Department of Electrical and Computer Engineering Seminar:

Plasmonics: current status and perspectives

Wednesday, Sept 17th
1:30-3:00 ENG 1200 (Hall of Fame).

Plasmonics is a part of nanophotonics dealing with metallic nanostructures. It describes light interaction and confinement in such structures creating new properties and applications. a new area which covers a wide range of research and application topics. There are many promising directions have been discovered during last years in plasmonics including new principles of optical microscopy, optical metamaterials which includes “invisibility cloak” problem, enhanced solar energy devices etc.

I will outline most significant areas of modern plasmonics emphasizing two specific areas: principles of plasmonic optical circuitry or a “new integrated optics” and numerous biomedical applications of plasmonics including cancer detection, SERS, wounds healing, and plasmonics related aspects of nano-medicine.

Speaker Bio:
Ildar Salakhutdinov graduated in Radio-Physics and Electronics from the Kazan State University in Russia. In 1996 he received a PhD in Optics from A.M. Prokhorov General Physics Institute of the Russian Academy of Sciences. After industrial and academic post-doctoral research in Micro Managed Photons A/S, Denmark and Wayne State University, in 2007 he became an Assistant Professor –Research in the Electrical and Computer Engineering Department at Wayne State University, Detroit, Michigan. His research interests include waveguide optics, plasmonics, integrated optics, and biomedical optics.

ECE GRAs and GTAs required to Attend.
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