



**SARANATHAN COLLEGE OF ENGINEERING**  
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

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**CRITERION: 3.1.1**

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## Electronics and Communication Engineering



### 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

Phone : 044 - 2230 1428

Web : www.tanscst.nic.in

Telefax : 044 - 2230 1552

E-mail : enquiry.tanscst.nic.in / ms.tanscst@nic.in

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

Ref: TNSCST/RFRS/VR/12/2018-19/ 7366

dt.28.05.2019

To  
B.Divya  
Research Scholar  
Dept. of ECE  
Saranathan College of Engg.,  
Trichy-620 012

Sir/Madam,

Sub: Programme to bridge the gap in research funding for research scholars  
in colleges (RFRS)- Approval – Intimated – Reg.  
Ref: Chairman Approval dt:26.03.2019.

With reference to the above, I am happy to inform that the Chairman,  
Executive Committee of the Council has approved RFRS funding for your application  
as per the details given below.

| Title  | Amount<br>Rs.in lakh | Duration |
|--|----------------------|----------|
| Intelligent post harvest monitoring and<br>controlling system using wireless sensor<br>network | 3.00                 | 2 years  |

The terms and conditions of the grant is enclosed. Your acceptance should be  
received in our office on or before **03.06.2019**. Prof.V.Ramaswami, Associate  
Professor of the Council and Officer in Charge of the above programme (Mobile  
Number : 9444743052) may be contacted for clarification, if there is any.

With wishes,

Yours faithfully,

  
Member Secretary

Copy to: The Principal  
Saranathan College of Engg.,  
Trichy-620 012

2 Dr.M.Santhi  
Prof. and Head, ECE  
Saranathan College of Engg.,  
Trichy-620 012

Date: 29.11.2019

F.No. 9-136/RIFD/MOD/Policy-I/2018-19

All India Council for Technical Education  
(A Statutory Body under Ministry of HRD, Govt. of India)  
Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: [www.aicte-india.org](http://www.aicte-india.org)



MODROB - Sanction Letter

F.No. 9-136/RIFD/MOD/Policy-I/2018-19

Date: 03.12.2019

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



*[Handwritten signature]*  
20/3/2020

Sub: Release of a sum of Rs.960000/- (Rupees Nine Lakh Sixty Thousand Only) being the Grant-in-Aid under the scheme Modernization and Removal of Obsolescence (MODROB) for the year 2018-19 payable during the current financial year 2019-20- reg.

Sir,  
With reference to the proposal submitted by the institute, this is to convey that the sanction of the Council for payment of Rs.1200000/- (Rupees Twelve Lakh Only) as Grant-in-Aid under the Modernization and Removal of Obsolescence (MODROB) scheme, as per details given below:

|    |  |  |                                      |                                 |
|----|--|--|--------------------------------------|---------------------------------|
| 1. | Name and address of the Beneficiary Institution: | Director/ Principal/ Registrar,<br>SARANATHAN COLLEGE OF ENGINEERING, VENKATESWARA NAGAR<br>EDAMALAI PATTIPUDUR POST PANJAPPUR VILLAGE SRIRANGAM<br>TALUK Tamil Nadu -620012 |                                      |                                 |
| 2. | Title of Project:                                | Modernization of Communication Lab with Software defined Radio and removal of obsolescent equipment  |                                      |                                 |
| 3. | Name of Coordinator:                             | Dr. SANTHI MUTHURATHINAM   |                                      |                                 |
| 4. | Duration of the project:                         | 2 Years  |                                      |                                 |
| 4. | Total Grant-in-aid Sanctioned:                   | Total:<br>Rs.1200000/-   | Non-Recurring (85%):<br>Rs.1020000/- | Recurring (15%):<br>Rs.180000/- |
| 5. | Amount to be released during the year 2019-20:   | 1st Installment<br>Rs.960000/-   | Non-Recurring (85%):<br>Rs.816000/-  | Recurring (15%):<br>Rs.144000/- |
| 6. | Sanctioned grant-in-aid is debit to:             | Major Head 601.18(a) Gen. (Plan Head)  |                                      |                                 |

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

**THE INSTRUCTIONS/GUIDELINES TO BE FOLLOWED BY UNIVERSITY/INSTITUTION**

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

| Institute PAN No. | Bank Name             | Bank Branch Name           | Branch Address  | Account Holder Name                        | Account Type      | Account Number      | IFSC            |
|-------------------|-----------------------|----------------------------|---|--|-------------------|---------------------|-----------------|
| AAETS<br>6115N    | CITY<br>UNION<br>BANK | TIRUCH<br>IRAPAL<br>L MAIN | VALLI<br>KUMMAN<br>KOL<br>STREET, SIGC<br>CAMPUS,<br>TIRUCHIRAP | SARANATHAN<br>COLLEGE<br>OF<br>ENGINEERING | Saving<br>Account | 02300100<br>0138318 | CIT0000<br>0023 |

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

DOTE CAMPUS, CHENNAI - 600 025


STUDENT PROJECT SCHEME 2018-2019


UTILISATION CERTIFICATE

1. Name of the guide and address : Dr. M. Santhi  
Professor & Head  
Department of ECE  
Saranathan College of Engineering  
Trichy, TamilNadu
2. Name of the student(s) : M. Merline Magrina  
M.E Communication Systems
3. Title of the project : Recognition of Ancient Tamil  
Characters from Epigraphical  
Inscriptions using OCR Technique
4. Project code : EEE - 013

It is certified that a sum of Rs. 7500 (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 the sum of Rs. Nil remaining unutilized is refunded.

  
Signature of the guide

  
Signature of the HOD  
**H.O.D. (ECE)**  
Saranathan College of Engg  
Trichirapalli - 620 012

  
Signature of the  
**PRINCIPAL**  
REGISTRAR/PRINCIPAL/DEAN  
Saranathan College of Engineering  
With SEAMY - 12.



# Electrical and Electronics Engineering

## CENTRE FOR FACULTY DEVELOPMENT

ANNA UNIVERSITY, CHENNAI - 600 025

**SIX-DAY FACULTY DEVELOPMENT TRAINING PROGRAMME WINTER - 2019**

(Self Financing Engineering Colleges)

### Statement of Accounts

NAME OF THE DEPT / COLLEGE : ELECTRICAL AND ELECTRONICS ENGINEERING (SARANATHAN COLLEGE OF ENGINEERING)  
 COURSE : FDTM ON EE8502 - PROTECTION AND SWITCHGEAR  
 PERIOD : 09.12.2019 - 14.12.2019  
 NO. OF DAYS : 6                                  No. of Session : x2                                  TOTAL NO. OF HOURS : 36  
 TOTAL NO. OF PARTICIPANTS ATTENDED (AS PER ATTENDANCE SHEET) : 30

| Sl. No.      | Details   | Notes  | Total amount restricted to (Rs) | Actual Expenditure |
|--------------|---|--|---------------------------------|--------------------|
| 1.           | Co-ordinator fees   | Per programme  | * 3,000/-                       | 3,000/-            |
| 2.           | a) Remuneration to teaching faculty (Theory)  | Rs. 1,500/- per session of 1½ hours  | * 30,000/-                      | 52,000/-           |
|              | b) Remuneration for conducting Practical  | (i) Rs. 1,000/- per session of (1½ hours) for faculty member<br>(ii) Rs. 500/- per session (1½ hours) for technical staff. |                                 |                    |
| 3.           | Travelling Expenses   | External Faculty member @ Rs 500/- per day   | * 5,000/-                       |                    |
| 4.           | Remuneration to administrative staff  | Rs. 1,500/- per programme.   | * 1,500/-                       | 1,500/-            |
| 5.           | Course material including CD's.   | Rs. 120/- per participants   | * 3,600/-                       | 1,800/-            |
| 6.           | Lunch expenses including Tea and snacks   | =  | * 25,000/-                      | 30,600/-           |
| 7.           | Contingencies including Printing and Postage of brochures, photographs, banner etc. | =  | * 2,500/-                       | 300/-              |
| <b>Total</b> |   |  | <b>70,000/-</b>                 | <b>89,498/-</b>    |

\* Anna University provides Rs.30,000/- only to meet the Remuneration on Resource Persons. Utilization Certificate and consolidated Statement of Expenditure for Rs.30,000/- with original vouchers duly certified by the Coordinator and Principal and should be sent to the Director, CFI for claiming the said amount.

