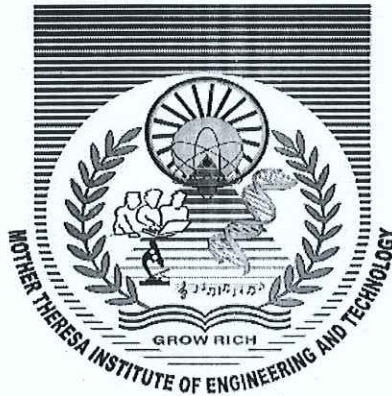


# MOTHER THERESA INSTITUTE OF ENGINEERING AND TECHNOLOGY

*(Approved by AICTE, New Delhi and Affiliated to JNTUA, Anantapuramu-515002)*

Melumoi Post, Palamaner,  
Chittoor(Dist.). AP, India-517408



## POLICY DOCUMENT

## PROMOTION OF RESEARCH

## VISION

To promote excellence in the field of Engineering Education, Research and Consultancy which encompasses knowledge, skills and values to produce technically and intellectually competent and socially committed students to become responsible citizens.

## MISSION

- To empower the students in developing professionalism through innovative teaching and learning process
- To improve high ethical values in engineering and technology through research and consultancy
- To promote high standards in education to meet the needs of the society
- To impart knowledge and technical skills to enhance intellectual property of primary stake holders.

## PROGRAM OUTCOMES (POS)

Engineering Graduates will be able to:

- **PO1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **PO7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**MOTHER THERESA INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**POLICY ON PROMOTION OF RESEARCH**

**1.Preamble**

Mother Theresa Institute of Engineering and Technology (MTIET) aims at nurturing research culture in the campus by promoting research activities and make efforts to establish research partnerships and collaboration with more Government, Industry and other Universities. The institution encourages the faculty, students and staff to take-up research work and publish research articles, file patents and do consultancy work. MTIET also introduces various incentive schemes for the Research and Consultancy Project works carried out in the respective year. The College thrives to emphasis on excellence in research and aims to stay ahead in the Science and Technology sector. Our commitment towards research yields long term technical impacts over interdisciplinary areas. The R&D cell serves as a wide platform for all research enthusiasts who have a constant thirst for innovation and development. Besides promoting research and disseminating knowledge gained the institution helps to develop co-operation between the academic and industrial communities

**2. Vision of MTIET Research Policy**

To be a Centre to provide qualitative engineering and technology solutions to society by fostering the staff and students through research and consultancy activities.

**3. Mission of MTIET Research Policy**

- To create a research environment with state of art infrastructure, well equipped laboratories and research facilities.
- To facilitate the faculty and students to foster innovative ideas, inculcate competent research and consultancy skills through industry –Institute Interaction
- To develop innovative ideas for solving the social/industry problem by empowering the staff and students.

#### 4.Objectives

- To enhance the research output of the institute by research publication in referred journal/conference proceedings and patents.
- To motivate the faculty members to publish the research articles peer reviewed journals/proceedings with SCI, Scopus and WoS Indexing.
- To promote the Institute- R&D Labs- Industry Collaboration to do research that is useful to society.
- To encourage the faculty members to apply for sponsored Research projects in the frontier areas of science, engineering, technology and management.
- To promote the consultancy activities and projects among the faculty members
- To encourage the innovative ideas among the faculty members and students through Institution Innovation Club and to facilitate for patent filing.

#### 5. Research and Development (R&D) Cell

The R & D cell comprises of faculty members from various departments in the Institution. This committee oversees the smooth and efficient co-ordination of research and development activities in the Institution and overall growth. The members will contribute towards enhancing research and development at MTIET. The R&D Cell facilitates creation and transfer of knowledge by conducting technical workshops, seminars, industrial visits, Training programs, National and International Conferences, Technical presentations by faculty members and also provides mechanism for submission of research proposals for funding by Institute and other funding agencies. R&D Cell has the responsibility of regulating the research activities of faculty members, and students of the Institution. It also initiates research components in the curriculum of UG Programs.

- Development of Research infrastructure
- Promotion of research in emerging areas
- Inseminating inter-disciplinary research activities across all the departments
- Providing support to all department faculty to pursue research in their area of expertise
- Monitoring the utilization of research facilities

- Monitoring the quality of publications and other research activities
- Promotion of consultancy activities
- Organizing various seminars, workshops, National / International conferences and other events related to R&D
- Affirm policies for sponsored research and consultancies.
- Encourage the development of strategic research priorities, objectives and monitor research performance within the framework of planning process.

