



# RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University  
Accredited by NAAC & An ISO 9001:2015 Certified Institution  
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### INTERNATIONAL CONFERENCE ON SMART ENGINEERING FOR RENEWABLE ENERGY TECHNOLOGIES – 2023 (ICSERET 2023)

24.03.2023

International Conference on Smart Engineering for Renewable Energy Technologies – 2023 (ICSERET-2023) aims to i) provide ample opportunities for researchers, industrial experts, academicians and practicing engineers from all over the world to present their high-quality original research, innovative ideas, and compelling insights on future trends in Renewable Energy Technologies. ii) create the linkage between Academicians, UG/PG research scholars and industrialists to bridge the gap between academia and industries. Additionally, this conference strives to connect people with like interests in order to foster collaboration and find more effective answers to social challenges.

This conference work was initiated in October 2022 and then the advisory committee members were formulated, followed by brochure preparation and website hosting.

The Keynote Speaker of this conference **“Fausto P. Garcia Marquez” Full Professor at Castilla-La Mancha University, Spain** is going to deliver his address in **Artificial Intelligence and Renewable Energy Systems.**

Followed by keynote address, we have Domain Specific invited talk **“Cyber –physical concept indesigning smart applications”** by **Dr. Mohd Helmy Bin Abd Wahab, Principal researcher, Advanced Telecommunication Research Centre, Faculty of Electrical and Electronic Engineering, University Tun Hussein Onn Malaysia, Malaysia.**

Similarly, on 25<sup>th</sup> March 2023 Afternoon, we have another domain specific Invited talk about **“Electrical Power System for Aircraft”** by an industry person, **Mr. Yadaiah Anantholla, Technical Lead Engineer – Level – IV, Electrical Design Integration Team, Boeing India Private Limited, Bangaluru**

In this conference we have received contributions from various colleges across 5 countries and 8 states of India.

We received 72 technical papers for presentation. Google forms is used for receiving, reviewing and for communication of the papers. Each paper was blind-peer reviewed by two

expert reviewers and plagiarism was checked. Finally, 44 quality papers were selected for presentation.

This two-day international conference is planned with 6 technical sessions. About 7-8 authors will present their research work in each session, chaired by two Expert members from reputed Institutions to give valuable suggestions. The selected papers presented in the conference will be published in **E3S web conferences** based on authors' willingness.

We take this opportunity to express gratitude for our Chairman Shri.P.R.Venketrama Raja for his inspiring support towards organizing this conference and Dr.R. Venkatraj, CEO, Ramco Educational Institutions, Dr.L.Ganesan, Principal, Ramco Institute of Technology and Dr.S. Rajakarunakaran, Vice-Principal for their guidance in all aspects. We thank our General Manager Mr.K.S. Selvaraj for all his support for this conference.

We take this opportunity to echo out the untiring support extended by the advisory committee members, Chief guests, Keynote Speakers, Invited Talk Members, Session chairs, publication partner Dr R Senthil Kumar Sri Sai Technology, HoD, Co-Patron, Conveners and Coordinators of various committees, the faculty members and non-Teaching staff members of RIT EEE dept.

We wish all participants for being a part of this event and getting mutually benefitted. The success of this conference is the team effort of Ramco Institute of Technology.









# RAMCO INSTITUTE OF TECHNOLOGY

## RAJAPALAYAM - 626 117



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### Department of Electrical and Electronics Engineering

### International Conference on Smart Engineering for Renewable Energy Technologies - 2023

24 - 25 March 2023



#### About the College

ICSERET - 2023

Ramco Institute of Technology (RIT) was founded in 2013 by our Founder Chairman, Shri P. R. Ramasubrahmaneya Rajha, with a vision to impart high-quality engineering education at an affordable cost. Under the able guidance of our present Chairman, Shri. P. R. Venketrama Raja, RIT has stayed true to its vision and continues to grow. With the support and advice of distinguished professionals, academicians, and education experts, we at RIT continually aim to revolutionise the learning environment by creating an enviable knowledge pool of engineering and technology graduates who are attuned to the current industry requirements. Being a part of the Ramco Group, which is well-known for its qualitative and innovative brands not only in India but across the world, we are looked upon to set high standards in the education sector. True to its legacy, RIT has embarked on a mission to empower students with high-quality, accessible, yet world-class engineering education and prepare these young minds for lifelong learning by creating and disseminating appropriate knowledge. The college has signed MoUs with research organizations and prominent industries for interaction, exchange of knowledge and collaboration in the areas of technology development, training of students, curriculum updation and development of state-of-art centres. R&D projects sponsored by DST, IE (I), AICTE, and TNSCST have been undertaken and successfully completed by our college.