\* Host Institution should meet the remaining expenditure of Rs.40,000/- to conduct the FDTM.

### Utilization Certificate

This is to certify that an amount of Rs. 89,498/- (Rupees Eighty Nine Thousand Four hundred and Ninety Eight only) is fully utilized for the conduct of Six-Day Faculty Development training programme on EE8502 - Protection and Switchgear during 09.12.2019 and 14.12.2019.

Signature of the Co-ordinator(s) with Seal

**Dr.C KRISHNAKUMAR M.Tech., Ph.D**  
 Supervisor No: 3430987  
 Professor and Head  
 Department of EEE  
 Saranathan College of Engineering,  
 Palayamkottai, Trichy - 620 012.

Signature of the Principal with Seal

**PRINCIPAL**  
**Saranathan College of Engineering**  
**TRICHY - 12.**

15<sup>th</sup> November 2019

F.No.67-20/RIFD/GOC/POLICY-1/2018-19

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



**GOC - Sanction Letter**

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

**Subject:** Release of a sum of Rs. 5,00,000/- (Rupees Five lakh only) as Grant-in-Aid to conduct Conference under the scheme Grant for Organizing Conference (GOC) for the year 2018-19 payable during the current financial year 2019-20-reg.

Sir,  
With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs. 5,00,000/- (Rupees Five lakh only) to conduct Conference under the scheme Grant for Organizing Conference (GOC), as per details given below:

|    |  |  |
|----|--|--|
| 1. | Name and address of the Beneficiary Institution: | Director/ Principal/ Registrar<br>Saranathan College of Engineering, Venkateswara Nagar,<br>Edamalaipattipudur-Post, Panjappur-Village, Srirangam-Taluk,<br>Tiruchirappalli, Tamil Nadu-620012 |
| 2. | Permanent ID of Institute:                       | 1-4190371  |
| 3. | Title of Conference:                             | International Conference on Cutting Edge Technologies on Electrical,<br>Communication, Embedded system and soft computing techniques   |
| 4. | Name of Coordinator:                             | Dr. Vijayalakshmi Subramanian  |
| 5. | Grant-in-aid Sanctioned:                         | Rs. 5,00,000/- (Rupees Five lakh only)   |
| 6. | Amount to be released during the year 2019-20:   | Rs. 5,00,000/- (Rupees Five lakh only)   |
| 7. | Sanctioned grant-in-aid is debitable to:         | Major Head 601. 17 (a) Gen (GOC) Plan Head   |

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

**The instructions/guidelines to be followed by College/Institution**

**1. Release of funds**

- a. The Principal/Director of the institute and the Coordinator of the program are hereby requested to verify the correctness of the undermentioned bank account/ RTGS details submitted by them alongwith the Proposal/Estimated expenditure details, against which the grant is being released:

| Institute PAN No. | Bank Name           | Bank Branch Name            | Bank Branch Address                | Account Holder Name               | Account Type   | Account Number   | IFSC Code    |
|-------------------|---------------------|-----------------------------|------------------------------------|-----------------------------------|----------------|------------------|--------------|
| AAETS 6115N       | CITY UNION BANK LTD | TIRUCHIRAP ALLI MAIN BRANCH | 23, Kalliamman Kudi Street, Trichy | Saranathan College of Engineering | Saving Account | 0230010001 38318 | CIUB000 0023 |

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

AQIS Application ID : 1-4146853549

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**SARANATHAN COLLEGE OF ENGINEERING**  
**TIRUCHIRAPALLI - 12**

**Dr. D. VALAVAN** B.E., M.Tech., Ph.D.  
**PRINCIPAL**

08/01/2020

To  
Prof. Dileep N. Malkhede  
Advisor,  
AICTE,  
New Delhi - 110070

Sir,

Sub : Submission of acceptance letter with dates for organizing International Conference reg.-

Ref: F.No. 67 - 20/RIFD/GOC/Policy - 1/2018-2019 Dated: 15.11.2019


We are very grateful to you for sanctioning the payment of Rs.5,00,000/- to conduct two day International Conference under the scheme Grant for Organizing Conference (GOC). It is planned to conduct the Conference in the month of September tentatively during 23/09/2020 & 24/09/2020. This is for your kind information.

Thanking you

  
Coordinator

**Dr. B. VIJAYALAKSHMI**  
**ASSOCIATE PROFESSOR**  
**DEPARTMENT OF EEE**  
**SARANATHAN COLLEGE OF ENGINEERING**  
**TIRUCHIRAPALLI, TRICHY - 12**

Yours Sincerely

  
**Dr. D. Valavan, M.Tech., Ph.D.**  
Principal  
Saranathan College of Engineering  
Trichy - 12.

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**SARANATHAN COLLEGE OF ENGINEERING**  
**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**  
TIRUCHIRAPALLI - 620 012.

Date : 16.03.2019

Ref No : SCE/EEE/IEI Workshop/2018-2019/01

Submitted to : The Secretary, IEI-TLC

Submitted through: The HOD/EEE

Submitted by : Dr.S. Vijayalakshmi

Account settlement report for Twoday All India Workshop titled "Design of Micro Grid and Grid integrated issues in Distributed Generation" on 06 & 07-03-2019.

Total Number of Registration - 30.

1. Registration amount received from the participant - Rs. 20,600

**Expenditure Details**

| Bill.No             | Description                               | Amount (Rs.)      |
|---------------------|---|-------------------|
| 1                   | Conference Fles, Invitation etc:          | Rs. 1,250         |
| 2                   | Certificate for participants              | Rs. 624           |
| 3                   | Memento for Chief Guests                  | Rs. 1,539         |
| 4                   | Lunch and snacks for participants & Staff | Rs. 21,914        |
| 5,5A                | Remuneration for the Resource Person      | Rs. 20,500        |
| 6                   | Kit (File, Notepad and Pen)               | Rs. 4,910         |
| 7,7A                | Snacks for Resource Person                | Rs. 616           |
| 8                   | Reception items                           | Rs. 300           |
| <b>Total amount</b> |   | <b>Rs. 51,653</b> |

Balance amount yet to receive from IEI - Rs. 51,653 - 20,600  
= Rs. 31,053/-

*[Handwritten Signature]*

Yours truly

*[Handwritten Signature]*  
(Dr.S. Vijayalakshmi)



REPORT OF ALL INDIA SEMINAR/WORKSHOP ORGANISED BY CENTRES / OVERSEAS CHAPTERS

|                                    |                         |  |   |
|------------------------------------|-------------------------|--|---|
| Name of Centre / Overseas Chapter: |                         | Tiruchirappalli Local Centre   |   |
| Title of Activity:                 |                         | Design of Micro Grid and Grid integration issues in Distributed Generation |   |
| Activity under Divisional Board    |                         | Electrical Division Board (ELDB)   |   |
| Date:                              | 06-03-2019 & 07-03-2019 | Venue:   | Civil Seminar Hall, Saranathan College of Engineering |



Photo of Inaugural Session with banner of IEE



Photo of Technical Session

|  |  |
|--|--|
| Day-1(Forenoon)<br>Inaugural Session<br>Inaugural programme, Keynote Address   | Registration and Inaugural Session, Keynote address was delivered by Dr.N.Kumaresan, Chairman IEE-TLC. From 10.15 AM to 1.15 AM the session 1 handled by Dr.S.Senthilkumar, Asso. Prof/EEE, NIT, Trichy  |
| Day-1(Afternoon)<br>Technical Session I<br>1 Invited Lecture (about 1 hour duration) and minimum 4 papers or two invited lectures / presentations  | Invited Lecture by:Dr.S.Senthilkumar, Associate Professor/EEE, National Institute of Technology, Trichy.<br>Topic:Operation and Control of wind-driven Induction Generators Supplying Micro grids.<br>Session 2 :Dr.P.Sivakumar, Associate Professor/EEE, Rajalakshmi Engineering College, Chennai.<br>Topic : Grid Integration issues in Distributed Generation |
| Day-2 (Forenoon)<br>Technical Session II<br>1 Invited Lecture (about 1 hour duration) and minimum 4 papers or two invited lectures / presentations | Invited Lecture by:Er.S.Selvakumar, Lead Engineer, ABB Pvt. Ltd, Chennai .<br>Topic: Micro Grid Design using HOMER.  |
| Day-2 (Afternoon)<br>Technical Session III<br>Minimum 2 papers or two invited lectures / presentations   | Invited Lecture by :Er.S.Selvakumar, Lead Engineer, ABB Pvt. Ltd, Chennai.<br>Topic :Islanded Micro Grid Design using HOMER, Cycle Charging Algorithm and Load Following Algorithm in HOMER. Sensitivity Analysis in HOMER, Multi Year Optimisation and Simulation of Brown field Projects with importing load profile.  |
| Day-2 (Afternoon)<br>Valedictory Session   | Valedictory Address byDr.S.Dharmalingam, Former Chairman, IEE, Tiruchirappalli Local Centre  |

