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Webinar organized by  
**Department of Electrical Engineering, IIT (ISM), Dhanbad**

### Program Conveners

**Prof. Ashok Kumar, Prof. Sonam Acharya**  
Department of Electrical Engg.  
IIT (ISM), Dhanbad

### Registration Details

Once the registration fee is paid, fill up your details and Upload the payment receipt in –

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## Key Speakers of the webinar



**Prof. Utsab Kundu**

Department of Electrical Engg.  
IIT Kanpur



**Prof. Shiladri Chahraborty**

Department of Electrical Engg.  
IIT Bombay



**Prof. Saptarshi Basak**

CART  
IIT Delhi



**Prof. Olive Ray**

School of Electrical & Computer Sciences  
IIT Bhubaneswar



**Prof. Sanjay Tolani**

Department of Electrical Engg.  
NIT Surat



**Prof. Ramanuja Panigrahi**

Department of Electrical Engg.  
IIT Roorkee



**Prof. Abhinav Arya**

School of Electrical & Computer Sciences  
IIT Bhubaneswar



**Mr. Ambar Pakhira**

Tech. Leader, Global Foundries



**Mr. Arun Karthikeyan**

Senior Hardware Engineer, Enphase



**Dr. Rajdeep Banerjee**

R & D Manager, Kirloskar



# Call for Participation

## Three Day Webinar on

Upcoming  
webinar



## Design and Control Perspectives in Sustainable Energy and Electric Mobility

### Who Can Apply?

- PhD Research Scholars
- PG/UG students
- Faculties/Academicians/Scientists
- Engineers from industries
- Other professionals

**E-certificates for all participants**

### Registration Fee (including GST@18%)

|                                   |              |
|-----------------------------------|--------------|
| Student-UG/PG/Ph.D.               | : Rs. 1000/- |
| Academicians/Scientists/Faculties | : Rs. 2000/- |
| Delegates from Industries         | : Rs. 2500/- |
| Internal participants             | : Rs. 600/-  |

### Payment Details

The non-refundable registration fee should be sent through **Net-banking /Online Payment/ UPI**.

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IMPORTANT DATE



**Registration opens: 20.06.25**

**Registration closes: 01.07.25**



**UPI ID: 31012626024892@cnrb**

**UPI Name: IIT ISM PROJECT AC**

**Address for Communications, if any**

**Sanjay Kumar Sena (M-9835398358)**

**Chandan Verma (M-7084701918)**

**Email : [sustainable.emobility@gmail.com](mailto:sustainable.emobility@gmail.com)**

### About the Webinar:

The objective of this webinar is to bring together **experts and excellence from both academia and industry**, delivering insightful sessions on two interconnected concepts at the forefront of global efforts to combat climate change, reduce air pollution and transition away from fossil fuels. This webinar aims to provide participants with a comprehensive understanding of **emerging technologies in sustainable energy** systems and **electric mobility**, with a strong focus on power electronic converters, control strategies, and smart integration.

### Key Themes and Topics:

#### ➤ **FPGA-Based Control Systems**

Real-time control platform design for high-performance power converters.

#### ➤ **Permanent Magnet Motor**

Design and analysis techniques for EV-oriented PM motors.

#### ➤ **Microgrid Integration**

Low-voltage smart distribution system architectures and grid interfacing.

#### ➤ **Reliability of Power Electronics in EVs**

Thermal management and failure analysis of EV power electronics.

#### ➤ **Advances in Control and Instrumentation**

Modern control strategies for high-efficiency converter operation.

#### ➤ **Capacitor-less PV Inverter Design**

Two-stage inverter innovation eliminates bulky electrolytic capacitors.

#### ➤ **Switched Reluctance Motor Drives**

Energy-efficient design of variable speed drives.

#### ➤ **Integrated EV Chargers**

Smart, compact solutions combining grid and renewable energy sources.

#### ➤ **Design challenges in wide band gap devices**