7
Rs. 16,15,000/-	Nil	Nil	Nil	Nil	Nil	16,15,000/-	16,14,989	Rs.11/-

**Component wise utilization of grants:**

Grants-in-aid- General	Grant-in-aid-creation for capital assets	Total
Equipment	16,14,989	16,14,989

**Details of grants position at the end of the year**

- (i) Cash in Hand/Bank : Rs. 11/-
- (ii) Refunds to SERB, If any : NIL
- (iii) Balance (Carry forward to next financial year 2021-22) : Rs. 11/-


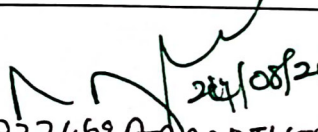
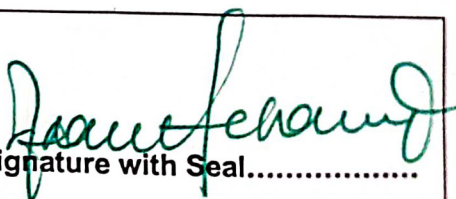
**GFR 12 – A [(See Rule 238 (1))]  
UTILIZATION CERTIFICATE (UC) FOR THE YEAR 2020-21  
in respect of NON-RECURRING  
as on 31.03.2021 to be submitted to SERB  
Is the UC Audited  
(To be given separately for each financial year ending on 31st March)**

Certified that I have satisfied that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (x) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (xi) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- (xii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- (xiii) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (xiv) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (xv) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (xvi) It has been ensured that the physical and financial performance under **Start-up Research Grant (SRG)**(Name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure – I duly enclosed.
- (xvii) The utilization of the fund resulted in outcomes given at Annexure – II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
- (xviii) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure –II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date: 24/03/21

Place: Madurai

 Signature of PI : ..... Dr. J. Jeslin Dausila Nesamalar	 UDIN: 21027469/TA/AAETH658 Signature with Seal : ..... <b>R. RAJKUMAR</b> Chartered Accountant Name: Membership No. 27469 Chief Finance Officer (Head of Finance)	 Signature with Seal : ..... Name: ..... <b>Dr. ANANT ACHARY</b> Head of Organisation
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(Strike out inapplicable terms)

KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.G. Chidambara Nadar - C. Neganmal Campus,  
S.P.G.C. Nagar, K. Velakulam - 625 701,  
Near Virudhunagar, Madurai District

**GFR 12 – A [(See Rule 238 (1))]  
UTILIZATION CERTIFICATE (UC) FOR THE YEAR 2020-21  
in respect of RECURRING  
as on 31.03.2021 to be submitted to SERB**

**Is the UC Audited**

(To be given separately for each financial year ending on 31st March)

1. Name of the grant receiving Organization : KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY.
2. Name of Principal Investigator(PI): Dr. J. JESLIN DRUSILA NESAMALAR
3. SERB Sanction order no. & date : SRG/2019/001946, Dated 20-01-2020
4. Title of the Project: Optimal Design and Development of Machine Learning Model for Remote Monitoring and Control of Hybrid Microgrid in Educational Institutions using Smart Sensor Network and IoT
5. Name of the SERB Scheme : Start-up Research Grant (SRG)
6. Whether recurring or non-recurring grants : Recurring
7. Grants position at the beginning of the Financial year (Grants released by SERB)
  - (i) Cash In Hand/Bank /Carry forward from previous financial year (2019-20) : Rs. 6,47,628/-
  - (ii) Others, If any (Interest) : Rs. Nil
  - (iii) **Total :Rs. 6,47,628/-**

8. Details of grants received, expenditure incurred and closing balances:(Actuals)

Unspent Balance of Grants received previous years [figure as at Sl. No. 7(iii)]	Interest Earned thereon	Interest deposited back to the SERB	Grants received during the year (2020-21)			Total Available funds (1+2-3+4)	Expenditure incurred	Closing Balances (5-6)
			Sanction No. (i)	Date (ii)	Amount (iii)			
1	2	3	4			5	6	7
6,47,628/-	38,063/-	Nil	Nil	Nil	Nil	6,85,691/-	4,98,162.80	1,87,528.20