**Utilization Certificate**

AICTE's Sanction Order No. 20/AICTE/BIFD/RPS/(POLICY-IV) 31/2012-13  
 Date: 3-9-2013

**A. NON-RECURRING:**

| S.N<br>O | List of<br>Approved<br>Equipment | List of<br>equipments<br>procured | Date of<br>Purchase | Amount<br>Sanctioned* | Amount<br>Utilized (Item<br>wise) (Rs) | Unspent<br>Balance |
|----------|----------------------------------|-----------------------------------|---------------------|-----------------------|--|--------------------|
| 1        | PV SOLAR<br>PANNEL               | PV Panel<br>with Battery<br>Bank  | 31-03-<br>2014      | 4, 50, 000            | 330000/-                               | NIL                |
| 2        | Battery<br>Bank                  |                                   |                     |                       | 119547/-                               |                    |
| 3        | SENSORS                          | Irradiation<br>Sensor-            | 28-08-<br>2014      |                       | 33548/-                                |                    |
|          |                                  | Voltage<br>Sensor -               | 12-12-<br>2013      |                       |  |                    |

\* Amount sanction is not mentioned item wise in the sanction order.

**B. RECURRING:**

| Sl.<br>No               | Activities undertaken  | Period         | Amount<br>Sanctioned* | Amount Utilized<br>(Item wise) | Unspent<br>Balance |
|-------------------------|--|----------------|-----------------------|--------------------------------|--------------------|
| <b>1 year (2013-14)</b> |  |                |                       |                                |                    |
| 1                       | Purchase of Consumable<br>items - Single Phase Multi<br>Tap Inductor (6 NOS) | 02-09-<br>2014 | 23,334/-              | 8300/-                         | NIL                |
| 2                       | Purchase of consumable<br>items - DC Power supply<br>PCB's                   | 18-9-<br>2014  |                       | 12500/-                        |                    |
| 3                       | Conference Registration<br>Fees (SEED Conference at<br>IIT MADRAS)           | 19-08-<br>2014 |                       | 5000/-                         |                    |

| II Year (2014-15)  |  |            |           |          |     |
|--------------------|--|------------|-----------|----------|-----|
| 4                  | Purchase of PV cable accessories   | 30-7-2014  | 23,334 /- | 2783 /-  | NIL |
| 5                  | Purchase of Resistors, IC's, diodes etc                                  | 25-10-2014 |           | 5123 /-  |     |
| 6                  | Purchase of Miscellaneous Items for wiring PV cables from terrace to lab | 2-4-2015   |           | 11327 /- |     |
| 7                  | Purchase of Lamps & other miscellaneous items                            | 2-4-2015   |           | 4258 /-  |     |
| III Year (2015-16) |  |            |           |          |     |
| 8                  | Purchase of Resistors, IC's, diodes etc                                  | 21-1-2016  | 23,334 /- | 13632 /- |     |
| 9                  | Purchase of wind emulator accessories                                    | 6-5-2016   |           | 10080 /- |     |

Total of A+B = Rs. 5,54,298

Certified that the grant has been utilized for the purpose for which it was sanctioned in accordance with the "Terms and Conditions" attached to the grant. If, as a result of check or audit objection some irregularity is noticed at a later stage, action will be taken to refund, adjust or regularize the amount objected to.

For M. RAJU & Co.,  
CHARTERED ACCOUNTANTS

(A. KUMAR)  
M.No. 026517

|   |
|---|
| Signature of Chartered Accountant   |
| Name of the CA: <u>A. KURAK</u>   |
| Membership No: <u>026517</u>  |
| Full Address of CA With Seal:   |
| <b>M. RAJU &amp; Co.,</b><br>CHARTERED ACCOUNTANTS<br>No 9, Officers Colony, Puthur<br>Trichy- 620 017. |

|  |
|--|
| Signature of Head of the Institution   |
| Dr. D. VALAVAN, PRINCIPAL  |
| Name and Designation   |
| Full Address With Seal   |
| Saranathan College of Engineering,<br>Venkateshwara Nagar, Panjapur, Trichy-<br>620012, Tamilnadu. |
| <b>PRINCIPAL</b><br>Saranathan College of Engineering<br>TRICHY - 12.                              |

Date: 27-01-2017

## Instrumentation and Control Engineering



### Fwd: All India Workshop on “Nanosensors for Medical Applications”

**Dr. M. Shanmugavalli ICE** <shanmugavalli-ice@saranathan.ac.in>

To: "Mr. P. Aravind ICE" <aravind-ice@saranathan.ac.in>

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

From: **Dharmalingam s** <sdharma59@gmail.com>

Date: Sun, 13 Oct 2019 at 19:30

Subject: All India Workshop on “Nanosensors for Medical Applications”

To: Dr. M. Shanmugavalli ICE <shanmugavalli-ice@saranathan.ac.in>

Cc: Kumaresan N. <nkumar@nitt.edu>, A Anand <a.anand@bhel.in>

Madam,

Approval for conducting this workshop has been received from IEI HQ. Next activity is to finalise the brochur

Pl. see the attached word file containing the draft of the brochure in three column format. Corrections in the draft to be done are highlighted in yellow colour. Please carry out the corrections and return the draft for further processing.

Regards,

Dharmalingam

---

SP/YC/040/2017(C)  
Government of India  
Ministry of Science & Technology  
Department of Science & Technology  
(SEED Division)

Technology Bhavan,  
New Mehrauli Road,  
New Delhi-110016  
Dated : 13/12/2018

**ORDER**

**Sub:-** Financial assistance for the project titled "Nano-sensor for fluid mass flow rate measurement for biomedical applications" sponsored to Dr. M.Shanmugavalli, Department of Instrument and Control Engineering, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu.

In continuation of this Department's Sanction Order dated 13.03.2018, sanction of the President is conveyed to the payment of Rs.3,59,995/- (Rupees Three Lakh Fifty Nine Thousand Nine Hundred Ninety Five only) to the Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu being the second instalment of grant under the non-recurring grant for implementation of the said project during 2019-20. The details of which may be seen in the below given table:

| Sl.No | Equipment details for 2 <sup>nd</sup> year | Amount         |
|-------|--|----------------|
| 1.    | Sensors and Instrumentation (10 Nos)       | Rs. 2,00,000/- |
| 2.    | Fabrication of prototype equipment.        | Rs. 1,60,000/- |
|       | Total                                      | Rs. 3,60,000/- |

2. Sanction of the President is also conveyed for the carry forward of Rs. 5/- under the non-recurring grant from the last financial year to the current financial year 2019-20.

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

4. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/ final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

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

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

(a) a transparent procurement procedure in line with the Provision of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

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

*(Signature)*  
13/12/2018

7. "In terms of Rule 230(8) of GRF 2017, 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, generated against released grant shall be remitted to Consolidated Fund of India, 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 account".

