

Academy for Co-creative Education of Environment and Energy Science -Third Special Lecture-

Date and Time: April 17 (Tuesday) 4:45pm to 6:00pm

Venue: Room 201, South 3 Building, O-okayama Campus

Lecturer : Prof. Lawrence E. Larson (Dean, School of Engineering, Brown University, USA)

Title:

Ultra broad-band wireless circuit development at Brown University -from Neurons to Networks.

Abstract:

This talk will focus on the development of microwave and RF wireless circuits for high bandwidth applications. Several applications are proposed for this technology, including neural interfaces, cognitive radios, and sensors. Development of new technology in these areas requires a unique interdisciplinary research team and structure, and the development of this team at Brown University will be discussed.

Biography:

Lawrence E. Larson (S'82-M'86-SM'90-F'00) received the B.S. and M.Eng. degrees in electrical engineering from Cornell University, Ithaca, NY, in 1979 and 1980, respectively, and the Ph.D. degree in electrical engineering and M.B.A. degree from the University of California at Los Angeles (UCLA), in 1986 and 1996, respectively. From 1980 to 1996, he was with Hughes Research Laboratories, Malibu, CA, where he directed the development of high-frequency microelectronics in GaAs, InP, and Si-SiGe and MEMS technologies. In 1996, he joined the faculty of the University of California at San Diego (UCSD), La Jolla, where he is the Inaugural Holder of the Communications Industry Chair.

He was Director of the UCSD Center for Wireless Communications from 2001-2006 and was Chair of the Department of Electrical and Computer Engineering from 2007-2011. He moved to Brown University in 2011, where he is Founding Dean of the School of Engineering.

He has published over 300 papers, received 40 US patents, co-authored three books, graduated 23 PhD students, and is a Fellow of the IEEE.

During the 2000-2001 academic years, he was on leave with IBM Research, San Diego, CA, where he directed the development of RF integrated circuits (RFICs) for third-generation (3G) applications. During the 2004-2005 academic year, he was a Visiting Professor with the Technical University of Delft, Delft, The Netherlands. He has authored or coauthored over 250 papers. He holds 31 U.S. patents. Dr. Larson was the recipient of the 1995 Hughes Electronics Sector Patent Award for his research on RF MEMS technology. He was corecipient of the 1996 Lawrence A. Hyland Patent Award of Hughes Electronics for his research on low-noise millimeter-wave HEMTs, the 1999 IBM Microelectronics Excellence Award for his research in Si-SiGe hetero-junction bipolar transistor technology, and the 2003 IEEE Custom Integrated Circuits Conference Best Invited Paper Award.