

Beyond Photolithography

The promise of nano-imprint lithography

DISTINGUISHED SPEAKERS

Dr. S. V. Sreenivasan (CTO, Molecular Imprints, Inc.) John Pong (Nanonex, Inc.) Dr. Will Tong (Quantum Science Research, HP) Dr. Charles Schaper (Stanford University)

MODERATOR & EVENT CHAIR

Anthony Waitz (Quantum Insight)

VENUE Frances C. Arrillaga Alumni Center, Stanford University Sep 16, 2004 6:00-9:00 pm

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AGENDA

6:00 – 6:50 pm	Registration, Refreshments and Networking
7:00 – 7:05 pm	Introduction Dr.Wasiq Bokhari , Chair, MIT Stanford UC Berkeley Nanotechnology Forum
7:05 – 8:30 pm	Speaker presentations
8:30 – 9:00 pm	Session close by the Event Chair

ABSTRACT

The costs of a current generation (90nm) photolithography tools for building integrated circuits is now on the order of \$25M. The cost of next generation generation lithography tools are expected to be even more as the equipment makers move to yet more exotic technologies. The semiconductor industry is searching for new ways to reliably and cheaply create sub-100 nm structures. The nanotech community is looking ways to create structures with substantially smaller features today.

Nano-imprint lithography offers a new paradigm for printing nanometer scale structures for diverse applications in areas ranging from life sciences to semi conductors. Join the leaders of innovation in nano imprint lithography from industry and academia to explore the promise and challenges of this burgeoning area.

SPEAKER BIOS

Dr. S. V. Sreenivasan Chief Technology Officer, Molecular Imprints, Inc.

Dr. Sreenivasan is one of the founders of the company and one of the inventors of the technology while a Professor of Mechanical Engineering at the University of Texas at Austin. S.V. is a recognized authority in the areas of robotics and nano-precision machines.

John Pong

Director of Sales, Nanonex Inc.

John Pong, Director of Sales, Nanonex. He comes to Nanonex with 23 years of successful sales achievements in the field of Electron Beam Lithography through Leica Microsystems; and in the field of Electron Microscopy through Leica Microsystems (Cambridge Instruments), Philips Electronic Instruments and AMRAY (KLA-Tencor). His ability to promote new products and relentless pursuit of developing and winning new businesses has enabled him to establish market leadership in the product areas that he has been engaged in.

Dr. Will Tong Researcher, Quantum Science Research, Hewlett-Packard.

Dr. Tong received his PhD in chemistry at UCLA in 1994. He was a postdoctoral scientist at Lawrence Berkeley Lab and an NSF International postdoctoral fellow in Italy, performing research on materials properties of semiconductors. Since then he has been involved in R&D of mask fabrication for EUV lithography and optical proximity correction. He is currently a researcher at HP Inkjet Printing Group assigned to the Quantum Science Research Group at HP Labs to lead nanoimprint R&D effort.

Dr. Charles Schaper

Senior Research Scientist, Stanford University.

Dr. Schaper is the inventor of the MxL (Molecular Transfer Lithography) nanoprinting and nano-imprinting strategies, and discovered PVA-based surface topography replication chemistry for the formation of water-dissolvable biodegradable templates that drive the MxL methods.

MIT • Stanford • UC Berkeley Nanotechnology Forum

Introduction and Mission Statement

The Nanotechnology Forum is the largest nanotechnology focused organization in the Bay Area. It is dedicated to promoting the burgeoning field of nanotechnology by connecting ideas, technology and people. It is a unique organization, run entirely by unpaid volunteers under the umbrella of the alumni associations of the three universities.

The Nanotechnology Forum primarily serves the alumni communities of MIT, Stanford and the University of California, Berkeley, but events are open to anyone interested or active in the field of nanotechnology. We provide opportunities for industry experts, researchers, entrepreneurs, venture capitalists, private investors, technologists and the interested public to discuss, understand and evaluate the state-of-the art in nanotechnology.

Our events feature leading researchers, business leaders, investors, policy makers and entrepreneurs active or interested in the field of nanotechnology.

Steering Committee

Kitu Bindra, Dr. Wasiq Bokhari (Chair), Elizabeth Curran, Terry Fuqua, Dr. Klaudyne Hong, Dr. Fred Lam, Dr. Arun Mehta, Vivek Nadkarni, Camille Olufsson, Gina Reiger, Dr. Jane Scheiber, Anthony Waitz, Qian Wu.

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Quantum Insight

Quantum Insight is a pioneering business strategy services firm in the field of emerging new materials and nanotechnology. Our customers include Fortune 500 companies as well as venture and corporate funds. We provide strategic business and market development services to companies active or interested in the fields of emerging new materials and nanotechnology. We also provide investment research and targeted deal sourcing services to venture and corporate funds seeking to build new technology startups.



Burns Doane

We at Burns Doane are proud to say that among our 100 plus scientists and attorneys from all the major scientific disciplines we have some of the pioneers in the field of nanotechnology. Our

attorneys have developed patent portfolios around some of the fundamental building blocks of this emerging area, including carbon nanotubes, photo-voltaics, MEMS, NEMS, and fuel cells. Our attorneys have founded some of the most successful nanotechnology networking organizations across the country and are well positioned to introduce clients to venture capitalists, industry leaders, and others who can help establish successful businesses.



Girvan Institute of Technology, NASA

The Girvan Institute of Technology is a non-profit corporation focused on research, technology development, technology transfer, and technology commercialization at the NASA Research Park, Moffett Field, California. Girvan's primary mission is to accelerate the convergence of commercial markets and government-developed technologies, and to spur the use of innovative commercial technology for NASA missions. Girvan identifies commercially developed technologies of interest to NASA, and assists small companies in accessing technology developed by US government agencies for eventual application in commercial markets.

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NEXT EVENT

Small Science, Big Impact Nanotechnology and Silicon Valley

A Joint Event with Red Herring Magazine and ICC Report

LOCATION

SRI International, Menlo Park, CA Oct. 19, 2004

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