8. (a). DST reserves sole rights on the assets out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

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

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

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 acknowledgment of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

11. Failure to comply with the terms and condition of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

12. The expenditure involved is dubitable to Demand No.86, Department of Science & Technology for the year 2019-20:

|  |   |   |
|--|---|---|
| 3425                                       | : | Other Scientific Research (Major Head)                            |
| 60   | : | Others  |
| 60.200                                     | : | Assistance to Other Scientific Bodes (Minor Head)                 |
| 70   | : | Innovation, Technology Development and Deployment                 |
| 70.00.35                                   | : | Grants for Creation of Capital Assets for the year 2019-20 (Plan) |
| *(Previous: SSP-SEED-3425.60.200.08.11.35) |   |   |

13. The amount of **Rs.3,59,995/- (Rupees Three Lakh Fifty Nine Thousand Nine Hundred Ninety Five only)** will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu. The bank details for electronic transfer of funds through RTGS are given below:


|                            |   |
|----------------------------|---|
| Institution Account Name   | Principal, Saranathan College of Engineering  |
| Saving Bank Account Number | 023001000138318   |
| Name of Bank               | City Union Bank Ltd   |
| Branch Name                | 23, Kalliamman Koil Street, Opp. To Trichy Annadhana Samajam Tiruchirapalli-620 002 |
| IFSC Code                  | CIUB0000023   |
| MICR Code                  | 620054002   |

*[Handwritten Signature]*  
13/12/2019

14. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 131 in the register of grants maintained in the Division for the scheme (Scheme for Young Scientist and Technologists –SYST).

15. This issues with the concurrence of IFD Vide their Concurrence Dy. No. C/4617/IFD/2019-20 dated 13<sup>th</sup> December, 2019.

16. Niti Aayog Darpan Unique I.D. of the institute is 'TN/2017/0172903'.

  
(Dr. Rashmi Sharma) 13/12/2019  
Scientist-'E'  
011-26590541

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

Copy for information and necessary action to: -

1. Cash Section (3 copies) for making the payment to the grantee.
2. Account Section.
3. Director of Audit, (Scientific Department), AGCR Building, New Delhi – 110 002.
4. Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu.
5. Dr. M.Shanmugavalli, Department of Instrument and Control Engineering, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu.
6. Head (SEED)
7. Sanction Folder

  
(Dr. Rashmi Sharma) 13/12/2019  
Scientist-'E'  
011-26590541

SP/YO/040/2017(G)  
Government of India  
Ministry of Science & Technology  
Department of Science & Technology  
(SEED Division)

Technology Bhavan,  
New Mehrauli Road  
New Delhi-110016  
Dated:13/12/2019

**ORDER**

**Sub:- Financial assistance for the project titled "Nano-sensor for fluid mass flow rate measurement for biomedical applications" sponsored to Dr. M.Shanmugavalli, Department of Instrument and Control Engineering, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012,Tamil Nadu.**

In continuation of this Department's Sanction Order dated 13.03.2018, sanction of the President is conveyed to the payment of **Rs.69,000/-** (Rupees Sixty Nine Thousand only) to the Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012,Tamil Nadu being the second instalment of grant for implementation of the said project during 2019-20.

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

3. 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.

4. 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.

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

(a) a transparent procurement procedure in line with the Provision of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of the grantee organization while procuring capital assets sanctioned for the above mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.

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

6. "In terms of Rule 230(8) of GRF 2017, 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, generated against released grant shall be remitted to Consolidated Fund of India, 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 account".

  
13/12/2019



7. (a). DST reserves sole rights on the assets out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

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

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

8. 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.

9. Due acknowledgment of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

10. Failure to comply with the terms and condition of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

11. The expenditure involved is dubitable to Demand No.86, Department of Science & Technology for the year 2019-20:

|          |   |   |
|----------|---|---|
| 3425     | : | Other Scientific Research (Major Head)            |
| 60       | : | Others  |
| 60.200   | : | Assistance to Other Scientific Bodes (Minor Head) |
| 70       | : | Innovation, Technology Development and Deployment |
| 70.00.31 | : | Grants-in-aid General for the year 2019-20 (Plan) |

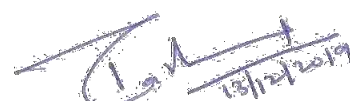
\*(Previous: SSP-SEED-3425.60.200.08.11.31)

12. The amount of **Rs.69,000/- (Rupees Sixty Nine Thousand only)** will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu. The bank details for electronic transfer of funds through RTGS are given below:

|                            |  |
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| Name of Bank               | City Union Bank Ltd  |
| Branch Name                | 23, Kaliamman Koil Street, Opp. To Trichy Annadhana Samajam Tiruchirapalli-620 002 |
| IFSC Code                  | CIUB0000023  |
| MICR Code                  | 620054002  |

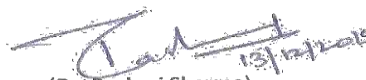
14. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. **130** in the register of grants maintained in the Division for the scheme (Scheme for Young Scientist and Technologists--SYST).

15. This issues with the concurrence of IFD Vide their Concurrence Dy. No. C/4616/IFD/2019-20 dated 13<sup>th</sup> December, 2019.

  
13/12/2019

-3-


16. Niti Aayog Darpan Unique I.D. of the institute is 'TN/2017/0172903'.

  
(Dr. Rashmi Sharma)  
Scientist-'E'  
011-26590541

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

Copy for information and necessary action to: -

1. Cash Section (3 copies) for making the payment to the grantee.
2. Account Section.
3. Director of Audit, (Scientific Department), AGCR Building, New Delhi – 110 002.
4. Principal, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu.
5. Dr. M. Shanmugavalli, Department of Instrument and Control Engineering, Saranathan College of Engineering, Venkateswara Nagar, Trichy-Madurai Main Road (NH 45 B), Edamalaipatti Pudhur(Post), Panjappur, Thiruchirappalli - 620012, Tamil Nadu.
6. Head (SEED)
7. Sanction Folder

  
(Dr. Rashmi Sharma)  
Scientist-'E'  
011-26590541

# Information Technology

## REPORT OF ALL INDIA WORKSHOP ORGANISED BY CENTRES / OVERSEAS CHAPTERS

|                 |                              |
|-----------------|------------------------------|
| Name of Centre: | Tiruchirappalli Local Centre |
|-----------------|------------------------------|

|                                 |   |        |  |
|---------------------------------|---|--------|--|
| Title of Activity:              | One day workshop on “Machine Learning Techniques using PyTorch” |        |  |
| Activity under Divisional Board | Computer Engineering Division                                   |        |  |
| Date:                           | 05-10-2019  | Venue: | J.S.Block Seminar Hall, Saranathan College of Engineering, Tiruchirappalli |



Photo of Inaugural Session and group photo

Photo of Technical Session and valedictory

### WORKSHOP SCHEDULE

|                         |   |  |
|-------------------------|---|--|
| 09.00 a.m. – 09.30 a.m. | Registration  |  |
| 09.30 a.m. – 10.00 a.m. | Inauguration  |  |
| 10.00 a.m. – 11.30 a.m. | Detailed discussion on AI machine learning, deep learning using PyTorch- Keras Platform   |  |
|                         | <b>Mr. Salai Deva Thirumani,</b><br>Techno Commercial Engineer,<br>AIDELTECZ , Pudukottai   |  |
| 11.30 a.m. – 11.45 a.m. | Tea Break   |  |
| 11.45 a.m. – 01.15 p.m. | Getting started with Packages installation, discussion on dataset creation, loss error, learning rate, gradient descent, stochastic gradient descent and execution of MNIST in PyTorch.   |  |
|                         | <b>Mr. Salai Deva Thirumani,</b><br>Techno Commercial Engineer,<br>AIDELTECZ , Pudukottai   |  |
| 01.30 p.m – 02.00 p.m.  | Lunch   |  |
| 02.00 p.m. – 03.15 p.m. | Introduction to CNN and custom dataset creation, Model creation, Implementation of customized object detection using keras with leaner and VGG net YOLO model ,Implementation of interface part and detection of object using CAFFE – |  |
|                         | <b>Mr. Salai Deva Thirumani,</b><br>Techno Commercial Engineer,<br>AIDELTECZ , Pudukottai   |  |
| 03.15 p.m. – 03.30 p.m. | Tea Break   |  |
| 03.30 p.m. – 04.30 p.m. | Demo on autonomous car creation, – Path and autonomous navigation of car based on environment.  |  |
|                         | <b>Mr. Salai Deva Thirumani,</b><br>Techno Commercial Engineer,<br>AIDELTECZ , Pudukottai   |  |
| 04.30 p.m. – 05.00 p.m. | Valediction   |  |

## All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110075 Website: [www.aicte-india.org](http://www.aicte-india.org)



### STTP- Sanction Letter

Ref. No. 34-65/331/RIFD/STTP/Policy-1/2018-19

Date: \_\_\_\_\_

To

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

**Sub:** Release of grant for conduct of Short Term Training Programme (STTP) under AQIS 2018-19 during the financial year 2019-20- reg.