Component wise utilization of grants:

Grants-in-aid- General	Grant-in-aid-creation for capital assets	Total
Consumables	-	23,238
Travel	-	3,000
Contingencies	-	56,724.80
Overhead Charges	-	1,30,200
Manpower	-	2,85,000
Scientific Social Responsibilities	-	-
<b>Total</b>	-	<b>4,98,162.80</b>

Details of grants position at the end of the year

- |  |                  |
|--|------------------|
| (i) Cash in Hand/Bank  | : Rs.1,87,528.20 |
| (ii) Refunds to SERB, If any                                 | : NIL            |
| (iii) Balance (Carry forward to next financial year 2021-22) | : Rs.1,87,528.20 |


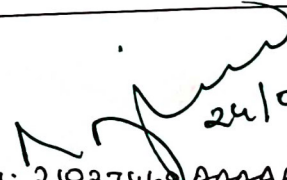
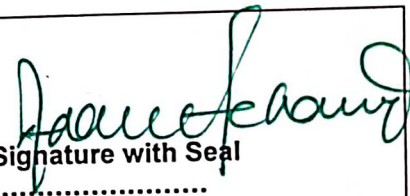
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in respect of RECURRING  
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Is the UC Audited  
(To be given separately for each financial year ending on 31<sup>st</sup> March)**

Certified that I have satisfied that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
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- (iv) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (vi) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (vii) It has been ensured that the physical and financial performance under Start-up Research Grant (SRG) (Name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure – I duly enclosed.
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- (ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure –II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date : 27/8/21

Place : Madurai

 Signature of PI : Dr. J. Jeslin Dhasila Nesamalai	 24/08/21 UDFN: 21027469 AAAA ET4658 Signature with Seal <b>R. RAJKUMAR</b> Chartered Accountant Name: ..... No: 27469. Chief Financial Officer (Head of Finance)	 Signature with Seal Name: ..... <b>DR. ANANT ACHARY</b> Head of Organisation
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(Strike out inapplicable terms)



KAMARAJ College of Engineering and Technology  
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S.P.G. Chidambara Nadar - C. Nagammal Campus,  
S.P.G.C. Nagar, K. Vellaludam - 625 701,  
Near Vrudhunagar, Madurai District.



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, Telefax : 044-22301552 [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/AR/2019-2020

*Seen*

18.03.2020

To  
 The Principal  
 Kamaraj College of Engineering and Technology  
 K. Vellakulam - 625 701

*Submitted to  
 The Secretary*

*for information*

Sir/Madam,

*Done  
 21/03/2020*

*Seen  
 21/3/20  
 Suitable action  
 may be taken by  
 Principal.*

Sub: TNSCST – Student Project Scheme – 2019-2020 – 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 in Time.

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-no.5&6) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
 18/3/20

Member Secretary.

*[Signature]*  
 18/3/20

- Encl: a) Terms & Conditions (T&C)  
 b) Format of Utilisation Certificate (UC)  
 c) Cheque for Rs.29500/- No: 852966 dt.18.03.2020

Copy to: Individual Guides

137. Kamaraj College of Engineering and Technology (4) – 29,500/-

Dr. S. Mariaamalraj Assistant Professor Dept. of Biotechnology Kamaraj College of Engineering and Technology Virudhunagar - 625 701	Design and Fabrication of Domestic Wastewater Recycler and Herbal based Drinking Water Purifier	U. Kavya G. Ramya Y. Swathi	ECV- 060	The Principal Kamaraj College of Engineering and Technology Virudhunagar - 625 701	7500/-
Mrs. C. Naga Devi Associate Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Graphene Battery (Future Battery)	A. Ameer Raja M. Praveen Raj M. Karthikeyan P. Vignesh	EEE- 011	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7000/-
Mr. B. Gurukarthik Babu Assistant Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Ecofriendly based water generation technique to harvest palatable water from green source	R. Vignesh A. Mohammed Nasrulla B. Ramkumar	ES-051	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7500/-
Dr. Anant Achary Professor Dept. of Biotechnology Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	Cytotoxic effect of fucoxanthin and phlorotannin isolated from sargassum tenerrimum against MCF-7 breast cancer cell line	A. Karthick	MS-017	The Principal Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	7500/-

