



IEEE

Ottawa Section



Seminar by IEEE Ottawa Section, PELS, SSIT, RS-PEL, PES, Education Activities, Algonquin College
IEEE Student Branch, ComSoc, CESoc, and BTS Ottawa Joint Chapter.

The IEEE Ottawa Section is inviting all interested IEEE members and nonmembers to a seminar

Modern Day Applications of Power Electronics – Who Can Benefit?

By

Kalyan K. Sen

Sen Engineering Solutions, Inc.

DATE: November 28th 2019

TIME: Refreshments, Registration and Networking: 18:00; Seminar: 18:30 – 20:00.

PLACE: [Algonquin College](#), Room P208, 1385 Woodroffe Ave., Ottawa.

PARKING: Parking in Lots 8 and 9 after 5 p.m. is \$5 flat rate, pay at a machine and display the ticket on your dashboard.

Abstract - Application of power electronics is widespread in everyday life. Some applications are considered as “nice to have it;” in other cases, they are essential. This presentation discusses a wide variety of daily-used applications around the world. Also covered is an advanced topic, such as SMART Controller that today’s grid requires for voltage regulation, power factor regulation, unbalance voltage/current regulation, harmonic elimination and so on. A SMART Controller that is based on functional requirements and cost-effective solutions is derived from utilizing the best features of all the technical concepts that are developed until now. Final year students of electrical engineering undergraduate curriculum, post graduate students, researchers, academicians and utility engineers will benefit from attending this course. The participants will hear from an expert who actually designed and commissioned a few utility-grade SMART controllers since their inception in the 1990s.

Speaker’s Bio

Kalyan Sen, a Fulbright Scholar, is the Chief Technology Officer of Sen Engineering Solutions, Inc. (www.sentransformer.com) that specializes in developing SMART power flow controllers—a functional requirements-based and cost-effective solution. He received BEE, MSEE, and PhD degrees, all in Electrical Engineering, from Jadavpur University, India, Tuskegee University, USA, and Worcester Polytechnic Institute, USA, respectively. He also received an MBA from Robert Morris University, USA.

Dr. Sen spent more than 30 years in academia and industry and became a Westinghouse Fellow Engineer. He was a key member of the Flexible Alternating Current Transmission Systems (FACTS) development team at the Westinghouse Science & Technology Center in Pittsburgh. He contributed in all aspects (conception, simulation, design, and commissioning) of FACTS projects at Westinghouse. He conceived some of the basic concepts in FACTS technology. He has authored or coauthored more than 25 peer-reviewed publications, 8 issued patents, a book and 4 book chapters in the areas of FACTS and power electronics. He is the coauthor of the book titled, *Introduction to FACTS Controllers: Theory, Modeling, and Applications*, IEEE Press and John Wiley & Sons, Inc. 2009, which is also published in Chinese and Indian paperback editions. He is the co-inventor of Sen Transformer.

Admission: Free. Registration required.

Please register by e-mail contacting: ottawapels@gmail.com