

# Towards Commercialization of Nanoelectronics and Beyond

### DISTINGUISHED SPEAKER

Dr. Paolo Gargini, Intel

### **MODERATOR & EVENT CHAIR**

Dr. Wasiq Bokhari (Quantum Insight)

### **VENUE**

The Teaching Center at Science and Engineering Quad, (TCSEQ), Stanford University

June 23, 2005
6:00-9:00 pm

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### **AGFNDA**

6:00 – 6:50 pm	Registration, Refreshments and Networking
7:00 – 7:05 pm	Introduction  Wasiq Bokhari, Event Moderator and Chair
7:05 – 8:00 pm	Speaker presentation
8:00 – 8:30 pm	Q&A session
8:30 – 9:00 pm	Session close and networking

# **ABSTRACT**

The electronics and semiconductor industries have been one of the biggest components of the global high-tech economy and have continuously blazed the path with breakthrough innovations. Nanotechnology, with new materials and processes, has the potential to fundamentally alter these industries by enabling new devices, architectures and applications. There has been a lot of speculation and discussion on the role nanotechnology will play in the future of electronics. This issue is particularly relevant for Silicon Valley where electronics and semiconductors have been a major component of the high-tech industry and professional employment. We are privileged to have Dr. Paolo Gargini as our next speaker. He is an Intel Fellow and the Director of the Technology and Manufacturing Group where he is in charge of technology strategy. He will share with us an insider's look at the future of electronics and semiconductors and the role played by nanotechnology.

### SPEAKER BIOGRAPHY

## Dr. Paolo Gargini

Director for Technology Strategy and Intel Fellow, Intel Corporation.

Dr. Paolo Gargini is director of technology strategy for Intel Corporation. He is also responsible for interaction with such external organizations as consortia, institutes and universities for the Technology and Manufacturing Group (TMG). He has also been distinguished as an Intel Fellow.

Gargini was born in Florence, Italy, and received a doctorate in electrical engineering in 1970 and a doctorate in physics in 1975 from the Universita di Bologna, Italy.

He has done research at LAMEL in Bologna, Stanford Electronics Laboratory, and Fairchild Camera and Instrument Research and Development in Palo Alto from 1970 to 1977. Since joining Intel in 1978, Gargini has conducted studies on process reliability; he has also been responsible for developing the building blocks of HMOS III and CHMOS III technologies used in the 1980s for the 80286 and the 80386 processors. In 1985 he headed the first submicron process development team at Intel.

Gargini has been the chairman of the Executive Steering Council (ESC) of I300I and, subsequently, of International Sematech from 1996 to 2000. Since 1998, Gargini has been chairman of the International Technology Roadmap for Semiconductors (ITRS).

He is a member of various technical committees and technical advisory boards for organizations such as the Silicon Research Corporation (SRC) and the Technology Strategic Council (TSC) of the SIA in the United States, IMEC in Europe, ASET and MIRAI in Japan.

He also heads the International EUV Initiative (IEUVI), formed in 2001, that fosters cooperation and coordination among the largest EUV consortia in the world.

Gargini is the facilitator of the International Consortia Cooperation Initiative (ICCI). This initiative, was started in 2000, fosters exchange of information among a selected group of leading consortia and institutes in the world.

In September 2003, Gargini was included by EE Times in a very selected group of Influencers of the semiconductor industry with the following motivation: "EE Times has chosen 13 people who are influencing the course of semiconductor development technology and taking it into realms that exceed the bounds set by the inventors of the transistor more than 50 years ago. With more than 25 years in the industry, Gargini is helping to navigate tough process and manufacturing waters."

# 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

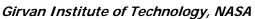
Quantum Insight is a pioneering business strategy services firm in the field of emerging new materials and nanotechnology. Our customers include Fortune 500 companies as well as venture and corporate funds. We provide strategic business and market development services to companies active or interested 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.



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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