#### About the Department

ICSERET - 2023

The Department of Electrical and Electronics Engineering was established in the year 2013. Currently, it offers a 4-year Undergraduate programme, B.E. Electrical and Electronics Engineering, with a sanctioned intake of 60. The department has been accredited by the NBA for 3 years. The objective of the department is to offer quality education and competitive training to students which would help them evolve as Professional Engineers. The students of the department are trained to meet the needs of society and are capable of adapting to rapidly changing technology in various areas of Electrical and Electronics Engineering. The department has well-qualified and experienced faculty members specialising in domains such as Power Systems, High Voltage Engineering, Power Electronics, and Control Systems. They also have a strong sense of responsibility to provide the finest possible engineering education to the students. The department has dedicated state-of-the-art laboratories and leading software like DlgSILENT, LabVIEW, ETAP, MATLAB, PLC/SCADA, and Power World Simulator to enhance academic and research activities. It helps students gain an in-depth knowledge of fundamentals and practical applications, which facilitates their pursuing a wide-range of career opportunities.

#### About the Conference

ICSERET - 2023

The First International Conference on Smart Engineering in Renewable Energy Technologies (ICSERET-2023) is organized by the Department of Electrical and Electronics Engineering, Ramco Institute of Technology, Rajapalayam, Tamil Nadu, India and is scheduled for the 24th and 25th March 2023 through online. The conference is planned against the backdrop of India's vision of "450 GW of Renewable Energy by 2030." ICSERET-2023 provides ample opportunities for researchers, industrial experts, academicians and practicing engineers from all over the world to present their high-quality original research, innovative ideas, and compelling insights on future trends in Renewable Energy Technologies. The main theme of the conference is the application of smart engineering methods, processes, and tools to Renewable Energy Technologies. Additionally, this conference strives to connect people with like interests in order to foster collaboration and find more effective answers to social challenges. The two-day conference features keynote addresses, invited talks and paper presentations on Smart Engineering in Renewable Energy Technologies delivered by leading experts and researchers.

#### Organising Committee

Chief Patron  
P.R.Venketrama Raja  
Chairman, Ramco Group

Patron  
Dr.R.Venkatraj  
CEO, Ramco Group of Educational Institutions

Patron  
Dr.L.Ganesan  
Principal- RIT

Patron  
Dr.S.Rajakarunakaran  
Vice-Principal RIT

Convenor  
Dr.S.Kannan  
Professor - EEE

Organizing Secretary  
Dr.K. Karthikeyan  
ASCP, EEE



International Advisory committee members (Alphabetical order)

ICSERET - 2023

- Dr Ahmed Zobaa, Brunel University, London.
- Dr. Akthar Kalam, Victoria University, Australia.
- Dr. Ali M. Eltamaly, Mansoura University, Egypt.
- Dr. Kahtan Aziz, Anglia Ruskin University, United Kingdom.
- Dr. Lalit Kumar Goel, Nanyang Technological University, Singapore.
- Dr. Lipo Wang, Nanyang Technological University, Singapore.
- Dr. Mohammad A Abido, King Fahd University of Petroleum and Minerals, Saudi Arabia.
- Dr. Mohan Lal Kolhe, University of Agder, Norway.
- Dr. S. Ramasamy, King Faisal University, Saudi Arabia.
- Dr. Sheldon Williamson, University of Ontario Institute of Technology, Canada.
- Dr. P. Sanjeev Kumar, Aarhus University, Denmark.

