



## FIRST INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATION AND COOPERATION

### Speaker's Bio

#### Lars Samuelson



Lars Samuelson obtained his Ph.D. in Physics at Lund University in 1977. After a post-doc at IBM Research (USA), he returned to Lund in 1979. In 1986 he became Professor in Semiconductor Physics in Göteborg and returned to the Physics Department in Lund in 1988 for a Professorship in Semiconductor Electronics. He is since 1988 the director of the Nanometer Structure Consortium, today the primary center for Nanoscience in Sweden. He has also taken the initiative for a new university degree program in "Engineering Nanoscience" at LTH/LU, started in the fall 2003. Since 2003 he has been Deputy Director of the MIC center at DTU, Copenhagen, with special responsibility for nanoscience. He has also been coordinating a couple of EU-projects in the field of nanotechnology and nanoelectronics.

With a background in fundamental semiconductor physics, his research is focused on physics and applications of low-dimensional structures. In the 1990s this primarily involved: (i) studies of self-assembly and optical properties of quantum dots, and (ii) the realization of quantum devices by manipulation of pre-fabricated nanostructures. In recent years his research is focused on growth of ideal one-dimensional nanowires, their physical properties and applications in electronics, photonics and in life-sciences.

In 2002 Lars Samuelson was appointed "doubly excellent scientist" by the Swedish Research Council (VR), for his research on (i) fundamental quantum physics (by the Natural Science section of VR), and (ii) electronics and photonics (by the Engineering Science section of VR). In February 2005, the research program "Nanowires for Fundamental Materials Science and Quantum Physics and for Applications in Electronics, Photonics and in Life-sciences", directed by Lars Samuelson, was selected by the Swedish Research Council as one of 10 top research environments among all areas of science in Sweden.

Samuelson is the author of more than 300 articles in refereed journals, and has given more than 100 plenary/invited talks at international conferences and workshops.