



Press Release

## IIT Bhubaneswar organizes Workshop on Power Devices and Power Electronics

**Bhubaneswar, 7<sup>th</sup> February 2025:** Indian Institute of Technology (Bhubaneswar) organised a one-day workshop on 'Power Devices and Power Electronics' on 6<sup>th</sup> February 2025. The workshop discussed next-gen research, workforce and supply-chain programs necessary to build India from the bottom up in Power Electronics from Design to Devices to Packaging and Systems, so as to bridge the manufacturing gap between advanced countries and India. This workshop was part of the national level effort to establish Industry Co-development Centres (ICCs) in 12 strategic research areas to promote industry-academia collaboration and manpower training. IIT Bhubaneswar is leading the proposal for the ICC on Power Devices and IIT Bombay is leading the ICC on Power Electronics. The workshop conducted at IIT Bhubaneswar was a joint effort for these two ICCs, which witnessed participation from industry and academia.

Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar and Advisor to the ICC on Power Devices, and Prof. Rao Tummala, Advisor to Government of India in India Semiconductor Mission and Emeritus Professor, Georgia Institute of Technology inaugurated the event and addressed the participants. In his inaugural address, Prof. Karmalkar pointed out the strengths of IIT Bhubaneswar in industry-academia collaboration, entrepreneurship development and semiconductor technology and chip design. "This workshop is a significant effort to build industry-academia collaboration towards setting up of the Industry Co-development Centre on Power Devices and contribute to the India Semiconductor Mission," he added. Prof. Rao Tummala highlighted efforts to create a complete ecosystem for Indian Design, Semiconductor, Packaging and System (IDSPS) technologies. The IDSPS focus is not on either semiconductors or packaging but a total of 12 strategic research areas to form any electronic system.

Leaders from companies such as SiCSem, RIR, iVP Semiconductor, CDIL, Texas Instruments, MacDermid Alpha Electronics Solutions, MELSS, and Indium Corporation participated and spoke about their current focus and future needs in terms of research and manpower. The proposal on the ICC on Power Devices was presented by a team of faculty, namely - Dr. Akshay K, Dr. P. V. Satyam and Dr. Abhinav Arya (IIT Bhubaneswar), Dr. Arvind Ajoy (IIT Palakkad), Dr. G. Vijaya Kumar (IIT Tirupati) and Dr. Ankush Bag (IIT Guwahati). The proposal on the ICC on Power Electronics was presented by Dr. Shiladri Chakraborty (IIT Bombay). This was followed by a site visit to key facilities of IIT Bhubaneswar related to semiconductor characterization, chip design, power electronics, research and entrepreneurship park, and SiCRIC (Silicon Carbide Research and Innovation Centre).