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PRESS-RELEASE

IIT (ISM) Director Prof. Sukumar Mishra Receives Prestigious Hingorani Award 2024 for Excellence in Solar Photovoltaic Systems

The Indian Institute of Technology (Indian School of Mines) (IIT (ISM)) is proud to announce that Prof. Sukumar Mishra, the Director of IIT (ISM), has been honored with the esteemed Hingorani Award 2024 by the Bangalore Chapter of the IEEE Power and Energy Society. This recognition is awarded in acknowledgment of his outstanding contributions to the field of Solar Photovoltaic Systems.

The award was presented to Prof. Mishra during a recent ceremony held in Bangalore, celebrating his pioneering research in developing a reliable microgrid for residential societies. His innovative work includes advanced control methods for designing grid-forming inverters, which emulate seamless synchronization features to address the dynamic challenges faced by modern power grids. The proposed control methods have been rigorously validated through simulations under various operating conditions and were published in the 2021 IEEE Energy Conversion Congress and Exposition (ECCE).

Prof. Mishra's research is particularly significant in light of the growing energy and environmental crises, as it contributes to the advancement of distributed generation systems that harness renewable energy sources, including photovoltaic arrays, fuel cells, wind turbines, and hydroelectric systems.

In his acceptance speech, Prof. Mishra reflected on his journey in the field of power systems, stating, "I began my exploration into the operation and research of Flexible Alternating Current Transmission System (FACTS) devices during my PhD at NIT Rourkela in 2000, focusing on the controls of FACTS devices. This experience led me to integrate Power Electronics into various systems, eventually transitioning to renewable energy and the integration of FACTS devices with renewable sources."

He further elaborated on his current research focus, saying, "Today, my domain of research is inverter-based microgrid systems, particularly analyzing their stability."

Prof. Mishra expressed his gratitude for the support he has received throughout his career, stating, "The credit for this award goes to my family, including my wife, children, and parents, as well as my students, who have played a crucial role in my research endeavors. Without their support, I would not have been able to achieve this milestone."

IIT (ISM) congratulates Prof. Sukumar Mishra on this remarkable achievement and looks forward to his continued contributions to the field of renewable energy and power systems.

Rajni Singh

Dean (Corporate Communications)