

**Dr.Mahalingam College of Engineering and Technology, Pollachi-3
(An Autonomous Institution)**

Office of Dean Research and Innovation

Research Incentive Awards Ceremony Report

10.06.2023

The Research Incentive Awards Ceremony commenced at 10:30 AM on 09.06.2023 in the CS Hall. The event began with a prayer song by Dr. M. Selva Kumar, Associate Professor, Automobile department.

Welcome address delivered by Dr.C.Ramaswamy, Secretary, NIA Educational Institutions:

Dr. C. Ramaswamy, the Secretary, extended a warm welcome to the chief guest, Dr. C. Umarani, Director of the Centre for Research at Anna University, Chennai, at the Research Incentive Awards Ceremony. He also welcomed Dr. M. Manickam, Chairman of NIA Educational Institutions, Shri M. Hari Hara Sudhan, Correspondent of NIA Educational Institutions, the principal, deans, and faculty members of MCET.

Dr. Ramaswamy emphasized that the event presented a unique opportunity to motivate faculty members in research, and they had chosen the perfect person, Dr. C. Umarani, to grace the ceremony. He highlighted the importance of research, publication, and consultancy in the career development of faculty members, while acknowledging the essential processes of teaching and learning.

Providing an overview of two funded projects received by MCET, Dr. Ramaswamy first mentioned a project titled "Design and Development of Healthcare Equipment." This project, led by Dr. K. N. Vijeyakumar from the AI&DS (Artificial Intelligence and Data Science) department, was granted by the funding agency MEITY and had a value of Rs. 1.40 Crore. Additionally, they obtained IC design EDA (Integrated Circuit Design Electronic Design Automation) tools worth Rs. 28,00,000 at no cost. The project's duration was estimated to be approximately two years.

He then discussed the second grant awarded by DST (Department of Science and Technology) for the project titled "Nanostructured Bi-functional Metal Schiff Base Complexes and Its Spinel Oxides for Biological and Energy Storage Applications." Dr. S. Parveen from the Chemistry department led this project, which had a value of Rs. 33,02,620 and a duration of approximately three years. Dr. Ramaswamy expressed pride in these projects, emphasizing their significance and the impact they had on the institution.

Address by Dr.P.Govindasamy, Principal, MCET:

Dr. P. Govindasamy, Principal of MCET, warmly welcomed everyone in the gathering and expressed his gratitude to Dr. C. Umarani for graciously accepting the role of chief guest despite her busy schedule. He took a moment to appreciate the management for their unwavering support in fostering innovation, research, collaboration, and continuous improvement.

Dr. Govindasamy recognized the management's dedication to professional development and commended their efforts in providing state-of-the-art infrastructure and cutting-edge educational technology. These resources enabled the faculty members to produce high-quality research and deliver exceptional education to the students.

Highlighting the significance of the day, Dr. Govindasamy emphasized that it was dedicated to honoring and acknowledging the invaluable contributions of the faculty members in research. He extended heartfelt congratulations to the faculty members who would be receiving awards, recognizing their unwavering dedication and hard work.

Presidential address by Dr.M.Manickam, Chairman, NIA Educational Institutions:

Dr. M. Manickam, Chairman, extended a warm welcome to the chief guest, Dr. C. Umarani, and initiated a discussion on the NIRF ranking. The NIRF ranking is primarily designed to assess and recognize the excellence of central institutions such as IITs and NITs that are funded by the Government of India. These institutions have a limited number of students, with approximately 300-400 students joining each year. They also benefit from substantial faculty resources and funding. Dr. Manickam highlighted the comparison of IITs and NITs with Anna University, emphasizing the disparity in student numbers. Anna University has around 6 lakh students,

whereas IITs have only 6000 students. Drawing comparisons between the two would be inappropriate due to this vast difference.

Dr. Manickam proposed that Dr. Umarani submit a new research proposal and coordinate the research efforts of the 500 colleges affiliated with Anna University. By leveraging a team of researchers from various locations and fields, a comprehensive and validated report could be generated, propelling Anna University's research efforts significantly. This coordinated approach would enable Anna University to gather around 5000 research papers annually from the affiliated colleges, making a substantial impact on research.

