University of Windsor IEEE STUDENT BRANCH

IEEE Windsor Section

Dr. Luay Taha

Air Emirate's Aviation Expert, Associate Professor

Friday , July 24, 2015, 3:00 – 3:45 PM

University of Windsor

Centre for Engineering innovation, Room # 3000

Biography:

Luay Y. Taha was born in Basra, Iraq on Sep 10, 1959. He received the B.Sc. degree in Electrical Engineering from Basra University, in 1980, the M.Sc. degree in Control and Instrumentation from university of Technology, Baghdad, in 1985, and the PhD degree in Micro-engineering and Nano-Electronics from UKM university, Malaysia, in 2009. From 1986 – 1988 he joined the scientific research council in Baghdad as a researcher in computer engineering and signal processing groups. He was involved in researches related to programmable instrumentation and homomorphic signal processing. In 2008, he joined university of Technology – Department of control and systems as lecturer in digital design and computer buses. From 2009 – 2002 he joined Dubai Aviation College to teach in the department of electronic and aerospace engineering. Since 2002 he worked with Emirates airlines/Emirates Aviation University as an engineering lecturer and a programs developer for Electronics, Avionics and Aerospace Engineering. In 2009, he was appointed as an assistant professor and a programs manager of Electronics, Avionics and Aerospace Engineering departments. On Jan 2014 Luay was promoted to associate professor. Luay worked in the research and development of electrostatic micro power generator, MEMS piezoelectric micro power generator, and published many papers and Journals in this field. Luay is an IEEE member since 2004.

Title:

Energy harvesting systems: overview, technologies and applications

Abstract:

The aim of this presentation is explain the main principle and technologies used in energy harvesting systems with focus on piezoelectric, electrostatic and electromagnetic harvesting topologies. A comparison between these types is also presented along with possible applications in micro/nano Watts level such as wireless sensor networks. Experimental and simulation results are provided.