

Report on 22nd Thomas Alva Edison Memorial Lecture:

Speaker: Prof. Ned Mohan, Oscar A. Schott Professor of Power Electronics at the University of Minnesota (USA)

Topic: "PE Transformers" and "DAB for EV Battery Charging"

Venue: EE, Committee Room, Block II, IIT Delhi

Date and Time: 16-11-2018, 4PM-5PM.

Brief Report:

Prof. Ned Mohan of University of Minnesota, was invited under the PES-IAS and PELS-IES Chapters to deliver a lecture at IIT Delhi on 16th Nov 2018. The lecture was given at the committee room in the Department of Electrical Energy, IIT Delhi. Prof. Mohan began his lecture by introducing his university and his work there. He also said about the various opportunities interested students working in power electronics can get in universities abroad such as his. He started his presentation with the topic of Power Electronic transformers (PET), and hinted about their applications and topologies that they have currently worked upon. He also discussed on the problems of training of PE devices to provide unbalanced current at fault times. For the second topic of the presentation he briefly told the audience how the dual active bridge based converters may find applications such as interfacing plug in hybrid vehicles with the ac grid, due to their bidirectional power flow and soft switching which leads to higher efficiency. In the end, he also told the audience about a new numerical simulation tool 'Sciamble' developed by his students. The lecture was attended by a combined 42 students and faculty. The attendees were open to ask questions after his presentation ended. Some of the photographs taken on that day are given below.

