

Speaker Profile



Contact Details

Organization Name:

National Institute of Standards and Technology

Address:

MS 8443 100 Bureau Drive

Town: Gaithersburg, MD

Country: USA

Zip code: 20899

Phone: (301)975-4580

Fax: (301)975-6991

Email:

jch@nist.gov

Website:

<http://physics.nist.gov/Divisions/Div844/staff/Gp8/index.html>

Dr. Jeeseong Hwang**Research Biophysicist**

National Institute of Standards and Technology

Dr. Hwang is a research biophysicist at the physics laboratory of the National Institute of Standards and Technology (NIST) of US Department of Commerce. His work at NIST in 1994 began with an award of US National Research Council Fellowship on near-field optical scanning probe microscopy of nanoscale materials and structures. Before coming to NIST, he was a research scientist at the biology department of Johns Hopkins University investigating biophysical aspects of immuno-receptors and nanoscale structures and functions of lipid membranes in human cells using super-resolution near-field scanning optical microscopy and other laser-based optical techniques in collaboration with AT&T Bell Laboratories. His Ph. D thesis work at the physics department of Michigan State University was on the study of diffusion of atoms and charges in a quantum confined structures and junctions using low-temperature scanning tunneling microscopy and atomic force microscopy. His recent research activities involve several multidisciplinary projects on the development and real-world application of a variety high-resolution optical imaging techniques and spectroscopy and optical nano-metrology to characterize and employ various nanoscale materials such as semiconductor nanocrystals, nanotubes, and bio-inspired self-assembled nanostructures towards quantitative nano-biophotonics, nano-biotechnology, and nanomedicine.