



The Hebrew University Center
for Nanoscience & Nanotechnology



Nano Seminar

Recent progress in nanoscale enhanced light-vapor interactions on a chip

Prof. Uriel Levy

*Department of Applied Physics, School of Computer Science & Engineering,
Hebrew University of Jerusalem*

Abstract:

Motivated by the growing efforts for miniaturization, on chip nanoscale photonic and plasmonic based devices and systems are becoming a reality. In this talk I describe our recent progress towards the construction of chip-scale devices for the purpose of enhancing the interaction of light with atomic media. This effort includes the demonstration nanoscale dielectric waveguides, resonators and plasmonic structures and their integration with vapor cells. In parallel, I will show some of the recent results related to the integration of vapor cells with metasurfaces. Finally, I will discuss applications in frequency stabilization and demonstrate ultra-precise measurement capabilities with chip scale nanophotonic devices.

Bio: Professor Uriel Levy is affiliated with the Department of Applied Physics, School of Engineering and Computer Science of the Hebrew University of Jerusalem. He serves as the director of the center for nanoscience and nanotechnology at the Hebrew University. Prior to joining HUJI in 2006 he was a post graduate researcher at the University of California, San Diego. His major research interest is nanophotonics, with focus on silicon photonics, plasmonics, and light matter interactions for applications in communication, imaging, lithography, sensing, memories, and alternative energy. He is a fellow of the Optical Society of America and a recent recipient of an ERC grant related to light vapor interactions on a chip.

Gathering & Refreshments at 10:50

Please contact Alexandra Bannykh at 6584919 if you are interested in meeting the lecturer.

Tuesday, Feb 28th 2017, 11:00 at the Seminar Hall
Los Angeles Building, entrance floor.