He also emphasized that Tamil Nadu is a frontrunner in technical education and highlighted the remarkable progress in women's education based on a report from the Government of India. The statistics indicated that out of 1.8 million working women in India, 8 million are employed in the manufacturing sector, showcasing the empowerment of women in the state.

Dr. Manickam expressed the need to take the institution to the next level by constructing an auditorium in the B-block and installing air conditioning in classrooms. He reassured that the infrastructure plans were on track. Furthermore, he stated that problem-solving skills were crucial for students, and research was an excellent avenue to enhance the institution's capabilities and skills.

Chief Guest Introduction by Dr. Calvin Sophistus King, Dean-IR&TD, MCET:

Dr. Calvin Sophistus King, Dean of Industry Relations and Talent Development (IR&TD), introduced the esteemed chief guest, Dr. C. Umarani, Director of the Centre for Research at Anna University. Dr. Umarani's impressive academic background includes a Post Doctorate Fellowship from the University of Canterbury, New Zealand, and a Ph.D. in Civil Engineering from CIT, Coimbatore. She has accumulated 33 years of teaching experience, with 19 years at IRTT, Erode, and 14 years at CEG, AU.

Dr. Umarani's research contributions are noteworthy, with over 50 papers published in international journals, along with 12 papers in national journals. She has also reviewed three books and authored one book herself. Her guidance has been instrumental in the successful completion

of 12 Ph.D. scholars (10 as Supervisor, 2 as Joint Supervisor), 4 M.S. (By Research) Scholars, and she is currently guiding 5 Ph.D. scholars.

Recognized for her expertise in Earthquake Engineering, Dr. Umarani was one of the six candidates selected for international research under the NPEEE scheme by MHRD. She has also been awarded a Research Project by DST under the Young Women Scientist Scheme. As a researcher, she has established R&D collaborations with the University of Canterbury, New Zealand. In 2014, she was invited to deliver a seminar talk at UC, NZ and has conducted Seismic Performance evaluations of bridges through field testing. She presented her research findings before the Bridges Committee at TRB, USA.

Dr. Umarani's involvement in major sponsored studies throughout India has led to successful research projects funded by DST, AICTE, and UGC. Her contributions extend beyond academia, as she serves as an expert member in the Special Investigation Team (SIT) for the Moulivakkam Building Collapse case. She is also a fellow member of the Institution of Engineers and a life member of IASE, ISTE, ACCE (INDIA), and ICI. Additionally, she has been involved in over 50 consultancy projects.

Address by Chief Guest Dr.C.Umarani, Director, Centre for Research, Anna University, Chennai:

She warmly welcomed everyone present and congratulated the faculty members for their great contribution in Research and Innovation. She proceeded to mention the Perambur flyover bridge, highlighting that the project was assigned to Anna University due to their successful completion of extensive research on the underlying concept. She emphasized the significant role research plays in making the internet more user-friendly and accessible.

The speaker stressed the importance of giving due attention to teaching, research, and consultancy. Hard work was emphasized as the only mantra for achieving success in these endeavors. Gratitude was expressed to all the dignitaries for their efforts in ensuring education reaches all segments of society. The growth of the institution was linked to the happiness of its faculty members.

Furthermore, it was mentioned that many scholars had successfully completed their research at Dr. MCET, illustrating the institution's commitment to fostering research excellence. The role of researchers in addressing societal problems was highlighted, emphasizing the need to contribute to meaningful solutions.

To facilitate and enhance research endeavors, a research advisory committee was introduced to provide support, encourage discussions, and offer ideas for refining research topics. The faculty members were urged to publish their work in top reputed journals, specifically those classified as Q1 and Q2. The importance of patent filing was also stressed.

The speaker quoted Steve Jobs' words and extended congratulations to everyone present, acknowledging their efforts and dedication.