Sir,

This is to convey the sanction of the Council for payment of **Rs. 300000 /- (Rupees Three Lakh Only)** for conduct of Short Term Training Program as per details given below:-

|  |  |
|--|--|
| 1. Name and address of the beneficiary University / Institution                    | SARANATHAN COLLEGE OF ENGINEERING , VENKATESWARA NAGAR EDAMALAIPATTIPUDUR POST PANJAPPUR VILLAGE SRIRANGAM TALUK TIRUCHIRAPPALLI-620012 Tamil Nadu |
| 2. Permanent ID of Institute   | 1-4190371  |
| 3. Institute type  | Unaided - Private  |
| 4. Name of Coordinator   | Dr. SUMATHI RATHNAM  |
| 5. Amount sanctioned   | Rs. 300000/-   |
| 6. Amount to be released   | Rs.300000/- Full & final payment   |
| 7. Head of account.  | 601.15(a) Gen. Short Term Training Programme (Plan)  |
| 8. The authorized officer in whose favour Cheque/ Demand Draft/ RTGS is to be made | REGISTRAR / DIRECTOR / PRINCIPAL   |
| 9. Title of the programme  | BIG DATA ANALYTICS   |

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

# Mechanical Engineering



The Institution of Engineers (India)

AN ISO 9001: 2015 CERTIFIED ORGANISATION  
(ESTABLISHED: 1920) (INCORPORATED BY ROYAL CHARTER: 1934)  
6 GOKHALE ROAD, KOLKATA - 700 028



*A Century of Service to the Nation*

Ref: R4/2010/2019-20/RG2020067

Date: 11 June 2020

The Principal  
Saranathan College of Engineering  
Techy Madurai road Panjappur  
Venkateswara Nagar, Edamattipatti Pudur  
Tiruchirappalli 620012 Tamil Nadu

Dear Sir/Madam,

Sub: Intimation of Approval for R&D Project entitled: "Comprehensive Analysis of New Composition Cost Single Point Cutting Tool in Machining various Materials"

This has reference to your subject project proposal submitted to The Institution of Engineers (India) for funding under III 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                       | SRG2/0057                         | Category               | US   | Financial Year           | 2019-20 |
|----------------------------------|-----------------------------------|------------------------|--|--------------------------|---------|
| Guide(s)                         | A Saranathan                      | Applicant(s)           | 1. N R Joban<br>2. R S Sarath Kumar<br>3. M Zashan Ahmed |                          |         |
| College / Institute / University | Saranathan College of Engineering | Total Grant Sanctioned | ₹10,000/-  | Number of Installment(s) | 1       |

Kindly quote your project ID in your future correspondence.

Please note that the Terms & Conditions of the Grant (Genc 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 IROD in R&D Compendium and forms in .docx/.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

End: as stated.

cc: Guide(s) - A Saranathan



# The Institution of Engineers (India)

AN ISO 9001:2015 CERTIFIED ORGANISATION  
(ESTABLISHED UNDER THE ENGINEERS ACT, 1947)  
8 BORNHALL ROAD, KOLKATA - 700 020



*A Century of Service to the Nation*

Ref: E-471/06/2024/00042023996

Date: 31 December 2023

The Principal  
Saranathra College of Engineering  
Tiruchy-madurai road, Tiruppur  
Vinkalavayana Nagar, Talambapatti Padur  
Tiruchirappalli 620012, Tamil Nadu.

Dear Sir/Madam,

Sub: Intimation of Approval for R&D Project entitled: "Performance Monitoring and Controlling of Shell and Tube Heat Exchanger Using Internet of Things".

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

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

| Project ID                       | 02/02/046                              | Category               | 01                              | Financial Year         | 2023-24 |
|----------------------------------|--|------------------------|---------------------------------|------------------------|---------|
| Guide(s)                         | 1. Shiva Kumar R.S.<br>2. Vigneshwar P | Applicant(s)           | 1. J Vignesh<br>2. P Sha Sankar |                        |         |
| College / Institute / University | Saranathra College of Engineering      | Total Grant Sanctioned | ₹10,000                         | Number of Installments | 1       |

Kindly accept your project ID as 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: (i) final and soft copy of the Project Report; (ii) hard/soft copy of the Project Completion Report; (iii) two hardcopies of the Utilization Certificate; (iv) soft copy of the Final or R&D Completion pro forma (as enclosed herewith) and (v) 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 at [research@ioeindia.org](mailto:research@ioeindia.org).

Thanking you,

Yours faithfully,

(Dr. N. Sengupta)  
Director (Technical)  
For Secretary & Director General

Best of luck!

cc: Guide(s) - 1. Shiva Kumar R.S.  
2. Vigneshwar P



# The Institution of Engineers (India)

A Scientific and Industrial Research Organisation (SIRO)  
Recognised by Government of India, Ministry of Science and Technology,  
Department of Scientific and Industrial Research

## Certificate of Project Completion

This is to certify that the PG project entitled "**Experimental Investigation on Solar Hybrid Heater System**" bearing Project ID **PG2019009** has been successfully carried out and completed by:

*Aavind Kannan S. AMIE*

of

**Saranathan College of Engineering,  
Institutional Member of IEI**

under the guidance of

*Sidhavan M. AMIE*

during the FY 2018-19 through funding under IEI R&D Grant-in-Aid Scheme.



  
Secretary & Director General



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

**PROJECT COMPLETION REPORT**

1. Project I.D. : UG2019029
2. Project Title : Experimental Analysis, Evaluation and Optimization of Friction Welding Parameters on EN 353 Alloy
3. Name of the Investigator : A. Rakesh, W. Robinson, C. Naveen
  - a. E-mail : rakesh.angaraj@gmail.com
  - b. Contact Address : Saranathan College of Engineering, Venkateswara Nagar, Panjappur, Tiruchirappalli – 620012
  - c. Mobile No. : 98945 91653
4. Name of the Institution of which Investigator is attached : Saranathan College of Engineering
5. Name and Designation of the Guide / supervisor : Dr. N. Baskar, Professor and Mr. S. Karthikeyan, Assistant Professor
  - a. E-mail : baskarnaresh@yahoo.co.in
  - b. Mobile No. : 94431 92729
6. Name of the Director / Principal of the Institution : Dr. D. Valavan
7. Date of Release of R & D Grant : October 2018
8. Date of Commencement of the Project : 19-01-2019
9. Amount of R & D Grant : Rs. 15,000/-
10. Date of Receipt of R & D Grant : 24-12-2018
11. How much work is yet to be completed with the reason of delay : Nil
  - a. Percentage of work completed : 100%
  - b. Amount utilized till date : Rs. 16,017/-

Continued.....





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

12. How much work is yet to be completed with the reason of delay : Nil
- a. Work yet to be completed with details :  
b. Reason for delay :
13. Probable date of completion of the project : Nil
14. Amount of matching grant : Rs. 15,000/-
- a) Name and address of the organization : Saranathan College of Engineering, Venkateswara Nagar, Panjappur, Tiruchirappalli - 620012
- b) Date of receipt : 24-12-2018
- c) Amount received : Rs. 15,000/-
- d) Amount utilised till date : Rs. 16,017/-
15. Name of the organizations providing support to the project:
- a. Name of the organization : Saranathan College of Engineering, Venkateswara Nagar, Panjappur, Tiruchirappalli - 620012
- b. Nature of support e.g. financial, technical and infrastructural : Technical and Laboratory support
- c. Support yet to be received : Nil
16. Project Achievements in brief :
- Literature review has been done for friction welding input process parameters.
  - 27 friction welded joints are made at WRI based on the recommended input process parameters.
  - The welded joints are tested for the output responses like axial shortening, hardness and temperature.
  - To maximize the output responses and to improve the quality of the welded joints, Design of Experiment is used to obtain the optimal input process parameters.
17. Expected beneficiaries of the project :
- These investigational studies helps in the applications of EN 353 alloy steel in the field of Automobile for manufacturing camshaft, gears, gudgeon pin, shafts, pinions and other parts.
  - The best results are to be recommended to welding industries. Further, the investigation can be extended to different combination of work piece materials.
18. Any other information to be furnished regarding progress of project :
- Best paper award – Paper presentation in National level Conference on “Cutting Edge technologies in Electrical, Communication and Soft Computing techniques” (NCCEECS’19) organized by Saranathan College of Engineering, Trichy on 14<sup>th</sup> March 2019.
  - Paper presentation in International Conference on “Recent Trends in Nanomaterials for Energy, Environmental and Engineering” (ICONEEEA-2K19) organized by K.Ramakrishnan College of Technology, Trichy on 14<sup>th</sup> & 15<sup>th</sup> March 2019.

