

IEEE Sri Lankan Chapter Central Region Subsection
together with IEEE PES SL CHAPTER

Organize a talk on

“Education to Innovation and commercialization”

By

Dr Nihal Kularatna

Associate Professor

School of Engineering, the University of Waikato, New Zealand

Tuesday, 19th of January 2016
2:00am - 3:00pm

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DEEE Seminar Room

All are Welcome

About the Talk:

As engineers most of us begin with a degree level qualification to enter the industry. Only a limited percentage of us get the real opportunities to start from text book theory into real-world engineering practice. Once we get this opportunity, if we intelligently apply simple text book theory to progress into new products and techniques, we can be very creative.

Presenter, a practicing-engineer turned into an academic, has looked at the special-case of a simple capacitor becomes one million times larger than the usual. Such a supercapacitor based circuit topology supported by simple circuit theory could lead into highly creative circuit topologies with the achievement of multiple international patents, commercial projects and new products. Examples used will be on the patented or patent-pending supercapacitor assisted (SCA) techniques such as SCALDO, SCASA, SCATMA, SCAHDI and SCABER respectively applied in the areas of linear power converters, surge absorbers, temperature modification apparatus, high density inverters and brake energy recovery. Presentation will be to justify how a practically oriented Sri Lankan electrical engineer can contribute at a global level.



About the presenter:

Nihal Kularatna is an electronics engineer with over 40 years of experience in industry and research. After 10 years of employment in the aviation and telecommunications industries, he joined the Arthur C Clarke institute for Modern Technologies in Sri Lanka as an R& D engineer in 1985 and he was appointed the CEO of the institute in 1999. From 2002 to 2005 he was a Senior Lecturer in the Dept of Electrical and Computer Engineering, University of Auckland, New Zealand and currently he is an Associate Professor at the University of Waikato, Hamilton, New Zealand.

He has authored 8 books for British and US publishers including the Volume 10 and 11 of Electrical Measurement Series books for the IET (London). His most recent book [2015] was “Energy storage devices for electronic systems: rechargeable batteries and supercapacitors” for Elsevier Academic-Press, USA. He has worked as a consultant for many Sri Lankan companies and several US companies and, including the Gartner Group, USA.

A Fellow of the IET (London), a Fellow of IPENZ and a Senior Member of IEEE (USA) he is currently active in research in supercapacitor applications, transient propagation and power conditioning areas. For his commercially oriented research work, multiple international patents were granted and several more patents are pending. He was the winner of New Zealand Engineering Innovator of the Year Award for 2013.