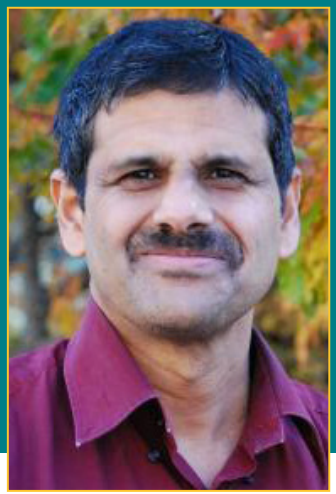
CPRI

Visiting Chair Professorship

Instituted by the Central Power Research Institute (CPRI) in the year 2011 to commemorate the Golden Jubilee of CPRI and the Centenary of the Department of Electrical Engineering at the Indian Institute of Science

Offered to distinguished researchers in power engineering (power systems, power electronics, high voltage engineering, and interdisciplinary topics in power engineering) to visit IISc for a few months to engage in teaching, and research interactions. The visitors are hosted by the Department of EE. IISc thanks CPRI for this generous endowment to promote research and innovation in power engineering.



Prof. Ashoka K S Bhat

Professor of Electrical and Computer Engineering , Univ of Victoria, Canada

Expertise

Power electronic controls

High-frequency link power conversion-resonant and pulse with modulation

Power converters for alternative energy sources

Design of electronic circuits for power control

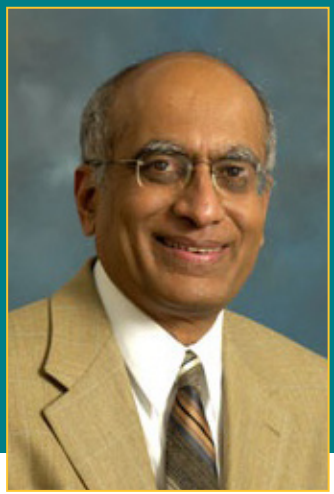
Awards and Distinctions

Fellow of IEEE

Excellence in Teaching Award from the Faculty of Engineering, 2008

Wighton Fellowship, 2010.

Visit Prof. Bhat visited IISc for six months from January 2014 till June 2014. During the visit, he taught a regular graduate course on *Switched Mode Power Conversion*. He was fully engaged in several department activities such as weekly seminars of the power electronics group and Masters project evaluations. He also delivered special lectures in his areas of expertise. He was actively engaged in interactive discussions with several faculty members and Ph.D. students working in power electronics.



Prof. Tangali S. Sudarshan

Carolina Distinguished Professor Emeritus of Electrical Engineering, University of South Carolina, USA

Areas of Expertise

Techniques of growth of silicon carbide (SiC) bulk and epitaxial films; Solid, liquid and gas insulated systems for high voltage power apparatus; Pulsed power systems; Electric field studies using numerical techniques; Insulator degradation and aging; Coronas and arcs; Power system protection.

Awards and Distinctions

Fellow of IEEE
Michael J. Mungo Distinguished Professor Award
Russell Research Award
Carolina Trustee Professorship

Visit Prof. Sudarshan visited IISc from August 2017 till December 2017. During the semester, he taught a course on *Introduction to Solid State Electron Devices*. He participated in several department activities such as weekly research seminars of the Department of EE. He was actively engaged in interactive discussions with several faculty members and Ph.D. students working in his areas of expertise. He is a collaborator on a multi-institutional project (CDAC, IISc, SCTIMST, and USC) for technologies for developing a light-weight portable standalone refrigerator for carrying vaccines to remote areas while maintaining the potency of the vaccine for 48 hrs.

Prof. Vijay Vittal

Ira. A. Fulton Chair Professor, School of Electrical, Computer and Energy Engineering, Arizona State University

Areas of Expertise

Robust Control Methods Applied to Power Systems

Emergency Control to Prevent Catastrophic Failures in Power Systems

Direct Control of Loads to Enhance Reliability in Power Systems

Sensors and Sensor Systems for Large Scale Power Systems

Use of Phasor Measurement for On-line Transient Stability Analysis

Grid Integration of Renewable Resources

Hybrid Simulation

Awards and Distinctions

Fellow of IEEE

Member of U.S. National Academy of Engineering

IEEE Power and Energy Society Prabha. S. Kundur Power System Dynamics and Control Award, 2018

Utility Variable-Generation Integration Group Achievement Award, 2018

IEEE Herman Halperin Transmission and Distribution Technical Field Award, 2013

IEEE Power and Energy Society (PES) Outstanding Power Engineering Educator Award, 2000.

U.S. National Science Foundation Presidential Young Investigator Award in 1985.

Visit Prof. Vittal visited IISc from September 11, 2017 till November 3, 2017. During the semester, he co-taught a course on *Power System Dynamics and Control*. He participated in several department activities such as weekly research seminars of the Department of EE. He was actively engaged in interactive discussions with several faculty members and Ph.D. students working in his areas of expertise.

Prof. Balarko Chaudhuri

Reader in Power Systems, Imperial College, London, UK

Course Director for MSc in Future Power Networks

Areas of Expertise

Power systems dynamics and stability; Grid integration of renewable energy; Wide-area Control through HVDC/FACTS; Demand response

Awards and Distinctions

Co-Author of two books: Robust Control in Power Systems (Springer) and Multi-terminal Direct Current Grids (Wiley IEEE)

Fellow, IET

Editor of IEEE Transactions on Smart Grid

Associate Editor of IEEE Systems Journal

Associate Editor of Elsevier Control Engineering Practice

Visit Prof. Chaudhuri visited IISc from July 18, 2019 to September 5, 2019. During the visit, he delivered several lectures on the topic of *HVDC Transmission Systems*. He was fully engaged in interactive discussions with several faculty members and Ph.D. students working in power system dynamics and control and grid integration of renewable energy.

Prof. Tarlochan Sidhu

Professor, Department of Electrical, Computer and Software Engineering, University of Ontario Institute of Technology

Areas of Expertise

Power system protection and monitoring. His work involves design, implementation and testing of relays and power system instrumentation that use digital signal processing and artificial intelligence techniques.

Awards and Distinctions

Fellow of IEEE
Dean, Electrical, Computer, and Software Engineering, University of Ontario Institute of Technology

Visit Prof. Sidhu visited IISc from December 12, 2019 to January 28, 2020. During the visit, he delivered several lectures as a part of the popular course "Advanced Power System Protection." He delivered expert lectures as a part of the Workshop titled "Next Generation Power Grids" (6-8 Jan 2020) to a group of engineering college teachers from selected colleges in India. He was fully engaged in interactive discussions with several faculty members and Ph.D. students working in power systems in general and power system protection in particular. An important outcome of his visit is the initiation of a possible MOU between IISc and University of Ontario.

IISc

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