Continued.....



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

PROJECT I.D. UG2019029

CERTIFICATE

Certified that:

1. The above progress report is correctly and duly audited : Yes
2. The necessary infrastructure is available for completion of the project by the due date : Yes
3. The balance amount is readily available for completion of the project by the due date : Nil
4. Interim technical report on the project has been enclosed : Yes
5. The project will be completed by the due date : Yes

1. *A Rakesh*  
2. *W. Robinson*  
3. *C. Naveen*  
Signature of the Investigator

1. A. RAKESH  
2. W. ROBINSON  
3. C. NAVEEN

1. *N. Baskar*  
2. *S. Karthikeyan*  
Signature of the Guide

1. Dr. N. BASKAR  
2. S. KARTHIKEYAN

Dr. N. BASKAR, M.E., Ph.D.,  
Supervisor Registration No. 1820047  
Professor/Dept. of Mechanical Engineering  
Saranathan College of Engineering  
Tiruchirappalli - 620012.

*[Signature]*  
Signature & Seal of the Director/Principal  
**PRINCIPAL**  
Saranathan College of Engineering  
TRICHY - 12.





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

**UTILISATION CERTIFICATE**

(To be submitted in duplicate)

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

1. Project I.D : UG2019029
2. Title of the Project : Experimental Analysis, Evaluation and Optimization of Friction Welding Parameters on EN 353 Alloy
3. Name of the Institution : Saranathan College of Engineering
4. Name of the Project Guide (PG) : Dr. N. Baskar and Mr. S. Karthikeyan

**UTILISATION CERTIFICATE**

Certified that out of Rs. 15,000/- of grants-in-aid sanctioned during the year 2018 -2019 in favour of The Principal, Saranathan College Of Engineering under IEI's letter No. R.4/2/UG/2018-19/RDUG2018032 dated 24-12-2018 and Rs. 15,000/-. A sum of Rs. 16017/- has been utilised for the purpose of Grant-in-aid scheme – UG level project for which it was sanctioned and that the balance of Rs. Nil remaining unutilised at the end of completion has been returned to IEI (vide Cheque/DD No. Nil dated Nil).

1. *N. Baskar* 11/11/19  
2. *S. Karthikeyan*  
Signature of Principal Guide  
with date & seal

1. DR. N. BASKAR  
2. S. KARTHIKEYAN

Dr. N. BASKAR, M.E., Ph.D.,  
Supervisor Registration No. 1820047  
Professor, Dept. of Mechanical Engineering  
Saranathan College of Engineering  
Tiruchirappalli - 620012.

*[Signature]* 11/11/19  
Signature of Registrar/  
Director /  
Principal with date & seal

PRINCIPAL  
Saranathan College of Engineering  
TRICHY - 12.

*[Signature]*  
Accounts Officer of the  
Institute with date & seal



## ABOUT THE COLLEGE

Saranathan College of Engineering was founded in the year 1998 by "Vidya Seva Ratnam", "Guru Seva Mani" Auditor Sri.K. Santhanam. It was so named in respectful memory of his Guru Principal Saranathan, the greatest ever Principal of National College Tiruchirappalli. It is a self-financing college approved by AICTE and affiliated to Anna University, Chennai. CSE, EEE, ECE and Mechanical departments are permanently affiliated to Anna University, Chennai. All the eligible 6 UG branches are accredited by NBA, New Delhi

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering Department was started in the year 2005. The department offers an undergraduate programme - B.E. (Mechanical Engineering) with sanctioned intake of 120 students and a postgraduate programme - M.E. (Thermal Engineering) with a sanctioned intake of 18 students. The department is accredited by NBA, New Delhi (since June 2018) in TIER II category. Also the department is a recognized research centre of Anna University, Chennai and it has state-of-the-art laboratories, CAD centre with advanced software, a department library, experienced and expert faculty members having doctoral degrees, outstanding research publications in peer reviewed International/National Journals. The department's mission is to generate employable mechanical engineering graduates with knowledge, skills and ethics; provide them with the professional and soft skills necessary to lead a successful career and peaceful life and equip them with the confidence necessary to contribute to society by performing in their respective chosen fields of endeavour.

## PROGRAMME EVALUATION COMMITTEE (PEC)

### PATRON:

Shri. S.Ravindran - Secretary

### CHAIRPERSON:

Dr. D. Valavan - Principal

### CO-CHAIRPERSON:

Dr. G. Jayaprakash - Professor & Head,  
Mechanical Engineering.

### COORDINATOR:

Dr. N. Baskar - Professor, Mechanical Engineering

### PEC MEMBER

Dr. C.Krishnakumar - Professor & Head, Department of  
Electrical and Electronics Engineering.

### ORGANIZER:

Dr. R. Rekha - Associate Professor,  
Mechanical Engineering.

### CONVENER:

Mr. A. Saravanan - Assistant Professor,  
Mechanical Engineering.

## ADDRESS FOR CORRESPONDENCE

Mr. A. Saravanan (+91 9488482091)  
Assistant Professor  
Department of Mechanical Engineering  
Saranathan College of Engineering,  
Panjappur, Tiruchirappalli, Tamil Nadu 620012.  
e-mail: saravanan-mech@saranathan.ac.in

# AICTE



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Two Weeks Faculty Development Programme  
01

Cutting Edge Technology and  
Contemporary Research In  
Mechanical Engineering

10<sup>th</sup> to 22<sup>nd</sup> June 2019



Organized by  
Department of Mechanical Engineering

## SARANATHAN COLLEGE OF ENGINEERING

Accredited by NBA, New Delhi  
(Approved by AICTE, New Delhi and  
affiliated to Anna University, Chennai)

[www.saranathan.ac.in](http://www.saranathan.ac.in)

**FACULTY DEVELOPMENT PROGRAM****FORMAT FOR UTILIZATION CERTIFICATE UNDER THE SCHEME  
FACULTY DEVELOPMENT PROGRAM**

AICTE File NO. : F.No.34-55/209/RIFD/FDP/POLICY-1/2017-18,  
Dated: 09.01.2019  
Name of Coordinator : Dr.N.Baskar  
Dates of the programme : 10.06.2019 & 22.06.2019  
Title of the Seminar : Two Weeks Faculty Development Program on Cutting Edge  
Technology and Contemporary Research in Mechanical  
Engineering.

| S.NO | Letter No. and date   | Amount         |   |
|------|---|----------------|---|
| 1(a) | F.No.34-55/209/RIFD/FDP/POLICY-1/2017-18, Dated: 09.01.2019 | Rs.6,47,000.00 | Certified that out of Rs6,47,000 of grants-in-aid sanctioned during the year 2018-2019 in favour of Principal under this Institution Letter No F.No.34-55/209/RIFD/FDP/POLICY-1/2017-18, Dated: 09.01.2019 given in the margin a sum Rs 6,47,000 has been utilized for the purpose of Faculty Development Program for which it was sanctioned and that the balance of Rs Nil remaining unutilized at the end of the year has been surrendered to the All India Council for Technical Education. |
| (b)  | Grant received  | Rs.6,47,000.00 |   |
| (c)  | Balance to be Released by AICTE                             | Nil            |   |

Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

1. Boarding and Lodging to the Participants
2. Honorarium to Resource Persons
3. TA/ DA to Resource Persons including two outstation resource persons
4. Reprographic charges of learning materials

Name & Signature of the Coordinator  
with seal

Dr. N. BASKAR, M.E., Ph.D.,  
Supervisor Registration No. 1820047  
Professor, Dept. of Mechanical Engineering  
Saranathan College of Engineering

Name & Signature of the Head of the  
Institution

Dr. Duvelavan, M.Tech.,  
Principal  
Saranathan College of Engg  
Trichy - 12.