Research Incentive report by Dr.S.Ramakrishnan, Dean-R&I, MCET:

Dr. S. Ramakrishnan, Dean of Research and Innovation (R&I), warmly welcomed all the attendees in the gathering. He provided valuable advice to the faculty members, emphasizing the importance of focusing on research, funding opportunities, consultancy projects, and patent works in addition to their regular curriculum and teaching responsibilities. Engaging in these activities would not only enhance their individual profiles but also contribute to the growth and development of the institution.

Dr. Ramakrishnan proceeded to present the research data of MCET's faculty members. Currently, there are 47 research supervisors actively engaged in research activities, 1,453 research publications with a citation count of 11,936. The institution's h-index stands at an impressive 45. Furthermore, the faculty members have collectively filed 77 patents. MCET boasts 20 centers of excellence and has successfully completed 129 consultancy works.

The Dean elaborated on the incentive norms established for various categories, including paper publication in renowned journals such as Q1, SCIE, and Scopus-indexed publications, external funding, patents, consultancy works, and in-house research and development. He presented a summary of the research incentives awarded during the function, with a total amount of Rs. 18,27,500/- distributed among 112 faculty members.

Department-wise research publication summaries were projected and discussed, revealing a total of 206 publications, including 53 in Q1 journals, 135 in SCIE, and 18 in Scopus-indexed publications. These publications were accomplished through reputable journal publishers such as IEEE, Springer, Elsevier, Wiley, and others.

The Dean highlighted that during the designated period, 9 projects were successfully completed under external funding, amounting to Rs. 2,76,000/- in incentives. Additionally, 3 patents were granted, yielding incentives worth Rs. 19,000/-. The institution also undertook 129 consultancy projects, generating a shared revenue of Rs. 7,18,005/-.

Furthermore, the achievements of 57 faculty members who completed AICTE-sponsored NITTT courses were recognized, resulting in an incentive of Rs. 4,06,000/-.

Following the presentation of the Research Incentive report by Dean R&I, Research Incentives and awards were distributed to faculty members. During the meeting, department-wise RI incentive amounts were announced. Four faculty members received incentives of over 1 lakh in cash for their exceptional contributions in funding, publications, patents, and more.

Dr. N. Natarajan from the Civil Department received the highest incentive amount of Rs. 1,60,750/- for his remarkable contributions in paper publications in Q1 journals (16), SCIE journals (10), and Scopus (5).

Dr. M. Selva Kumar from the Automobile Department received Rs. 1,39,916/- for his incredible contributions in paper publications, funded projects, and patents.

Dr. T. Ramkumar from the Mechanical Department received an incentive amount of Rs. 1,09,754/- for his fantastic contributions in paper publications, funded projects, and patents.

Additionally, Dr. S. Ramakrishnan, Dean R&I, received an incentive amount of Rs. 1,01,500/- for his marvelous contributions in funded projects and paper publications.

The incentives were distributed to faculty members department-wise as follows:

- Automobile Department: 10 faculty members benefited with a total claim amount of Rs. 2,30,416/-

- Mechanical Department: 15 faculty members benefited with a total claim amount of Rs. 3,07,584/-
- Civil Department: 07 faculty members benefited with a total claim amount of Rs. 2,15,500/-
- Information Technology Department: 16 faculty members benefited with a total claim amount of Rs. 2,37,250/-
- Computer Science and Engineering Department: 14 faculty members benefited with a total claim amount of Rs. 1,51,750/-
- AI & DS Department: 03 faculty members benefited with a total claim amount of Rs. 19,250/-
- MCA Department: 02 faculty members benefited with a total claim amount of Rs. 25,500/-
- Electrical and Electronics Department: 14 faculty members benefited with a total claim amount of Rs. 2,02,250/-
- Electronics and Communication Department: 18 faculty members benefited with a total claim amount of Rs. 2,61,000/-
- Electronics and Instrumentation Engineering Department: 03 faculty members benefited with a total claim amount of Rs. 21,000/-
- Science and Humanities Department: 10 faculty members benefited with a total claim amount of Rs. 1,28,500/-
- Additionally, 6 supporting staff members received incentives totaling Rs. 31,500/- for their contributions to funded projects.

