

MAR08-2007-020122

Abstract for an Invited Paper
for the MAR08 Meeting of
the American Physical Society

Educating the workforce for the nantoechnoogy industry at CNSE

PRADEEP HALDAR, University at Albany, SUNY

The College of Nanoscale Science and Engineering of the University at Albany is the first college in the world dedicated to research, development, education, and deployment in the emerging disciplines of nanoscience, nanoengineering, nanobioscience, and nanoeconomics. CNSE's Albany NanoTech complex, a \$4.2 billion, 450,000-square-foot facility has attracted over 250 global corporate partners, is the most advanced research complex of its kind at any university in the world. CNSE has evolved into an internationally recognized education and research center due to its eminently successful model for collaboration between industry, government and academia. CNSE's curriculum comprises a cutting-edge, inherently interdisciplinary academic program centered on intellectual rigor, educational diversity, and technical and pedagogical innovation to create a unique experience for faculty and students. The proposed undergraduate curriculum constitutes a four-part educational program comprised of a '*Foundational Principles*' component, a '*Core Competency*' component, a '*Concentration*' component and a '*Capstone Research/Design*' component. These four elements of the baccalaureate curricula in Nanoscale Science and Nanoscale Engineering inherently exploit the unparalleled academic, professional, and infrastructural resources of the College of Nanoscale Science and Engineering and its NanoFab Complex.