



CO-ORDINATORS

Dr. Sivasankari Sundaram

Assistant Professor

**Energy Institute, Bengaluru
Centre of RGIPT, Jais, Amethi**

Dr. M. Chakkarapani

Assistant Professor

**Assam Energy Institute, Sivasagar
Centre of RGIPT, Jais, Amethi**

ABOUT THE INSTITUTE:

Rajiv Gandhi Institute of Petroleum Technology (RGIPT), Jais, is an autonomous institution established by the Government of India. The Institute is co-promoted as an energy domain specific institute by six leading oil public sector units (ONGC, IOCL, OIL, GAIL, BPCL, and HPCL) in association with the Oil Industry Development Board (OIDB). The Institute has been accorded the status of "An Institution of National Importance" along the lines of the Indian Institutes of Technology (IIT) under an Act of Parliament ("Rajiv Gandhi Institute of Petroleum Technology Act 2007"). Institute's prime objective is to provide world class education, training, and research to roll out competent human resources to meet the growing requirements of the Petroleum & Energy sector. The aspiration is to develop India as a global manpower hub for the entire Petroleum and Energy Sector. The Institute offers BTech, IDD and MTech programs in various Engineering disciplines along with an MBA programme.



PhD programs in various areas of basic sciences, humanities, engineering and management are also offered at the Institute. With a view to supplement its on-campus academic offerings and to extend its domain towards energy sector, RGIPT has established two centers at Bengaluru, Karnataka and Sivasagar, Assam

ABOUT THE CENTRES:

The Energy Institute, Bengaluru centre is mandated to offer academic programs along with conducting cutting-edge research in the energy domain. Energy Institute Bengaluru offers M.Tech in specializations of Renewable energy, Electric Vehicle Technology, Data Science and Artificial Intelligence Specialization in Energy. It also offers doctoral programmes on Branches of Electrical, Mechanical, Material and Chemical engineering. The Centre is supported by computational laboratory facility and equipment based lab facility for realization of the offered programs. Equipment based laboratory includes facilities like solar grid integrated set-up, solar thermal system, fuel cell based system, configurable chassis, battery modeler etc.

Assam Energy Institute (Centre of Rajiv Gandhi Institute of Petroleum Technology Jais, Amethi), Sivasagar was launched for offering programs of education and training of skilled technical manpower at the certificate, diploma and post diploma level in various areas in the domain of petroleum, petrochemical and allied sector to serve as a Skill Development Center for the North-East Region. AEI, Sivasagar offers diploma and doctoral program in Petroleum Engineering, Chemical Engineering, Mechanical Engineering, Fire & Safety Engineering and Electronics & Instrumentation Engineering.

MG MOTOR INDIA PRIVATE LIMITED:

MG Motor India Private Limited had their inception in Automotive Industry in 1924 with its subsidiary unit headquartered at New Delhi since 2017. Since then, the concern has outgrown to such an extent introducing India's first pure electric Internet SUV, the MG ZS EV. It is not just India's first pure Electric Internet SUV, but also a catalyst for change. MG ZS EV, the global SUV is designed for the few who would like all the benefits of a zero tail pipe emission vehicle. Furthermore in 2021, it also introduced India's first car with personal Artificial Intelligence based assistance named MG-Astor. It has always stood for racing ahead of the curve and innovating to deliver what people want. Innovation is realised through Net Blue technology, Net green approach and Intelligent technology ensuring a better tomorrow.

RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY JAIS, AMETHI

Presents

SERB SPONSORED

Five-day Online Faculty
Development Programme

On

Recent Advances in Electric Vehicle
and Renewable Energy Integration:
Challenges, Solutions
and Opportunities

23rd - 27th January 2023



MORRIS GARAGES
Since 1924

Jointly Organized by

Energy Institute, Bengaluru
Assam Energy Institute, Sivasagar
(Centres of Rajiv Gandhi Institute of
Petroleum Technology Jais, Amethi)

&

MG Motor India Private Ltd
New Delhi

ABOUT THE FDP:

