# STABILITY AND PROTECTION OF Renewable dominated power grids

**COURSE CO-ORDINATOR PROF. SARASIJ DAS, IISC** 



## Venue:

Department of Electrical Engineering Indian Institute of Science (IISc) Bangalore

Registration Link: https://iisc.online/shortterm/home.html

## **Course Schedule**

6th to 9th January, 2025 Registration Deadline; 8th Dec 2024 Course Mode: Offline



भारतीय विज्ञान संस्थान

#### Who will benefit from the course?

This workshop is intended for students, researchers, faculty from academic and technical institutions, staffs from private and government industries and institutions. Hands-on sessions will be provided on the Matlab Simulations of Grid-Following Inverters.

#### **Featured Speakers:**

Prof. Sukumar Kamalasadan

Duke Energy Distinguished Professor of Electric Power Engineering,



**Prof. Nilanjan Ray Chaudhuri** Associate Professor, Pennsylvania State University (Penn State)

#### List of Topics Covered:

List of Speakers:

Prof Sukumar Kamalasadan, University of North Carolina at Charlotte, USA Prof Nilanjan Ray Chaudhuri, Pennsylvania State University, USA Prof Animesh Sahoo, IIT Dharwad Prof Vinod John, IISc Prof Kaushik Basu, IISc Prof Vishnu Mahadev Iyer, IISc Prof Sarasij Das, IISc Industry Speakers: TBD

Overview of Photovoltaic and Wind Generations; Grid Code Requirements; Introduction to Grid Following and Grid Forming IBRs; Small Signal Stability of IBRs: Modelling Adequacy; Transient Stability of Grid Following IBRs; Frequency Support from Grid Forming IBRs; Reactive Power Management in Inverter Dominated Systems; Fault Analysis of Power Systems with Grid Following Inverters; Protection Issues in Renewable Dominated Power Grids; Power Quality Issues in Inverter Dominated Systems; Energy Storage for Renewable Dominated Power Grids; Microgrids; Transition Control of Dual-mode Inverters in Microgrids; Case Studies; Hands on Training of Inverter Modelling in MATLAB.

Limited accommodations (non-AC) available at a hotel with 1200 INR/night rate near IISc on the first come first serve basis against payment by the attendees.



#### **Registration Fee:**

Student/Project Assistants: INR 5000+18% GST Post-Docs: INR 6000+18% GST Faculty of College/University: INR 10000+18% GST Industry: INR 15000+18% GST

### **Contact Us**

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