



IEEE

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Section



The IEEE Ottawa Joint Chapter of Communications Society and Broadcast Technology Society (ComSoc/BTS), Women In Engineering (WIE), and Algonquin College IEEE Student Branch (ACSB) are inviting all interested IEEE members and other engineers, technologists, and students to a technical seminar on

Advances in Wireless Sensor Networks

by

Dr. Hussein T. Mouftah

Canada Research Chair and Distinguished University Professor
SITE, University of Ottawa, Ottawa, Ontario, Canada

DATE: **Wednesday February 27, 2008.**

TIME: Refreshment, Registration and Networking: **06:45 p.m.**; Seminar: **07:00 p.m. – 08:30 p.m.**

PLACE: Algonquin College, [1385 Woodroffe Ave.](#), [School of Advanced Technology, Building-T](#), Room T129

PARKING: No fee after 5:00 p.m. at the Visitors' Parking Lots 8 & 9. Please respect restricted areas.

Admission: Free. Registration required. To ensure a seat, please register by e-mail contacting:

Wahab Almuhtadi at almuhtadi@ieee.org.

Abstract

In recent years, advances in miniaturization; low-power circuit design; simple, low power, yet reasonably efficient wireless communication equipment; and improved small-scale energy supplies have combined with reduced manufacturing costs to make a new technological vision possible: Wireless sensor networks. A sensor network is composed of a large number of sensor nodes, which are densely deployed either inside the phenomenon or very close to it. The position of nodes need not be engineered or pre-determined. This allows random deployment in inaccessible terrains or disaster relief operation. We will present an overview of advances in wireless sensor networks technology and its future trends and its applications.

Bio

Hussein Mouftah joined the School of Information Technology and Engineering (SITE) of the University of Ottawa in September 2002 as a Canada Research Chair (Tier 1) Professor in Optical Networks, where he became a *Distinguished University Professor* in February 2006. He has been with the Department of Electrical and Computer Engineering at Queen's University (1979-2002), where he was prior to his departure a Full Professor and the Department Associate Head. He has three years of industrial experience mainly at Bell Northern Research of Ottawa, now Nortel Networks (1977-79). He has spent three sabbatical years also at Nortel Networks (1986-87, 1993-94, and 2000-01), always conducting research in the area of broadband packet switching networks, mobile wireless networks and quality of service over the optical Internet. He served as Editor-in-Chief of the IEEE Communications Magazine (1995-97) and IEEE Communications Society Director of Magazines (1998-99), Chair of the Awards Committee (2002-2003) and Director of Education (2006-). He is a Distinguished Speaker of the IEEE Communications Society since 2000. Dr. Mouftah is the author or coauthor of five books, 24 book chapters and more than 800 technical papers and 9 patents in this area. He is the joint holder of the Best Paper Award for papers presented at the IEEE ICC'2005 Optical Networking Symposium and SPECTS'2002, and the Outstanding Paper Award for papers presented at the IEEE HPSR'2002 and the IEEE ISMVL'1985. Also he is the joint holder of a Honorable Mention for the Frederick W. Ellersick Price Paper Award for Best Paper in the IEEE Communications Magazine in 1993. He is the recipient of numerous prestigious awards, such as the 2006 IEEE Canada McNaughton Medal, the 2006 Engineering Institute of Canada (EIC) Julian Smith Medal, the 2004 IEEE Communications Society Edwin Howard Armstrong Achievement Award, the 2004 George S. Glinski Award for Excellence in Research of the University of Ottawa Faculty of Engineering, the 1989 Engineering Medal for Research and Development of the Association of Professional Engineers of Ontario (PEO), and the Ontario Distinguished Researcher Award of the Ontario Innovation Trust. He is also the recipient of the IEEE Canada (Region 7) Outstanding Service Award (1995) and the 2006 CSIM Distinguished Service Award of the IEEE Communications Society. Dr. Mouftah is a Fellow of the IEEE (1990), Fellow of the Canadian Academy of Engineering (2003) and Fellow of the Engineering Institute of Canada (2005).