National Advisory committee members (Alphabetical order)

ICSERET - 2023

- Prof. M. S. Ananth, Former Director, IIT Madras, Chennai
- Prof. M. S. Palanichamy, Former Vice Chancellor, Tamil Nadu Open University, Chennai.
- Dr. S. Albert Alexander, Kongu Engineering College, Erode.
- Dr. L. Ashok Kumar, PSG College of Technology, Coimbatore.
- Dr. M. A. Asha Rani, National Institute of Technology, Silchar.
- Dr. S. Balamurugan, Amrita Vishwa Vidyapeetam, Coimbatore.
- Dr. S. Baskar, Thiagarajar College of Engineering, Madurai.
- Dr. B. Chitti Babu, IIITM, Kancheepuram, Chennai.
- Dr. D. Devaraj, Kalasalingam Academy of Research and Education, Krishnankoil.
- Dr. R. Gnanadass, Pondicherry Engineering College, Puducherry.
- Dr. Joshua Earnest, NITTR, Bhopal.
- Dr. B.V. Manikandan, Mepco Schlenk Engineering College, Sivakasi.
- Dr. K. Ravi Kumar, Indian Institute of Technology, Delhi.
- Dr. Vijayakumar Krishnasamy, IIITM, Kancheepuram, Chennai.

Industrial Advisory committee members (Alphabetical order)

ICSERET - 2023

- Mr. KSB. Harisankar, Sidel India Private Limited, Gurugram, Haryana.
- Dr. N. Karunamoorthy, Wind Plus Pvt. Ltd., Coimbatore.
- Dr. N. Pothirasan, Hashan Medicare, Rajapalayam.
- Mr. N. Ragupathi Muthu, Sree Minniyal Ragu Enterprises, Sivakasi.
- Mr. Velventhan, Rajapalayam Mills Pvt. Ltd., Rajapalayam.
- Dr. Vijayaragavan Viswanathan, Eternal Resilient Tech Pvt Ltd., Bangalore.

Paper Submission Link

Register through Google Form:

<https://forms.gle/FrbYvXktJr16jmJN8>

The template for abstract and full paper is available in the conference website

The Abstract and Full paper submitted in the Prescribed format alone will be accepted.



Theme of the Conference (Topics not limited to....)

ICSERET - 2023

- \* Photovoltaic (PV) Systems and Materials
- \* PV for Rural Development
- \* Smart systems for PV plant maintenance
- \* Solar Thermal Electricity
- \* Wind Turbines and Generators
- \* Offshore Wind Technology
- \* Solar PV and Wind forecasting technologies
- \* Microgrid design, optimization and control
- \* Grid Integration of Renewable Energy Sources
- \* Smart Energy Management System
- \* Small and Micro Scale hydro turbines and generators
- \* Geo thermal technology
- \* Fuel Cells
- \* Green Hydrogen Energy Technology
- \* Bioenergy conversion technologies
- \* Distributed Energy storage systems
- \* Renewable Energy for Electric Vehicles
- \* Renewable Energy for Smart Cities
- \* Machine Learning Applications in Renewable Energy
- \* IoT Applications in Renewable Energy

Publications

ICSERET - 2023

Abstract of all the presented papers will be published with ISBN number in the conference proceedings.

Extended papers will be recommended for the inclusion in Scopus indexed Journals subject to meeting the scope, quality and financial requirements of the journal.

Publication Partner

Dr. R. Senthil Kumar, M/s. Sri Sai Technology Publication, 9659935246

Dates to Remember

- Submission of full papers: **Feb 28, 2023**
- Notification of Acceptance: **Mar 10, 2023**
- Camera-ready Paper Submission: **Mar 14, 2023**
- Registration for the conference: **Mar 14, 2023**
- Conference Date - **March 24 - 25, 2023**

Registration Fee

- Student: Rs. 300
- Academician / Industry Person: Rs. 500
- Foreign Delegates: 50 USD

Payment Details

- Beneficiary Name: Ramco Institute of Technology
- Account Number: 104801000036500
- Bank Name: Indian Overseas Bank
- Branch Name / Code: Rajapalayam / 1048
- IFSC Code: IOBA0001048
- Payment Type: Net Banking / UPI

Organizing Secretary: Dr. K. Karthikeyan, ASCP / EEE