

**AICTE Training and Learning
(ATAL) Academy Sponsored**

**6 DAYS ONLINE FACULTY
DEVELOPMENT PROGRAM**

on

**“RESEARCH PERSPECTIVES ON
SMART AND SUSTAINABLE ENERGY
MANAGEMENT SOLUTIONS
(RPS2EMS)”**

16th to 21st December 2024

Organized by

**Department of Electrical and
Electronics Engineering**



ADDRESS FOR CORRESPONDENCE

**Coordinator - ATAL FDP on RPS2EMS
Department of Electrical and Electronics
Engineering**

PSG Institute of Technology and Applied Research

Neelambur, Coimbatore - 641062

Email: iqbal@psgitech.ac.in

pavithra@psgitech.ac.in

Mobile: 98658 77488, 96009 88131

ABOUT THE INSTITUTE

PSG Institute of Technology and Applied Research, started in the year 2014, is an AICTE approved institution, affiliated to Anna University, Chennai and accredited by NAAC and NBA. The latest initiative of PSG and Sons' Charities, aims to realize its objective of enhancing youth empowerment through technical education. This institute caters to various engineering disciplines, focusing on learning, industry engagement of students, innovative and inclusive pedagogy, and ethics. The institution aims at effective transfer of knowledge, pursuit of truth and moulding the students to become ideal citizens of the country. Within a short span of time, the institution has emerged to be one of the most preferred institutions for the engineering aspirants in Tamil Nadu. Professional societies namely IEEE, IE(I) and ISTE helps the faculty and students for professional enrichment.

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 2014, offering Bachelor of Engineering in Electrical and Electronics Engineering since 2014 and Instrumentation and Control Engineering since 2024. The mission of the department is to enable students to become successful technocrats, and contribute to the progress of society. The department has faculty members with specializations in Power Systems, Electrical Machines, Power Electronics, Control Engineering, and Embedded and Real-Time Systems with rich academic and industrial experience. The department has set up industry supported laboratories and signed MoUs with industry leaders, thereby providing ample opportunities for faculty members and students, to interact with industry experts.

CHIEF PATRON

Shri. L. Gopalakrishnan

Managing Trustee,
PSG & Sons' Charities

PATRON

Dr. N. Saravanakumar

Principal

CONVENORS

Dr. C. L. Vasu

Dean - Academics

Dr. P. Vijayakumar

Dean - Electrical and
Computer Engineering

Dr. C. S. Subash Kumar

HoD (i/c),

Department of Electrical and
Electronics Engineering

COORDINATORS

Dr. M. Mohamed Iqbal

Professor,
Department of Electrical and
Electronics Engineering

Dr. C. V. Pavithra

Assistant Professor (Sl. Gr.),
Department of Electrical and
Electronics Engineering

PROGRAMME OBJECTIVE

Sustainability and climate change are two interconnected and critical issues facing our planet today. Sustainability involves the ability to maintain a balance between current and future needs, ensuring the preservation of natural resources and environmental health. Energy sustainability involves the provision of energy services in a sustainable manner, which in turn necessitates that energy services be provided for all people in ways that, now and in the future, are sufficient to provide basic necessities, affordable, not detrimental to the environment, and acceptable to communities and people. The aim of this online faculty development program is to provide a platform for interaction and exchange of Research Perspectives on Smart and Sustainable Energy Management Solution (RPS2EMS). The participants will get exposure on theoretical and experimental approaches in the field of energy and sustainability. The program aims at bringing many industry experts to present their opinion in the context of global warming and climate change.

EXPECTED OUTCOME

Upon completion of the FDP, the participants from various backgrounds would be able to acquire knowledge and skills to solve industrial and societal problems which can help to achieve Sustainable Development Goals (SDGs).

RESOURCE PERSONS

Experts from Industries and academia at the National and International levels would be sharing their rich experience with the participants.

TOPICS TO BE COVERED

- Sustainable Development Goals
- Research opportunities in Solar energy
- Smart Energy Management
- Combating Climate Change with Green Buildings
- Supply Chain Management
- Digital Techniques for Electrical Substation Automation
- Sustainable Nanocomposites
- Variable Frequency Drives
- Optimization Techniques in Smart-grid
- Analysis of Soil CO₂ in the context of Climate Change
- Advanced Techniques to ensure Safety and Reliability of Automobile Industries
- Lean Manufacturing Techniques
- Energy Storage in Grid-connected Operation

TARGETED PARTICIPANTS

- Faculty and R&D persons
- Research Scholars and PG students
- Industrial Delegates

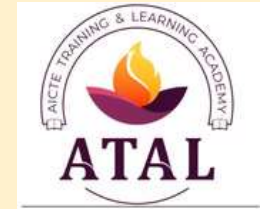
REGISTRATION AND CERTIFICATION

- Last date for Registration is **15th December 2024**
- There is no Registration fee
- Registration must be made through online using the following link or QR code.