This workshop intends to encompass the concepts and technology of Renewable Energy and Electric Vehicle Technology which lie in-line with the academic and research scope of our Institute. The current scenario of technological and societal development is driven towards the usage of alternative sources of energy for satisfying the energy demands occurring among the sectors in economy. One of the major energy consumption sectors is transportation. Deployment of renewable energy source coupled to e-mobility is a sustainable and feasible approach to meet the occurring energy need. So, a comprehensive knowledge on the concepts, challenges and its research advances must be known for effective integration of renewable energy to grid and its usage in electric vehicle. Furthermore, standards, topologies, architecture, and commercialized design considerations of an electric vehicle should be recognized in detail before integration of same to the electric grid. Also, challenges on integration of electric vehicle to grid / plug-in electric vehicle must also be addressed for realization on large scale. So, this programme shall ensure participants on the stated needs which presently drive to country mission on E-mobility and Renewable energy.

TOPICS TO BE COVERED:

1. Motor selection and advanced motor electric drive techniques in Electric vehicle
2. EV Battery Modelling
3. Battery Management systems
4. Electric Vehicle Charging Infrastructure
5. Technologies and solutions in G2V and V2G
6. Modelling and simulation of electric vehicle and hybrid electric vehicle
7. Fuel cell based electric vehicle -near future
8. High Power Conversion based DC-DC power converter suitable for EV application
9. Standards and testing protocols in EV's
10. Advanced Control Strategies for Reliable Renewable Energy Integration
11. Advancements in Solar PV inverters

BENEFITS OF ATTENDING THE FDP:

1. Fabulous opportunity to interact with speakers from global forum.
2. Sessions will be oriented to practical aspects which helps the attendees to pursue their research.
3. An opening to experience and inculcate one of the fastest growing aspects under Nation's Mission.

RESOURCE PERSONS:

Lectures will be delivered by experts working with different International and Indian institutions of national importance, Research organizations, Government organizations and E-Mobility based Industries.

TARGETED PARTICIPANTS:

This faculty development program provides a platform for Faculty members from all over the country and outside, scientists, research scholars, and engineers/professionals from industry can participate in the course.

REGISTRATION DETAILS:

Faculty Members: Rs.500/-

Participants from Industry: Rs.1000/-

Research Scholar/PG Scholars: Rs.300/-

Interested participants are requested to fill the registration form as provided in the **(link given below)** along with the details of registration fee payment. Registration form is available at: [Click here](#) or paste the below link in browser

<https://forms.gle/YGnbwobtoGFWmW7D8>

The registration fee must be paid through online transfer:

A/C Holder name: Rajiv Gandhi Institute of Petroleum Technology

A/C No: 59480100000382

IFSC: BARB0JAICAM (Fifth character is zero)

Branch: RGIPT, Jais Campus

MICR: 227012204

SWIFT: BARBINBBHRB

20th January, 2023
Last date for online registration and fee payment.

SPEAKERS



Sunderesan M.A
Head—New Technologies
Ashok Leyland Limited, Chennai



Sameer Jindal
Director—Product Engineering
MG Motor India Pvt Ltd



Prof. Akshay Kumar Rathore
Singapore Institute of
Technology, Dover, Singapore



Prof. G. Saravana Ilango
NIT Tiruchirappalli



V. Chandrasekar Scientist-G,
Senior Director, Power
Electronics Group CDAC,
Thiruvananthapuram, India



Birinchi Bora
Deputy Director (Technical)
National Institute of Solar
Energy, Gurgaon



Dr. Ranjan Kumar Behera
Associate Professor
IIT Patna



Dr. G. R. Chandramouli
Assistant Professor
Delft University of
Technology (TU), Delft



Dr. Deepak Reddy Pullaguram
Assistant Professor
IIT Kharagpur



Dr. B. Chitti Babu
Assistant Professor
IITDM, Kancheepuram



Dr. B. Dasatgiri Reddy
Assistant Professor
NIT Surathkal



Guru Raghav Raman, Research Fellow,
The Future Resilient Systems programme,
Singapore-ETH Centre, NUS



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CONTACT DETAILS

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