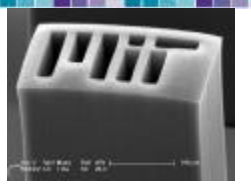

MEMS@MIT Open House - October 2007

The Fall Open House for MEMS @ MIT will be held on October 24-25, 2007 on the MIT campus.

The two-day Open House will start with a full day focused conference on Wednesday, October 24th. The event is entitled **MEMS/NEMS Manufacturing: Future Trends.** During this conference, we will hear from researchers engaged in activities which are sure to influence the direction of manufacturing in MEMS. In addition, we will examine the current state of manufacturing in MEMS and NEMS, and explore strategies for success. The agenda speakers include leaders from industry, academia, and government.

The second day of the Open House will be our semi-annual board meeting and poster session. During the board meeting, we will review recent new activities in the Center with an eye towards identifying opportunities for members to engage with these new programs. We will also review recent results and IP generated by Center members. Lastly, and most importantly, we will hold an extensive poster session where members may interacts with students and faculty across the Center.

Details on registration and the full schedule of events will be sent with upcoming invitations.

Senturia Prize 2007

Senturia Prize Winner Seeks New Challenges

In March, the 2007 Senturia Prize was awarded to Jianping Fu, Ph.D., currently a postdoctoral associate in the research group of Professor Jongyoon Han.

The Senturia Prize, named for MIT Professor Emeritus and MEMS research pioneer, Dr. Stephen Senturia, is awarded yearly to a graduating Ph.D. student conducting research in the MEMS/NEMS field who has made substantial technical contributions to the field and to the research community in MEMS/NEMS at MIT. In addition to receiving an honorarium, Dr. Fu (who defended his thesis in March 2007) was invited to present a lecture on his research as part of the prestigious MNSS seminar series on May 10, 2007. His talk was entitled, Nanofluidic Devices for Rapid Analysis of DNA and Proteins.

Dr. Fu's interest in MEMS reportedly began at UCLA where he worked on his master's degree and had the unique opportunity to major in MEMS in the department of Mechanical Engineering. The focus of his thesis involved the use of MEMS techniques to study thermal management of high power semiconductor lasers.

According to Dr. Fu, he chose MEMS as a major because he believed that MEMS will serve as an enabling technology for many different applications. MEMS was new to him and he wanted to explore a new ground with the benefit of the strength of the Mechanical Engineering department in which almost a third of the faculty had research projects related to the MEMS field.

Upon completion of his MS, he knew that he wanted to apply what he'd learned regarding MEMS to an area of the field that 'was most exciting' to him in potential and in challenge. He decided to apply his knowledge and enthusiasm to the area of BioMEMS, working under the direction of Professor Jongyoon Han (MEMS@MIT, Micro/Nanofluidic BioMEMS Group-RLE).

Among his most important accomplishments have been his contributions to the development of a microfabricated artificial sieve with its promise to speed up the separation and sorting of biomolecules such as proteins. His work is important because it could help scientists better detect certain molecules associated with diseases, potentially leading to earlier diagnoses or treatments. His invention of the Anisotropic Nanofilter Array device also won him the Helen Carr Peake Research Prize for 2007. At this time, Dr. Fu is also interested in the bridging and technology transfer between academia and industry which he believes should be an important mission of academic programs.

Looking to the future, Dr. Fu is interested in a career in academia and in expanding on his accomplishments at MIT to further the growth of the BioMEMS field. On a more personal note, he and his wife, Yangwei Situ, a concert pianist with a master's degree from the New England Conservatory ("She claims she is smarter because she plays with ten fingers"), are looking forward to the birth of their daughter in June.

Dr. Fu's enthusiasm for his work and for his membership in the MIT community continues to grow. He cites the 'big opportunities to explore different possibilities', the 'good students and good advisors,' the collaboration opportunities', 'the quality and quantity of faculty,' and the work ethic and efficient use of time among the best qualities of MIT.

And if he were to leave for his next big challenge, what would he miss most? "Cambridge and Boston" (and) "the cleanroom and the cleanroom buddies, we have the best cleanroom and the best staff."

Faculty Prizes Announced

Congratulations to our Center faculty !

Professor George Barbastathis (Department of Mechanical Engineering) has been given the John Kellett Award for creating a more welcoming environment at MIT

Professor Carol Livermore (Department of Mechanical Engineering) has been named a recipient of the Spira Award for Excellence in Education: given to faculty members to recognize their contributions to the tradition of high quality engineering education at MIT

MNSS Fall 2007

We are pleased to announce the schedule for the Fall 2007 MNSS (Micro/Nano-technology Seminar Series)

Thursdays@3pm

September 13 ***Induced-charge Electrokinetics***
Martin Bazant - Associate Professor, Department of Mathematics, Massachusetts Institute of Technology

October 18 TBA
Mark Shannon - Professor, Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign

October 25 TBA
Elisabeth (Sabeth) Verpoorte - Professor, Department of Mathematics and Natural Sciences, Pharmacy and Pharmaceutical Science, University of Groningen, The Netherlands

November 15 ***Nanocrystal Molecules***
A. Paul Alivisatos - Professor, Department of Chemistry, Materials Science and Engineering, University of California, Berkeley

December 6 ***Semiconductor Nanowires for Photonics and Energy Conversion***
Peidong Yang - Professor, Department of Chemistry, Materials Science and Engineering, University of California, Berkeley

This series is sponsored by the Department of Mechanical Engineering (MIT), RLE (Research Laboratory of Electronics), MEMS@MIT, and The Center for Engineering in Medicine, BioMEMS Resource Center (Mass General Hospital)