DOCTORADO EN CIENCIAS DE LA INGENIERÍA

Conferencias Magistrales

La Sociedad de Teoría y Técnicas de Microondas (MTT-S) del IEEE, la Sección Guadalajara del IEEE, y el Capítulo México de la MTT-S, en colaboración con el Doctorado en Ciencias de la Ingeniería del ITESO, invitan cordialmente a la conferencia magistral:

MICROWAVE ENGINEERING: WHAT IS IT, WHERE IS IT HEADED, AND HOW IT SERVES THE MANKIND

by Prof. Madhu S. Gupta

SYNOPSIS

This talk is aimed at professionals (electrical and electronics engineers, not necessarily experts on microwave engineering), professors-researchers, and graduate (and advanced under-graduate) students interested in RF and microwave engineering. The pre-requisites for appreciating the talk are minimal, and include some familiarity with electromagnetics and RF electronics. The talk consists of three components, with emphasis on the applications of microwave engineering and promising future trends, especially those with potential social benefits:

✓ What is Microwave Engineering: how it is different from low-frequency or optical engineering; what are its theoretical underpinnings; to what applications is microwave engineering put, and what makes microwaves particularly suitable, or even unique, in those applications; why is it necessary to study RF and microwave theory even if all you want to do is "just design circuits".

✓ What are the Frontiers of the Field: what is the present state-of-the-art in this field, and the challenges for the future; what technological developments and newer applications are driving the future evolution of the field; what are some of the open research problems; how is the practice of microwave engineering likely to change in coming decades.

✓ How does it Contribute to Quality of Life: how microwave engineering meets the human needs of communication, safety and security, decontamination and environmental remediation, health and biomedical applications, agriculture and food treatment; material processing; power generation and transmission; space exploration; material processing; and the generation, transport, and efficient utilization of electrical energy.

Madhu S. Gupta received the Ph.D. degree in Electrical Engineering from the University of Michigan, Ann Arbor, and is presently both an Adjunct Professor of Electrical & Computer Engineering at University of California, San Diego and the RF Communications Systems Industry Chair Professor at San Diego State University (SDSU), as well as Director of SDSU Communication Systems and Signal Processing Institute. Along with his other technical interests, his work concerns noise and fluctuations in devices that are active, nonlinear, very small, or used in high-speed/high-frequency applications. Dr. Gupta is an IEEE Fellow. He has served as the Editor of IEEE Microwave and Guided Wave Letters and IEEE Microwave Magazine and of three IEEE Press books. He served as the Chair of the Technical Program Committee of the IEEE International Microwave Symposium (IMS) for 2010. He was the recipient of the 2008 Distinguished Microwave Educator Award from IEEE Microwave Theory and Techniques Society (MTTS) in addition to a number of awards for outstanding teaching. He is a Distinguished Microwave Lecturer for MTTS. He also firmly believes that every technical talk should be entertaining, enlightening, and inspiring. Dr. Gupta was the President of the IEEE Microwave Theory and Techniques Society in 2013.

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Lunes 1 de septiembre: 18:30 a 20:00 horas. ITESO, Auditorio Pedro Arrupe.
Al finalizar la conferencia habrá un brindis y convivencia. Entrada libre, cupo limitado.
Interesados reservar lugar registrándose en: http://medios.iteso.mx/dci/

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