**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**

DOTE CAMPUS, CHENNAI – 600 025

**STUDENT PROJECT SCHEME 2019-2020**

**UTILISATION CERTIFICATE**

(TWO COPIES)

1. Name of the guide and address : Mrs. C. Naga Devi,  
Assistant Professor, Department of EEE,  
Kamaraj College of Engineering and Technology,  
K. Vellakulam-625701, Near Virudhunagar, Madurai.
2. Name of the student(s) : A. Ameerraja  
M. Praveen raj  
M. Karthikeyen  
P. Vignesh
3. Title of the project : Graphene Battery (Future Battery)
4. Project code : ES-051 EEE-011

It is certified that a sum of Rupees Seven Thousand (Rs. 7,000/-) 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 in refunded.

*C. Naga Devi*  
Signature of the Guide

*[Red Signature]*  
Signature of the HOD

*[Green Signature]*  
Signature of the  
PRINCIPAL with SEAL

**PRINCIPAL**  
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, Madurai District.



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

Lr.No.TNSCST/SPS/AR/2019-2020

*Seen*

18.03.2020

To  
 The Principal  
 Kamaraj College of Engineering and Technology  
 K. Vellakulam - 625 701

*Submitted to  
 The Secretary*

*for information*

Sir/Madam,

*Done  
 21/03/2020*

*Seen  
 21/3/20  
 Suitable action  
 may be taken by  
 Principal.*

Sub: TNSCST – Student Project Scheme – 2019-2020 – 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 in Time.

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-no.5&6) on completion of the project.

Thanking you,

Yours faithfully,

*[Signature]*  
 18/3/20

Member Secretary.

*[Signature]*  
 18/3/20

- Encl: a) Terms & Conditions (T&C)  
 b) Format of Utilisation Certificate (UC)  
 c) Cheque for Rs.29500/- No: 852966 dt.18.03.2020

Copy to: Individual Guides



137. Kamaraj College of Engineering and Technology (4) – 29,500/-

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Mrs. C. Naga Devi Associate Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Graphene Battery (Future Battery)	A. Ameer Raja M. Praveen Raj M. Karthikeyan P. Vignesh	EEE- 011	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7000/-
<b>Mr. B. Gurukarthik Babu</b> Assistant Professor Dept. of EEE Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	Ecofriendly based water generation technique to harvest palatable water from green source	R. Vignesh A. Mohammed Nasrulla B. Ramkumar	ES-051	The Principal Kamaraj College of Engineering and Technology K. Vellakulam - 625 701	7500/-
Dr. Anant Achary Professor Dept. of Biotechnology Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	Cytotoxic effect of fucoxanthin and phlorotannin isolated from sargassum tenerrimum against MCF-7 breast cancer cell line	A. Karthick	MS-017	The Principal Kamaraj College of Engineering and Technology K. Vellakulam- 625 701	7500/-

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

STUDENT PROJECT SCHEME 2019-2020  
UTILISATION CERTIFICATE

(TWO COPIES)

1. Name of the guide and address : **B. Gurukarthik Babu,**  
Assistant Professor, Department of EEE,  
Kamaraj College of Engineering and Technology,  
K. Vellakulam-625701, Near Virudhunagar, Madurai.
2. Name of the student(s) : R. Vignesh  
A. Mohamed Nasrulla  
B. Ramkumar
3. Title of the project : Eco friendly based water generation technique to  
harvest palatable water from green source
4. Project code : ES-051

It is certified that a sum of Rupees Seven Thousand Five Hundred (Rs. 7,500/-) 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 in refunded.