Signature (with seal) of the Finance Officer /  
Auditor / Accounts Officer / Certified by CA with her/his Membership No. & Full Postal  
Address.



For M. RAJU & Co.,  
CHARTERED ACCOUNTANTS.

M. RAJU  
M. NO. 026517  
PROPRIETOR

**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**

DOTE CAMPUS, CHENNAI - 600 025

**STUDENT PROJECT SCHEME 2018 - 2019**

**UTILISATION CERTIFICATE**

(TWO COPIES)

1. Name of the guide and address : Dr. N. Baskar/Professor  
Dr. M. Ganesan/Assistant Professor  
Department of Mechanical Engineering  
Saranathan College of Engineering,  
Venkateswara Nagar  
Panjappur  
Tiruchirappalli - 620 012
2. Name of the student(s) : Mr. S. Bilal Ahamed  
Mr. R. Lavanyan  
Department of Mechanical Engineering  
Saranathan College of Engineering  
Venkateswara Nagar  
Panjappur  
Tiruchirappalli - 620 012
3. Title of the project : Design and Fabrication of Single Point  
Composite Tool for Machining Various  
Materials
4. Project code : EME-069

It is certified that a sum of Rs. 7,500/- (Rupees Seven Thousand and 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. Nil remaining unutilized is refunded.

1.   
Signature of the Guide

2.   
Signature of the HOD

3.   
Signature of the PRINCIPAL

1. Dr. N. BASKAR  
Supervisor Registration No. 1420047  
Professor, Dept. of Mechanical Engineering  
Saranathan College of Engineering  
Tiruchirappalli - 620012.

Head of the Department  
Mechanical Engineering  
Saranathan College of Engineering  
Tiruchirappalli - 620 012.

With SEAL  
PRINCIPAL  
Saranathan College of Engineering  
TRICHY - 12.

PROJECT I.D. UG2017020

**CERTIFICATE**

Certified that:

1. The above progress report is correctly and duly audited.
2. The necessary infrastructure is available for completion of the project by the due date.
3. The balance amount is readily available for completion of the project by the due date.
4. Interim technical report on the project has been enclosed.
5. The project will be completed by the due date.

Signatures of the Investigator

1. H. H. H. H.
  2. E. K. K. K.
- Signature of the Investigator
1. P. P. P. P.
  2. M. M. M. M.
  3. E. E. E. E.

Signature of the Guide

1. Dr. N. Baskar
2. Dr. M. Srinivasan

Signature of the Director/Principal

PRINCIPAL  
Saranathan College of Engineering  
TRICHY - 12.

**Dr. N. BASKAR, M.E., Ph.D.**  
Supervisor Registration No. 12,0047  
Professor/Dept. of Mechanical Engineering  
Saranathan College of Engineering  
Trichirappalli - 620 012

#### ABOUT THE COLLEGE

Saranathan College of Engineering was founded by "Vidya Seva Ratnam", "Guru Seva Mani" Auditor Sri. K. Santhanam in the year 1998. It was so named in respectful memory of his Guru Principal Saranathan, the greatest ever Principal of National College, Tiruchirappalli. It is a self-financing college approved by AICTE and affiliated to Anna University, Chennai. Civil, CSE, ECE, EEE, ICE, IT and Mechanical Engineering departments are affiliated to Anna University, Chennai. All the eligible 6 UG branches are accredited by NBA, New Delhi.

#### ABOUT THE DEPARTMENT

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#### PROGRAMME EVALUATION COMMITTEE (PEC)

##### PATRON:

**Sri. S. Ravindran**  
*Secretary*

##### CHAIRPERSON:

**Dr. D. Valavan**  
*Principal*

##### COORDINATOR:

**Dr. G. Jayaprakash**  
*Professor & Head,  
Department of Mechanical Engineering.*

##### PEC MEMBER:

**Dr. C. Krishnakumar**  
*Professor & Head, Department of  
Electrical and Electronics Engineering.*

##### ORGANIZER:

**Dr. M. R. Anantha Padmanaban**  
*Associate Professor,  
Department of Mechanical Engineering.*

##### CONVENER:

**Dr. M. Ganesan**  
*Assistant Professor,  
Department of Mechanical Engineering.*

#### ADDRESS FOR CORRESPONDENCE:

**Mr. S. Karthikeyan (+91 93440 80099)**  
*Assistant Professor  
Department of Mechanical Engineering  
Saranathan College of Engineering  
Panjappur, Tiruchirappalli,  
Tamil Nadu - 620012.  
Email: karthikeyan-mech@saranathan.ac.in*

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Product Design & Development  
using CAD/CAM/CAE Tools**

**18<sup>th</sup> to 23<sup>rd</sup> November 2019**



*Organized by*

**Department of Mechanical Engineering  
SARANATHAN COLLEGE OF ENGINEERING**

*Accredited by NBA, New Delhi  
(Approved by AICTE, New Delhi and  
affiliated to Anna University, Chennai)  
www.saranathan.ac.in*



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

**UTILISATION CERTIFICATE**

(To be submitted in duplicate)

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

|                            |  |
|----------------------------|--|
| 1. Project I.D             | RDUG2017035  |
| 2. Title of the Project    | EXPERIMENTAL INVESTIGATION ON HYBRID FLOW HEAT EXCHANGER |
| 3. Name of the Institution | SARANATHAN COLLEGE OF ENGINEERING                        |
| 4. Guide (PG)              | SRIDHARAN M & VIGNESHWAR P                               |

**UTILISATION CERTIFICATE**

Certified that out of Rs.15,000 of grants-in-aid sanctioned during the year 2017-2018 (March) in favour of SARANATHAN COLLEGE OF ENGINEERING under IET's letter No. R.4/2/AIG/2017-18/RDUG2017035 dated 06/04/2018 and Rs.15000. A sum of Rs.15,000 has been utilised for the purpose of procurement of raw material, fabrication of heat exchanger components and erection of heat exchanger for which it was sanctioned and that the balance of Rs.-NIL- remaining unutilised at the end of completion has been returned to IET (vide Cheque/DD No. -Not Applicable- dated -Not Applicable-)

1. M. Sridharan  
 [M. SRIDHARAN]  
 2. P. Vigneshwar P  
 [P. VIGNESHWAR P]

Signature of PG with date

*ad h...*  
 Sridharan

Signature of Registrar/  
 Director /  
 Principal with date & seal

PRINCIPAL  
 Saranathan College of Engineering  
 TRICHY - 12.

*V. Krishna Swamy*  
 23/06/2018  
 (V. KRISHNASWAMY)

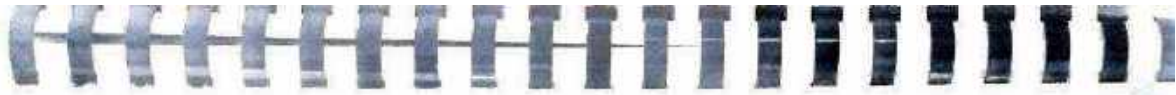
Accounts Officer of the  
 Institute with date & seal



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

**PROJECT COMPLETION REPORT**

1. Project I.D. : RDUG2017035
2. Project Title : EXPERIMENTAL INVESTIGATION ON HYBRID FLOW HEAT EXCHANGER
3. Name of the Investigator: 1. VINITH KUMAR V (Principal Investigator)  
2. NESAN K (Co-Investigator)  
3. SHARAN S (Co-Investigator)  
  
a. E-mail: vinith97@gmail.com                      c. Mobile No. : 9626991789  
  
b. Contact Address: 382,TFT Complex, Salai Street, Ayyampettai, Thanjavur-614201
4. Name of the Institution of which Investigator is attached:  
  
SARANATHAN COLLEGE OF ENGINEERING
5. Name and Designation of the Guide / supervisor:  
  
1. Principal Guide: SRIDHARAN M / Assistant Professor / Mechanical  
2. Co- Guide: VIGNESHWAR P / Assistant Professor / Mechanical  
  
a. E-mail: srividhiya@gmail.com                      b. Mobile No.: 9942345900
6. Name of the Director / Principal of the Institution: Dr. D.VALAVAN
7. Date of Release of R & D Grant : 31/03/2018
8. Date of Commencement of the Project : 10/04/2018
9. Amount of R & D Grant : Rs 15,000
10. Date of Receipt of R & D Grant : 06/04/2018
11. How much work is yet to be completed with the reason of delay: Full Work Completed
  - a. Percentage of work completed : 100% of work completed
  - b. Amount utilized till date : Rs 15,000 (Full Amount Utilized)



#### ABOUT THE COLLEGE

Saranathan College of Engineering was founded by "Vidya Seva Ratnam", "Guru Siva-Muni" Acharya S.K. Sarathanam in the year 1990. It was established in respectful memory of the Guru Principal Sarathanam, the greatest ever Principal of National College. It is a self-financing college approved by AICTE and affiliated to Anna University, Chennai.

