



New Research Programs at DARPA/MTO

Wednesday, October 18, 2006
Babbio 104, 11:00am (NOTE: normal room)

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Nanotechnology plays an increasing role in key defense technologies. This talk will highlight examples where nanotechnology can enable the development of robust devices and systems for defense-related sensing and imaging applications supported by DARPA's Microsystems Technology Office. Featured program areas include: (1) Recognize IED and Report (RIEDAR) for standoff detection of improvised explosive devices (IEDs), (2) Hemispherical Array Detector for Imaging (HARDI), (3) Room temperature, Ultra-Sensitive, Miniaturized Magnetic Sensor, and (4) Supermolecular Photonics Engineering (MORPH).

Dr. Devanand Shenoy is a program manager in the Microsystems Technology Office at DARPA. He received his BS in physics, chemistry and mathematics at Bangalore University, Bangalore, India; his MS in Physics from the same University specializing in solid state physics and his Ph.D. in Physics from the Indian Institute of Science at Bangalore, India for work on critical point phenomena using photon correlation spectroscopy. Dr. Shenoy joined the Center for Bio/Molecular Science and Engineering, Naval Research Laboratory in 1996 after a postdoctoral experience at Case Western Reserve University and a research faculty appointment at the University of Nevada. Dr. Shenoy has served as acting lab head and has been the leading PI of several basic and applied research projects at NRL for the past ten years. A central theme in these projects has been to demonstrate the potential of complex organic materials such as liquid crystals, polymers, nanotubes and supramolecules in applications of interest to the DoD and industry. Dr. Shenoy has been a recipient of several NRL awards, including an Invention Award for protein nanopore stabilization, an Invention Award for chemical nanopores to sequence single stranded DNA at high resolution, and a Technology Transfer Award. Dr. Shenoy has served on the DoD Display Technology Panel. He is also an Affiliate Associate Professor at the University of Washington in Seattle. He is a member of American Physical Society, American Chemical Society, Biophysical Society and the International Society for Optical Engineering. He has served as referee for journals such as Nano Letters, Analytical Chemistry, Journal of Microbiological Methods, Journal of Biomedical Optics, Biosensors and Bioelectronics, Physical Review Letters and Physical Review E. Dr. Shenoy has more than 50 publications in peer reviewed journals including Nature and Macromolecules. There are four pending patents to his credit.

Light refreshments will be served prior to seminar

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