

Seminar on

UWB Nano-Antenna Arrays

by

Prof. Amir Boag

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Abstract

Dual-Vivaldi nano-antenna arrays were designed, fabricated, and optically characterized in the infrared (IR) and visible regimes. The antenna arrays were characterized by measuring the scattered light at IR and visible spectral ranges. A novel technique for antenna and load impedance measurements using scattering data has been developed. The radiation efficiency and the spectral response of the antennas were found to be in good agreement with numerical simulations. The results presented here demonstrate the extremely wideband nature of the Dual-Vivaldi nano-antennas and the strong impact of load at the antenna terminals on its scattering response. These properties, as well as their many degrees of freedom for design, render the Dual-Vivaldi nano-antennas excellent candidates for optical sensing applications and energy harvesting.

Biography

Amir Boag is a Professor of Electrical Engineering at Tel Aviv University. His interests are in computational electromagnetics and acoustics, imaging, and design of antennas and optical devices. He has published over 90 journal articles and presented more than 180 conference papers on electromagnetics and acoustics. In 2008, Amir was named a Fellow of the IEEE for his contributions to integral equation based analysis, design, and imaging techniques.

Date : 08 May, 2014 (Thursday)

Time : 05:00 pm – 06:00 pm

Venue : Room 15-202, meeting room of State Key Laboratory of Millimeter Waves, 15/F,
Academic 3, City University of Hong Kong

***** ALL ARE WELCOME *****

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