The investigators of three recently received external grants were honored. The grant details are as follows:

Dr. K.N. Vijeyakumar from AI&DS served as the Chief Investigator, along with Dr. R. Sudhakar and Dr. N. Saravanakumar from ECE, Dr. B. Vinoth Kumar and Dr. K. Saranya from EEE, and Mr. Talluri Vineel Jessy from ECE as Co-chief Investigators. They received funding from MEITY (Ministry of Electronics and Information Technology) for the project titled "Design and Development of healthcare equipment." The sanctioned amount was Rs. 1.40 Crore, along with an additional Rs. 28,00,000 worth of IC design EDA tools provided free of cost.

Dr. S. Parveen from Chemistry (Women Scientist) and Dr. B. Saravanakumar from Physics (Mentor) received funding from DST (Department of Science and Technology) for the project titled "Nanostructured bi-functional metal Schiff base complexes and their spinel oxides for biological and energy storage applications." The sanctioned amount was Rs. 33,02,620.

Dr.M.Selva Kumar/Auto (Chief Investigator) received funding from EDII for the project titled "Development of EV-Fiber Rotavator for coir industries" for Rs.3,21,000/-

Research awards were presented to faculty members in recognition of their excellence in publications, funding, patenting, and consultancy. The awards received by the faculty members are as follows:

- Dr. M. Selvakumar, Associate Professor of Automobile Engineering, was honored with the Faculty Research Excellence Award for his outstanding performance in all categories of research activities. He has 30 indexed publications, 6 book chapters, and has been involved in 8 funded projects with a total amount of Rs. 20,00,000. Additionally, he has published 6 patents and has been granted 2 patents. He has also completed 6 consultancy works, earning Rs. 25,00,000.
- Dr. N. Natarajan, Associate Professor of Civil Engineering, received the Distinguished Researcher Award for having the highest number of 16 Q1 publications.
- Dr. T. Ramkumar, Assistant Professor (SG) of Mechanical Engineering, was presented with the Best Research Journal Paper Award in the Engineering category. He achieved the highest impact factor of 11.86 and also holds the highest cumulative impact factor of 172.05.
- Dr. B. Saravanakumar, Assistant Professor (SS) of Physics, received the Best Research Journal Paper Award in the Science and Humanities category. He achieved the highest impact factor of 10.38 and has the highest cumulative impact factor of 152.5.
- Mr. S. Dineshkumar, Assistant Professor of Civil Engineering, was honored with the Emerging Young Researcher Award. His accomplishments include 1 publication in Q1, 1 publication in SCIE, 1 publication in Scopus, and 1 consultancy work.
- Mr. S.V. Guruprakash, Assistant Professor of Mechanical Engineering, also received the Emerging Young Researcher Award. His achievements include 1 publication in Q1 and 2 publications in SCIE.

- Dr. B. Kishore, Assistant Professor (SG) of Electrical & Electronics Engineering, was recognized with the Best Expert Reviewer Award. He has reviewed a total of 7 journals and completed 123 reviews from June 2022 to June 2023.
- Dr. S. Ramakrishnan, Professor of IT & Dean – R&I, received the Highest Cited Researcher Award. He has the highest h-index of 26 and the highest number of citations, totaling 2344. He has been recognized as a top scientist in the AD Scientific Index and ranked as the No. 1 researcher in MCET. In 2023, he secured a top 8% position in India, 13% in Asia, and 23% in the world.
- Dr. J. Ramprasath, Assistant Professor (SS) of Information Technology & Head/ITeS, was presented with the Doctoral Completion Award. He submitted his thesis in 3 years and 6 months and received supervisor recognition. He has published 4 SCIE indexed journals and 9 other indexed journals in Scopus and other databases.