Signature of the Guide

[B. Gurukarthik Babu]



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

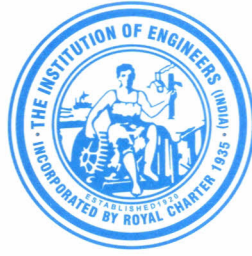
PRINCIPAL with SEAL

PRINCIPAL  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.C. Chidambaram - 625 701, Chidambaram Campus,  
S.P.C. Negamangalam - 625 701,  
Near Virudhunagar, Madurai District



# 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.4/2/UG/2019-20/UG2020061

Date: 11 June 2020

The Principal  
Kamaraj College of Engineering and Technology  
S P G Chidambara Nadar, C Nagammal Campus, Vellakulam  
Madurai District 625701 Tamil Nadu

Dear Sir/Madam,

**Sub: Intimation of Approval for R&D Project entitled: "Renewable Energy Based Atmospheric Water Harvesters for The Production of Potable Water"**

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>	UG2020061	<b>Category:</b>	UG	<b>Financial Year:</b>	2019-20
<b>Guide(s):</b>	1. B Gurukarthik Babu 2. Dr S Kalyani	<b>Applicant(s):</b>	1. Vignesh R 2. B Ramkumar 3. R Arunkumar		
<b>College / Institute / University:</b>	Kamaraj College of Engineering and Technology	<b>Total Grant Sanctioned:</b>	₹16,000/-	<b>Number of Instalment(s):</b>	1

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, (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 N Sengupta)  
Director (Technical)  
For Secretary & Director General

Encl: as stated.

cc: Guide(s) – 1. B Gurukarthik Babu  
2. Dr S Kalyani



# The Institution of Engineers (India)

Technical Department  
R&D Grant-in-aid Scheme

## UTILISATION CERTIFICATE

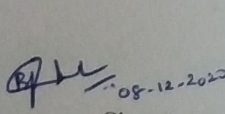
(Two copies duly signed & sealed by all concern)

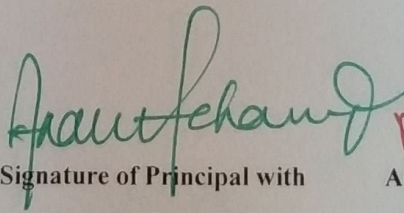
[FOR THE FINANCIAL YEAR - (ENDING 31<sup>ST</sup> MARCH)] 2021

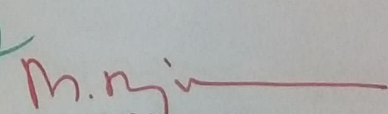
1. Project I.D : UG2020061
2. Title of the Project : Renewable Energy Based Atmospheric Water Harvesters for the Production of Potable Water
3. Name of the Institution : Kamaraj College of Engineering and Technology
4. Name of the Project Guide (PG) : **Dr. B. Gurukarthik Babu & Dr. S. Kalyani**

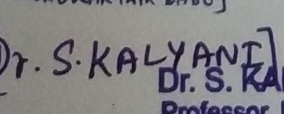
## UTILISATION CERTIFICATE

Certified that out of ₹ 16,000/- of grants-in-aid sanctioned during the year 2020 in favour of The Principal, Kamaraj College of Engineering and Technology under IEI's letter No. R.4/2/UG/2019-20/UG2020061 dated 11-June-2020 and ₹ 16,000. A sum of ₹ 16,000/- has been utilized for the purpose of project work for which it was sanctioned and that the balance of ₹ 0/- remaining unutilized at the end of completion.

 08-12-2020  
Signature of Principal Guide  
with date & seal  
[B. GURUKARTHIK BABU]

  
Signature of Principal with  
date & seal  
PRINCIPAL  
KAMARAJ College of Engineering and Technology  
(Autonomous)  
S.P.O. Chidambaram Nader - C. Nagamma Campus,  
G.C. Nagar, K. Vellakulam - 625 701,  
Virudhunagar, Madurai District.

  
Accounts Officer of the  
Institute with date & seal  
Accounts Officer  
Kamaraj College of Engineering and Technology,  
S.P.O. Chidambaram Nader - C. Nagamma Campus,  
G.C. Nagar, K. Vellakulam - 625 701,  
Virudhunagar, Madurai District.

  
Dr. S. KALYANI, M.E., P.E., P.D.  
Professor, Department of EEE  
Kamaraj College of Engineering and Technology  
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K. VELLAKULAM - 625 701, MADURAI.