**6.Responsibility of R&D cell:**

- To conduct seminars, workshops, conferences and training programmes for inculcating research interest among faculty.
- To encourage and motivate faculty for submitting proposals to externally funded research and development projects.
- To support interdisciplinary and multidisciplinary research, product design and development, publications in national and international journals of high standard.
- To facilitate collaborations with researchers from premier Institutions and to encourage joint research venture in the latest technology.
- To initiate and promote MoU with industries and R & D organizations for consultancy and collaborative research.
- To suggest peer reviewed national and international journals for subscription in central library
- To motivate students to present technical papers in National and International conferences and display projects in various competitions.
- To allow faculty to participate for seminars, workshops, FDPs and conferences in order to upgrade their knowledge.
- To instruct research scholars and faculty members to apply for projects.
- Discussion and review on department research activities, funded projects and consultancy activities.
- Conducting seminars and workshops on various research avenues.
- Encouraging submission of Journal Paper.
- Measures to motivate students to carry out innovative and socially relevant projects.
- Organizing the international and national conferences.

## **7. Funded Projects and Consultancy Work:**

The general guidelines for faculty engaging in research, development and consultancy are as follows:

### **7.1 Basic Guidelines:**

The entire sanctioned amount shall be utilized as per the guidelines of the funding agency

In case the Principal Investigator leaves the Institution, all the items purchased shall remain as an asset of the Institution. In case of ongoing projects, the responsibility will be delegated to other competent staff members as per the norms of the sponsoring agency.

All Department R&D Coordinators must regularly and diligently update the R&D information on the Institution website for department.

### **7.2 Academic Research Policy:**

Faculty of each department shall conduct research in recent areas.

Faculty publication in either WEB OF SCIENCE or SCOPUS indexed and UGC listed journals are appreciated with appropriate incentives.

Individual Citation Score needs to be improved by publishing in reputed journals.

All publications and research papers of faculty have to go through plagiarism check.

Every PG project shall lead to at least one research publication in a journal

### **7.3 Sponsored and Internal research related policies:**

The eligible faculty shall apply for a minimum of one government funded project per year.

All departments shall strive for recognition by National/International agencies such as AICTE, DST, UGC, ICMR and DRDO through various schemes.

Faculty members are encouraged to identify inter-disciplinary research in their field of expertise.

The faculty members of all the departments shall tie-up with industries and undertakes funded research in emerging areas and industry relevant areas.

All innovative projects carried out by the faculty members are insisted for filing patents on successful completion. Suitable recognition and incentives are given to those faculty members with patents.

Meritorious research work/consultancy by faculty is awarded with monetary incentives.

#### **7.4 Principal Investigator (PI)**

Principal Investigator (PI) of a sanctioned project is considered to be the prime interface between the funding agencies and is the operational head of the project.

The PI is advised to keep the whole project team aware about the progress of the project and involve the Co-PIs in all related project activities.

In his/her absence, the PI may request any of the Co-PI to take-over the responsibility of running the project.

#### **7.5 Planning the research activities:**

The R&D Cell will ensure all policies and procedures which are developed and implemented by the Institute. This document outlines the principles that should be taken into account while planning and conducting research.

#### **7.6 Economy in use of resources**

Assessment of the resources needed to ensure the study is viable within the available means

Adherence to the current safety practices and ethical standards

Securing all necessary ethical and regulatory approvals

Regular review of the research progress is essential to identify new findings of research.

### **8. Promotion for Research:**

#### **8.1 Incentives for publications and patent**

To following incentives are proposed to encourage research and development activities.

### **8.1.1.Funded Project Proposals**

Incentive will be paid to the investigators/team of investigators of research projects with external funding in an amount equal to 7 % of the total grant. This incentive will be paid in two parts – 5% after receipt of the 70% of the project amount and the other 5% on completion of the project and receipt of the balance amount of the project. The incentive amount is divided equally among all the investigators.

### **8.1.2 Research Publications:**

#### **Web of Science with Impact factor/ SCIE Journal (Free Journal)**

The Incentive amount shall be Rs.6000/- per publication with MTIET affiliation to the 1<sup>st</sup> author.

#### **Scopus Indexed Journal (Free Journal)**

The Incentive amount shall be Rs.4000/- per publication with MTIET affiliation to the 1<sup>st</sup> author.

#### **UGC CARE for Science & Management and MLA for English**

The Incentive amount shall be Rs.2000/- per publication with MTIET affiliation to the 1<sup>st</sup> author.

#### **Publication in Scopus Indexed Conference Proceedings**

The Incentive amount shall be Rs.1000/- per publication with MTIET affiliation to the 1<sup>st</sup> author.

#### **Consultancy Projects**

If there is a substantial contribution by the faculty member and the staff in the consultancy project and no resources of the College (like laboratory, computer, software etc. utilized), the members involved in the consultancy project will take 60% of the total net amount so received by the Institution and 40% will go to the College.



  
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