Sanction letters have been provided to 10 in-house R&D projects, benefiting 10 faculty members who were honored for their research endeavors. The details of the projects and the sanctioned amounts are as follows:

1. Dr. T. Ramkumar, Assistant Professor (SG) of Mechanical Engineering, received a sanction letter for the in-house R&D project titled "Design and Development of PCM-Nano Composite for Solar Water Heater Application." The sanctioned amount for this project is Rs. 1,15,000, and the project duration is 1 year.
2. Mr. M. Gideon Ganesh, Assistant Professor (SS) of Mechanical Engineering, received a sanction letter for the in-house R&D project titled "Design and Fabrication of Polymer-based 3D Printing." The sanctioned amount for this project is Rs. 1,10,000, and the project duration is 1 year.
3. Mr. C. Radhakrishnan, Assistant Professor (SS) of Mechatronics, received a sanction letter for the in-house R&D project titled "Experimental Investigation of Bio-oil Produced from Continuous Flash Pyrolysis of Biomasses." The sanctioned amount for this project is Rs. 1,10,000, and the project duration is 2 years.
4. Mr. S. Syed Masoodhu, Assistant Professor of Civil Engineering, received a sanction letter for the in-house R&D project titled "Hydraulic Performance of Geosynthetic Clay Liner

with Modified Clay by Polymeric Hydrogels." The sanctioned amount for this project is Rs. 1,10,000, and the project duration is 1 year.

5. Mr. K. R. Gokul Anand, Assistant Professor of Electronics and Communication Engineering, received a sanction letter for the in-house R&D project titled "Customized Cultivation using Smart Aeroponics System." The sanctioned amount for this project is Rs. 1,04,551, and the project duration is 1 year.
6. Dr. K. Rameshkumar, Assistant Professor of Electrical and Electronics Engineering, received a sanction letter for the in-house R&D project titled "Design and Development of Solar Photovoltaic-fed Electric Vehicle Charging Station with Improved Power Quality using Virtual Active Power Filter." The sanctioned amount for this project is Rs. 1,15,000, and the project duration is 2 years.
7. Dr. A. Noble Mary Juliet, Assistant Professor of Computer Science and Engineering, received a sanction letter for the in-house R&D project titled "Web/Mobile Application for Multi-modal Mark Entry and Hall Booking Service Automation." The sanctioned amount for this project is Rs. 1,15,000, and the project duration is 1.5 years.
8. Dr. A. Shanmugapriya, Assistant Professor of Science and Humanities (Chemistry), received a sanction letter for the in-house R&D project titled "Synthesis and Anticancer Activity of Binuclear Ni(II) & Pd(II) Complexes." The sanctioned amount for this project is Rs. 1,07,654, and the project duration is 1.5 years.
9. Dr. J. Johnson William, Assistant Professor of Science and Humanities (Physics), received a sanction letter for the in-house R&D project titled "Microwave Engineering of Binary Metal Compounds and its Carbon Composites as Electrode Materials for Energy Storage and Photocatalytic Applications." The sanctioned amount for this project is Rs. 1,15,000, and the project duration is 1 year.
10. Dr. M. Mariyappan, Assistant Professor of Science and Humanities (Physics), received a sanction letter for the in-house R&D project titled "Silver Nanoparticles Embedded Rare Earth Doped Borophosphate Glasses for Lasers, Wleds and Amplifiers" . Sanctioned amount is Rs.1,14,400/- for the duration of 1 year.

Felicitation by Shri.M.Hari Hara Sudhan, Correspondent, NIA Educational institutions:

Shri M. Hari Hara Sudhan, the Correspondent of NIA Educational Institutions, extends his congratulations to everyone. He emphasizes the importance of teachers dedicating more time to enhance research activities. Furthermore, the establishment of a 100-seat call center serves as a platform that should encourage students to delve into network design. It is essential to motivate young researchers and invest energy in nurturing their talents, ensuring the growth and development of every individual.