#### ABOUT THE DEPARTMENT

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#### ORGANIZING COMMITTEE

##### PATRON:

Shri. S.Ravindran  
Secretary

##### CO-PATRON:

Prof. V.Nagarajan  
Director

##### CHAIRMAN:

Dr. D. Valavan  
Principal

##### CO-CHAIRMAN:

Dr. G. Jayaprakash  
Professor & Head,  
Department of Mechanical Engineering

##### COORDINATOR:

Dr. N. Baskar  
Professor,  
Department of Mechanical Engineering

##### CONVENER:

Mr. A. Saravanan  
Asst. Professor,  
Department of Mechanical Engineering

##### ADDRESS FOR COMMUNICATION:

A. Saravanan (+91 9466482091)  
Department of Mechanical Engineering  
Saranathan College of Engineering,  
Varkkaleswara Nagar, Madurai Main Road,  
Perappur, Tiruchirappalli  
Tamil Nadu 620012

#### AICTE



Sponsored

Two-Day National Workshop

on

Application of Intelligent Techniques  
in Manufacturing Process

16<sup>th</sup> and 17<sup>th</sup> of November 2017



Organized by

Department of Mechanical Engineering



SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE) New Delhi and Affiliated to

**SEMINAR GRANT**

Annexure - II

**FORMAT FOR UTILIZATION CERTIFICATE UNDER THE SCHEME  
SEMINAR GRANT**

(FINANCIAL YEAR 2016 - 2017)


AICTE File NO. : F.No.7-79 RIFD/SG/POL-1/2016-17, Dated: 08.06.2017  
 Name of Coordinator : **Dr.N.Baskar**  
 Dates of the programme : 16.11.2017 & 17.11.2017  
 Title of the Seminar : **Application of Intelligent Techniques in Manufacturing Process**

| S.NO | Letter No. and date   | Amount                |  |
|------|---|-----------------------|--|
| (a)  | Date of Offer Letter<br>F.No.7-79/RIFD/SG/POL-1/2016-17<br>Dated:08.06.2017 | <b>Rs.1,00,000.00</b> | Certified that out of <b>Rs1,00,000</b> of grants in-aid sanctioned during the year <b>2016 2017</b> in favour of Principal under this Institution Letter No F.No.7 79/RIFD/SG/POL-1/2016-17, Dated <b>08.06.2017</b> given in the margin a sum R <b>1,00,000</b> has been utilized for the purpose of <b>SEMINAR GRANT</b> for which I was sanctioned and that the balance of R <b>Nil</b> remaining unutilized at the end of the year has been surrendered to the AI India Council for Technical Education |
| (b)  | Grant received  | <b>Rs.50,000.00</b>   |  |
| (c)  | Balance to be Released by AICTE   | <b>Rs.50,000.00</b>   |  |

I declare that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

1. Boarding and Lodging to the Participants
2. Honorarium to Resource Persons
3. TA/ DA to Resource Persons including two outstation resource persons
4. Its program/te changes of learning materials

Name & Signature of the Coordinator with seal  
**DR.N.BASKAR, M.E., Ph.D.**  
 Supervisor Reg.No.30110 (132075)  
 Professor/Dept of Mechanical Engineering  
 Saranathan College of Engineering  
 Trichy

  
 Name & Signature of the Head of the Institute with seal  
**Dr. B. Valavan, M.Tech., Ph.D.,**  
 Principal  
**Saranathan College of Engineering**  
**Trichy - 12.**

Signature (with seal) of the Finance Officer / Auditor / Account Officer / Certified by CA with her/his Membership No. & Full Postal Address.

  
**INRAJ & CO.**  
**CHARTERED ACCOUNTANTS**  
 10, RAJAGOPALAN STREET, TRICHY

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

**PROJECT COMPLETION REPORT**

1. Project I.D. : UG2017020
2. Project Title : Experimental Investigation and Optimization of Milling Parameters for Machining - Aluminium Silicon Carbide Composite using Design of Experiments Approach
3. Name of the Investigator : 1. R. Mathanbabu  
2. M. Moorthy  
3. E. Kumaresan
  - a. E-mail: mathankhoor96@gmail.com
  - b. Mobile No.: 80123 53473
- b. Contact Address :  
Saranathan College of Engineering, Venkateswara Nagar, Tiruchirappalli-620 012, Tamilnadu.
4. Name of the Institution of which Investigator is attached:  
Saranathan College of Engineering, Venkateswara Nagar, Tiruchirappalli-620 012, Tamilnadu.
5. Name and Designation of the Guide / supervisor: Dr. N. BASKAR  
Dr. M. GANESAN
  - a. E-mail: baskarnresh@yahoo.co.in  
arnmganesan@gmail.com
  - b. Mobile No.: 94431 92729  
98658 64040
6. Name of the Director / Principal of the Institution: Dr. D. VALAVAN
7. Date of Release of R & D Grant : 06-09-2016
8. Date of Commencement of the Project : 05-01-2017
9. Amount of R & D Grant : Rs. 36,000/-
10. Date of Receipt of R & D Grant : 28-09-2016
11. How much work is yet to be completed with the reason of delay: Nil
  - a. Percentage of work completed : 100 %
  - b. Amount utilized till date : Rs. 37,102/-

12. How much work is yet to be completed with the reason of delay?!!

- a. Work yet to be completed with details.
- b. Reason for delay.

13. Probable date of completion of the project

14. Amount of matching grant : Rs. 36,000/-

a) Name and address of the organization:

Saraswathi College of Engineering, Venkateswara Nagar, Tiruchirappalli-620 012, Tamilnadu

b) Date of receipt : 26-06-2016

c) Amount received : Rs. 36,000/-

d) Amount utilized till date : Rs. 22,100/-

15. Name of the organizations providing support to the project

a. Name of the organization:

Saraswathi College of Engineering, Venkateswara Nagar, Tiruchirappalli-620 012, Tamilnadu

b. Source of support e.g. financial, technical and infrastructural/ Technical & Laboratory

c. Support yet to be received: Yes

16. Project Achievements in brief

- Crackle furnace is fabricated.
- Aluminium - silicon carbide composite material is casted.
- Temperature is measured hot and workpiece and also analyzed at different levels.
- Optimal machining parameters are identified for face milling operations.

17. Expected beneficiaries of the project: The optimal parameters are proposed to manufacturing industries.

18. Any other information to be furnished regarding progress of project.

- Best Project Award - 3<sup>rd</sup> IIT Tiruchirappalli State Career Student's & Technicians's Convention and All India Seminar on "Innovation, Technology and Knowledge Economy", S.J.S. College of Engineering, Madurai on 17<sup>th</sup> March 2017.
- Third Place - Paper Presentation in National Level Technical Symposium organized by Trinity Engineering College, Kumbalangi, Trichy on 20<sup>th</sup> March 2017.
- International Conference on Newer Engineering Composite Technology (ICNCTE-17)
- To deliver guest lecture on "Optimization of Milling Parameters for Aluminium-Silicon Carbide Composite" in IIT - Tiruchirappalli local zone.

  
1. Dr. N. Baskar

2. Dr. M. Ganesan

**Dr.N.BASKAR, M.E., Ph.D.**  
Superior Registration No. L120547  
Professor/Dept of Mechanical Engineering  
Saraswathi College of Engineering  
Tiruchirappalli - 620 012

  
Dr. G. Jayaraman

Head of the Department  
Saraswathi College of Engineering  
Tiruchirappalli - 620 012

  
Principal

PRINCIPAL  
Saraswathi College of Engineering  
Tiruchirappalli - 12