

|   |                                 |          |    |               |
|---|---------------------------------|----------|----|---------------|
|  | <b>Research and Development</b> | Rev. no. | 01 | <b>SR - 7</b> |
|   |                                 | Date     |    |               |
|   |                                 | Page No. |    |               |

**Permission Request for Seed Money**

**Date:**

**Year: 2025-26**

| <b>Applicant Details</b>   |  |
|--|--|
| Name of the Faculty  |  |
| Designation  |  |
| Department   |  |
| Mobile & Email ID  |  |
| Area of Specilization  |  |
| Project Title  |  |
| Teaching Experience (in years)                                   |  |
| Research & Industrial Experience (in Years)                      |  |
| No. of Publications in last 3 years<br>(Scopus/WoS/SCI Journals) |  |

\*Project Proposal Description Enclosed

**Signature of the Faculty**

**Signature of the HoD of the Applicant**

## **PROJECT PROPOSAL DESCRIPTION (Max. 5 Pages)**

1. Abstract (1 page)
2. Objectives or the specific questions/problem/hypothesis that will be addressed. (Max. 1/2 page)
3. Description of the methods of investigation and techniques (Max. 1 page)
4. Time frame with List the activities (Max. 1/2 page)
5. If this is a new line of inquiry for you, briefly explain why you decided to pursue it. (1/2 page)
6. Outcome anticipated from this project (1/2 page)
7. Additional information
8. Proposed Budget
9. Budget Justification

## **Title of Proposal**

TCE SEED MONEY SCHEME 2024-2025

TCE Seed Money Approval No

*Executive Summary & Technical Report*

**PRINCIPAL INVESTIGATOR**

Dr. XXX

Professor

Department of \_\_\_\_\_



**THIAGARAJAR COLLEGE OF ENGINEERING  
MADURAI – 625 015**

07 March 2020

## TECHNICAL REPORT

|   |  |
|---|--|
| 1. Project Title:   |  |
| 2. Academic year:   | 2024-25  |
| 3. TCE SMS Approval No:   |  |
| 4. Principal Invigilators:<br>(Name &Address)   | Dr. XXXXX<br>Assistant Professor,<br>Department of Electrical and Electronics Engineering,<br>Thiagarajar College of Engineering,<br>Madurai – 625015.<br>Mobile Number:<br>Email: |
| 5. Principal Invigilators: if<br>any (Name &Address)  |  |
| 6. Sanctioned Amount:   |  |
| 7. Duration:  |  |
| 8. Date of Start:   |  |
| 9. Date of completion:  | Expenditure as on 24-Feb-20XX: Capital-Rs. _____/-   |
| 10. Area of Research:<br>10.1 Department<br>10.2 SIG:<br>10.3 Description   |  |
| 11. Objectives of the Proposal:<br>• A<br>• B   |  |
| 12. Methodology:<br>The aim of this project is,<br>• With the smart m   |  |
| 13. Salient Research Achievements:<br>13.1 Summary of Projects<br>(i) <i>Creation:</i><br><br>d server (Fig.1) is used to store various power system parameters in time synchronized manner through concentrta is in kW.<br><div style="text-align: center;">Fig. 1 Smart Meter – Server System at TCE</div><br>(ii) <i>Development of:</i><br><br>An Artificia<br><div style="text-align: center;">Fig.2 Automated Load Management Model</div><br>(iii) Classification and Prediction of demand using Machine Learning Algorithm:<br><br>The machine learning<br>13.2 New Observations:<br>• The.<br>13.3 Innovations: |  |

|   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>Clustered</li> </ul>   |  |   |
| 13.4 Application Potential:   |  |   |
| 13.4.1 Long Term  |  |   |
| <ul style="list-style-type: none"> <li>The institution will become a prosumer (active consumer as well as generator), and not just a consumer.</li> </ul>   |  |   |
| 13.4.2 Immediate  |  |   |
| <ul style="list-style-type: none"> <li>Becoming familiar with the load consumption pattern of each laboratory, auditorium, and library.</li> </ul>  |  |   |
| 13.5 Any other:   |  |   |
| 14.1 PhDs Produced no:  | 14.2 Technical Personnel trained:<br>( 1 – UG Students,<br>2 – PG Students&<br>2 – Ph.D. Scholars- pursuing) | 14.3 Research Publications arising out of the present project:<br>Numbers with classification,<br>Conference Paper, Journal Paper,<br>Patent, prototype |
| 15. List of Publications from this Project(including title, author(s),journals & year(s))   |  |   |
| (A) Papers published only in cited Journals(SCI) :  |  |   |
| ✓ G R, Hemh,  |  |   |
| (B) Papers published in Conference Proceedings, Popular Journals etc.   |  |   |
| ✓ G R, Hema,  |  |   |
| 16. Patents filed/to be filed:  |  |   |
| ✓ Application Number:201; Date of Registration : 05/08/2019   |  |   |
| Title: A Novel Intelligence Based Load Monitoring and Automation System Using IoT   |  |   |
| 17. Prototype:  |  |   |
| Description with add necessary images   |  |   |
| 18. Mention how the project led to or is expected to lead to an external funding proposal   |  |   |
| 19. Any other Outcome: Events/Hackathon/etc if any  |  |   |
| 20. Conclusion and Impact summarize:  |  |   |
| <ul style="list-style-type: none"> <li>How the project met its objectives.</li> <li>Contribution to TCE’s research infrastructure.</li> <li>Future plans for scaling or external funding.</li> </ul>  |  |   |
| 21 Enclosure:   |  |   |
| <ul style="list-style-type: none"> <li>Publication front page and acknowledgement section</li> <li>Patent Proof</li> <li>Closure Form</li> <li>Utilization Certificate</li> <li>If any</li> </ul>   |  |   |
| 22. Declaration by Principal Investigator   |  |   |
| I hereby declare that:  |  |   |
| 1. All equipment, prototypes, and assets procured or developed under the TCE Seed Money Scheme (Sanction No: ECR/2017/000827) are fully functional, properly maintained, and ready for inspection, demonstration, or audit by the TCE administration or any authorized committee at any time. |  |   |
| 2. All research publications, patents, conference presentations, and other scholarly outputs arising from this project explicitly acknowledge the financial and institutional support received from the Thiagarajar College of Engineering Seed Money Scheme (TCE SMS).                       |  |   |
| 3. I am willing and available to present the project outcomes, methodology, and future proposals before college committees, review boards, or external stakeholders as and when required by the institution.  |  |   |
| 4. All original bills, invoices, and expenditure proofs related to this project have been duly scanned and submitted via email to research@tce.edu on _____ [Date of Submission].   |  |   |
| Signature of Principal Investigator   |  |   |