Vote of Thanks by Dr.A.Senthil Kumar, Dean A&A, MCET:

Vote of thanks was delivered by Dr. A. Senthil Kumar, the Dean-A&A, MCET. He expressed his deep appreciation for the opportunity to propose the vote of thanks, recognizing that gratitude is the foundation of a positive attitude. Dr. Senthil Kumar extended his heartfelt thanks to the honorable Chief Guest, Dr. C. Umarani, the Director of the Centre for Research at Anna University, for accepting the invitation and gracing the occasion with their presence. He also conveyed his sincere gratitude to the Chairman and Correspondent for their continuous support and provision of incentives for research initiatives. He expressed his appreciation to the Secretary for his unwavering support and guidance in every activity undertaken. He acknowledged the principal for his timely and valuable advice to the team, which has been instrumental in their success.

Furthermore, he thanked the Dean of R&I for consistently encouraging faculty members to engage in research activities. He extended his gratitude to the Dean of IR&TD, all the Heads of Departments, faculty members, staff, and students for their contributions and cooperation.

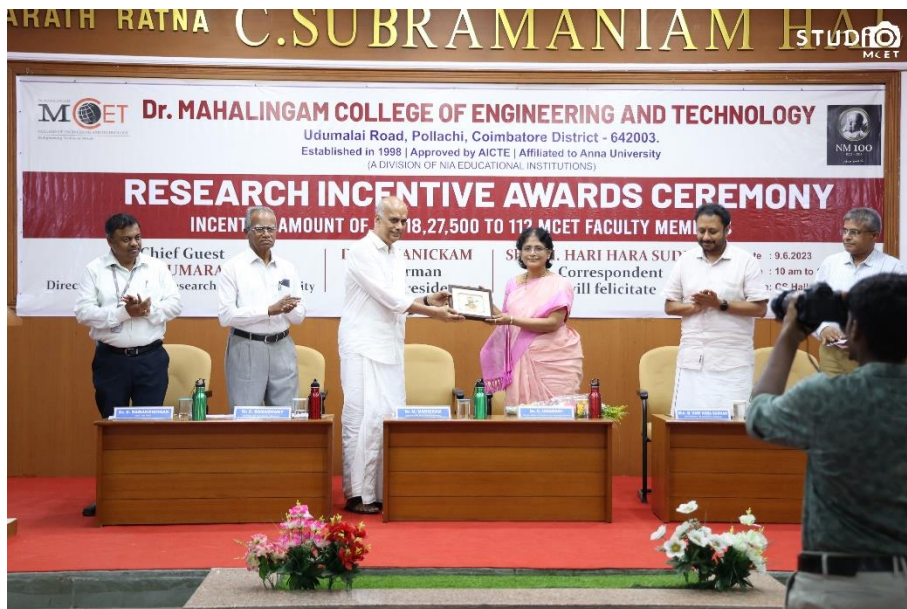
Dr. Senthil Kumar also expressed his thanks to the audio, video, and electrical support staff, as well as the press and media, for their wholehearted support in organizing and executing the event. The ceremony concluded with the rendition of the National Anthem, marking a formal closure to the event.

Research Incentive Awards Ceremony Photos:

Welcome address by Dr.C.Ramaswamy, Secretary, NIA Educational Institutions:



Honoring the Chief Guest:



Address by Dr.P.Govindasamy, Principal, MCET:



Presidential address by Dr.M.Manickam, Chairman, NIA Educational Institutions:



Chief Guest Introduction by Dr. Calvin Sophistus King, Dean-IR&TD, MCET:



Address by Chief Guest Dr.C.Umarani, Director, Centre for Research, Anna University, Chennai:



Research Incentive report by Dr.S.Ramkrishnan, Dean-R&I, MCET:



Sample Award receiving photos:







Felicitation by Shri.M.Hari Hara Sudhan, Correspondent, NIA Educational institutions:



Vote of Thanks by Dr.A.Senthil Kumar, Dean A&A, MCET:





Prepared by,
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Ms. K. Renuka Devi, AP/IT

Dean – R&I

Principal

-Sd-
Secretary