<https://atalacademy.aicte-india.org/signup>



- It is necessary to maintain 80% attendance and score minimum 70% in the final assessment to be eligible for the participation certificate



AICTE Training and Learning (ATAL) Academy Sponsored

6 DAYS ONLINE FACULTY DEVELOPMENT PROGRAM

on

“RESEARCH PERSPECTIVES ON SMART AND SUSTAINABLE ENERGY MANAGEMENT SOLUTIONS (RPS2EMS)”

16th to 21st December 2024

Organized by

Department of Electrical and Electronics Engineering



PSG Institute of Technology and Applied Research

(Approved by AICTE, New Delhi)

Avinashi Road, Neelambur

Coimbatore - 641062, Tamil Nadu

<https://psgitech.ac.in>

ATAL Online 6 Day Faculty Development Programme 2024-25 Schedule

FDP Thrust Area: Energy, Sustainability & Climate Change

FDP Title: Research Perspectives on Smart and Sustainable Energy Management Solutions (RPS2EMS)

Session Details

DAY 1 (16.12.2024)	DAY 2 (17.12.2024)	DAY 3 (18.12.2024)	DAY 4 (19.12.2024)	DAY 5 (20.12.2024)	DAY 6 (21.12.2024)
6.00 pm to 6.30 pm	Session 3 (6.00 pm to 7.30 pm)	Session 5 (6.00 pm to 7.30 pm)	Session 7 (6.00 pm to 7.30 pm)	Session 9 (6.00 pm to 7.30 pm)	Session 11 (2.00 pm to 3.30 pm)
INAUGURAL FUNCTION	<p style="text-align: center;">Digital Techniques for Electrical Substation Automation and Reliable Grid Operation Mr. Balasubramanian M S Engineering Manager Power Transmission and Distribution Larsen & Toubro Ltd., Chennai, Tamil Nadu</p>	<p style="text-align: center;">Recent Trends and Research Opportunities in Solar Energy System towards Sustainability Mr. Venkatesh L R Managing Director VESAT Renewables Private Ltd., Coimbatore, Tamil Nadu</p>	<p style="text-align: center;">Need of Artificial Intelligence Optimization Techniques in Smart Grid Dr. Ravi C N Professor Vidya Jyothi Institute of Technology, Hyderabad, Telangana</p>	<p style="text-align: center;">Analysis of Soil CO₂ in the Context of Climate Change Dr. Gunasekaran Thangavel Senior Lecturer Department of ECE University of Technology and Applied Sciences, Muscat, Oman</p>	<p style="text-align: center;">Assessment and Design of Solar Photovoltaic Energy System for Rural Electrification Dr. Ravi Samikannu Associate Professor Botswana International University of Science and Technology, Palapye, Botswana</p>
Session 1 (6.30 pm to 8.00 pm)	Session 4 (7.30 pm to 9.00 pm)	Session 6 (7.30 pm to 9.00 pm)	Session 8 (7.30 pm to 9.00 pm)	Session 10 (7.30 pm to 9.00 pm)	Session 12 (3.30 pm to 5.00 pm)
<p style="text-align: center;">Power Industries to Achieve Sustainable Development Goals Dr. Jayapal R Automation Consultant AGM (Retd.) BHEL Trichy, Tamil Nadu</p>	<p style="text-align: center;">High Performance and Sustainable Nano Composites for Protection of Electrical Systems Dr. Sunitha K Professor, Department of EEE NIT Calicut, Kerala</p>	<p style="text-align: center;">Supply Chain Management Technique for Circular Economy in Renewable Energy Management Dr. Kalpana P Associate Professor IIITDM, Kancheepuram, Tamil Nadu</p>	<p style="text-align: center;">Harmonics Mitigation Techniques and Smart Energy Management Mr. Ravichandran K Director (Technical) Foretec Electric (India) Pvt. Ltd., Coimbatore, Tamil Nadu</p>	<p style="text-align: center;">Combating Climate Change with Green Buildings Mr. Giridhar J.G. CEO & Managing Director SIERRA ODC Private Limited Coimbatore, Tamil Nadu</p>	<p style="text-align: center;">Advanced Techniques to Ensure Safety and Reliability of Automobile Industries Mr. Anush Prabhakaran Specialist Hardware Engineer Bosch Global Software Technologies Coimbatore, Tamil Nadu</p>
Session 2 (8.00 pm to 9.30 pm)					Session 13 (5.00 pm to 6.30 pm)
<p style="text-align: center;">Variable Frequency Drives (VFDs) for Reducing Carbon Footprint Dr. Sundaram M Associate Professor Department of EEE PSG College of Technology Coimbatore, Tamil Nadu</p>					<p style="text-align: center;">Process Optimization through Lean Manufacturing Techniques in Industrial Engineering Mr. Cedric H M Founder and IE Consultant Cedar Solutions and Services Coimbatore, Tamil Nadu</p>
					6.30 pm to 7.30 pm Online test & feedback
					7.30 pm to 8.00 pm Valedictory Session

Note:

- FDP Registration and course is free for all the participants
- Registration must be made online through :- <https://atalacademy.aicte-india.org/signup>