



# IAC'18

## One Day Industry-Academia Conclave on Energy Storage Devices: Recent Advances & Future Challenges



**December 12, 2018**

**Department of Physics, IIT Roorkee,  
Roorkee, Uttarakhand, India - 247667**

**[www.imesd18.in](http://www.imesd18.in)**

### REGISTRATION FEE\*

\*Registration fee includes conclave kit and lunch.

Industry: **INR 8000**

Academic/Research Institute: **INR 4000**

Students: **INR 2500**

### VENUE AND TIME

The conclave will be held at Indian Institute of Technology Roorkee, Roorkee on **December 12, 2018**.

### WEATHER OF ROORKEE

Temperature in Roorkee in the month of December is expected to be around 8°C (low) and 24°C (high).

### ONLINE MODE OF PAYMENT FOR REGISTRATION

Name of Conference: **CONFR-76-PHY**  
Name of Bank: **State Bank of India**  
Branch Office: **Indian institute of Technology Roorkee-247667**  
Account Name: **Conference, Seminar & Symposium, IIT Roorkee**  
Account Number: **33136732957**  
Branch Code: **1069**  
IFSC Code: **SBIN0001069**  
MICR Code: **247002094**

For more details please visit our website [www.imesd18.in](http://www.imesd18.in)

### ADDRESS FOR CORRESPONDENCE

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## BACKGROUND AND AREAS TO BE ADDRESSED

India's energy requirement is largely fulfilled by fossil based fuels, and by 2030, India's dependence on import of fossil fuels is expected to exceed by 53% of the country's total energy consumption. In fact, our country ranks below 80<sup>th</sup> position in the world in overall energy self-sufficiency. To make energy efficient economic development, the energy policy of India is being framed to increase the focus on developing alternative sources of renewable energy, particularly solar, wind and hydro energy. According to a recent report, current renewable energy resources contribution about one third of the total installed capacity of in our country.

To improve the usage of installed capacity, storage of energy is essential because renewable energy received from above sources is not perpetual and therefore coupling with energy storage devices is only a solution to increase the overall utilization of installed capacity. In view of the above, rechargeable batteries and ultracapacitors are the most popular ways to store electrical energy for any time use. Huge research efforts are being taken up by all developed and developing countries to introduce batteries and capacitors with enhanced charge storage capabilities. In recent time, Li-ion batteries and supercapacitors, are being produced and used in large scale applications in most of the developed countries. However, India still lacks in developing indigenous high performance rechargeable batteries and supercapacitors at an industrial scale.

To expedite the research and development of above said devices and their usage, we have planned to organize an International Meeting on Energy Storage Devices (IMESD) -2018, in December 10-12, 2018 at IIT Roorkee. Certainly, IMESD-2018 is going to be one of the most important gatherings for providing thought leadership within community working on energy storage devices and technologies and to foster collaborations between government, industry and academia. More information can be gathered from our meeting website: [www.imesd18.in](http://www.imesd18.in)

In addition, we have also planned to organize a **One Day Industry-Academia Conclave (IAC) -2018** at Indian Institute of Technology Roorkee, Roorkee, India. This unique one-day summit after an international meeting on energy storage devices (IMESD) -2018 will bring together stakeholders from India and abroad to meet for an informative and collaborative event that brings an in-depth focus on the opportunities and markets available in India.

This one-day summit will engage energy storage and utility industry leaders, best academic scientist from the globe and Indian government policy makers to discuss the policies and best practices that are bringing storage to the forefront of conversations around the future of the grid, renewable deployment, and system planning.

## KEY TOPICS OF THE CONCLAVE

- Need of storage devices: Challenges and Innovation
- Energy Storage Devices: Development and application
- Govt. Policy and Support for energy storage solutions
- Demands of Industry and Scope for an academician in India
- Joint Industry-Academia Project
- Involvement of stakeholders on integration of energy storage facilities
- Where we stand and What to do further (particularly in storage devices)

Each of above topics will be introduced by a plenary type talk from a distinguished speaker followed by the presentation of invited speakers. The conclave includes a public-private action day with prominent speakers and thematic panel discussions; roundtable discussions with clean energy business leaders, experts, policymakers, and other stakeholders. The conclave will be composed of speakers with some dignitaries invited from leading industries that have large emphasis on Research and development. Speakers will be from academia, government agencies and industries.

## OUTCOMES/BENEFITS

Public-private roundtable discussions will provide an opportunity for business leaders, invited experts and students from academic institute, scientist from various labs, to bring their knowledge and perspective on the importance of public investment for innovation, and the ways that the public and private sectors can engage more productively in the field of energy storage.

## TARGET BENEFICIARIES

- National Electric Mobility Mission Plan (NEMMP) 2020
- Mission Innovation
- Make In India
- Skill India
- Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME India)