|   |
|---|
| Name: Dr. XXXXX<br>Department: Electrical and Electronics Engineering<br>Date: [Date of Submission] |
| Signature of Head of the PI Department  |
| Signature of Principal  |

# Thiagarajar College of Engineering, Madurai –15 Research and Development

## TCE Seed Money Scheme - Closure form

Academic Year \_\_\_\_\_ to \_\_\_\_\_

|   |  |   |  |    |                            |   |  |
|---|--|---|--|----|----------------------------|---|--|
| <b>1. Basic Project Information</b>   |  |   |  |    |                            |   |  |
| a)  | Title of the Project                               | : |  |    |                            |   |  |
| b)  | Principal Investigator (PI) and Co-Investigator(s) | : |  |    |                            |   |  |
| c)  | Department   | : |  |    |                            |   |  |
| d)  | Date of Project Start                              | : |  | e) | Date of Project Completion | : |  |
| f)  | Sanctioned Amount                                  | : |  | g) | Total Amount Utilized      | : |  |
| <b>2. Project Summary</b>   |  |   |  |    |                            |   |  |
| a) Brief overview of the project (objectives, scope, and background)        |  |   |  |    |                            |   |  |
| b) Summary of work completed  |  |   |  |    |                            |   |  |
| <b>3. Achievement of Objectives</b>   |  |   |  |    |                            |   |  |
| a) List of approved project objectives                                      |  |   |  |    |                            |   |  |
| b) Status (Achieved / Partially Achieved / Not Achieved) for each           |  |   |  |    |                            |   |  |
| c) Explanation of any deviations or additional outcomes                     |  |   |  |    |                            |   |  |
| <b>4. Methodology Adopted</b>   |  |   |  |    |                            |   |  |
| a) Overview of the research or implementation methodology used              |  |   |  |    |                            |   |  |
| b) Tools, techniques, or technologies adopted                               |  |   |  |    |                            |   |  |
| <b>5. Results and Outcomes</b>  |  |   |  |    |                            |   |  |
| a) Key findings, innovations, or deliverables                               |  |   |  |    |                            |   |  |
| b) Relevance or impact of the outcomes (academic, industrial, social, etc.) |  |   |  |    |                            |   |  |
| c) Scope for further work or extension of the project                       |  |   |  |    |                            |   |  |

# Thiagarajar College of Engineering, Madurai –15

## Research and Development

### TCE Seed Money Scheme - Closure form

Academic Year \_\_\_\_\_ to \_\_\_\_\_

|  |
|--|
| <b>6. Publications and Dissemination</b>   |
| a) List of publications (journals, conferences, etc.)                                |
| b) Patents filed (if any)  |
| c) Student involvement (e.g., project work, thesis, internships)                     |
| d) Presentations or workshops conducted  |
| <b>7. Utilization of Funds</b>   |
| a) Total amount sanctioned and utilized  |
| b) Detailed expenditure statement (equipment, consumables, services, manpower, etc.) |
| c) Balance amount (if any) with justification  |
| <b>8. Challenges Faced</b>   |
| a) Major issues or challenges encountered  |
| b) Steps taken to overcome them  |
| <b>9. Conclusion and Suggestions</b>   |
| a) Overall remarks on the success of the project                                     |
| b) Suggestions for improving the Seed Money Scheme in future                         |
| c) Recommendation on possible scale-up, collaboration, or commercialization          |

# Thiagarajar College of Engineering, Madurai –15

## Research and Development

TCE Seed Money Scheme - Closure form

Academic Year \_\_\_\_\_ to \_\_\_\_\_

### 10. Supporting Documents (Annexures)

- Copies of invoices, bills, and expenditure proofs
- Photographs of setup, experiments, or field work
- Copies of publications/presentations
- Statement of Fund Utilization (signed by PI and HoD)
- Any other relevant documents

Signature of the PIs and Co-PIs

Signature of R&D (DLC) of PIs and Co-PIs

Signature of HOD of PIS PIs and Co-PIs



**Total Utilization**

- **Total Amount Utilized: ₹**
- **Unspent Balance (if any): ₹ 0.0**

**Remarks:**

- All expenditures strictly comply with TCE Seed Money Scheme guidelines.
- Unspent amount (if any) will be returned to the R&D section or adjusted as per norms.

**Certification**

I hereby certify that the funds have been utilized for the project work as per the approved budget, and the details provided above are true and correct.

**Signature of Principal Investigator**

Dr.

Assistant Professor

Department of \_\_\_\_\_

Thiagarajar College of Engineering, Madurai

**Signature of Head of the Department**

(Name with Seal)

**Finance Controller**

**PRINCIPAL**

(Name with Seal)