

The 8th Micromachine Summit

The 8th International Micromachine Summit was held for three days, from April 30 to May2, 2002, in Maastricht, the Netherlands, just near the border of the co-host nation, Belgium. The Summit, chaired by Professor Albert van den Berg from the University of Twente MESA + Research Institute and Mr. Kris Baert from IMEC Belgium, brought together high level experts from around the world to discuss the present status and future outlook for micromachine technology.

The common topics at the Summit were the fundamentals, the applications, the industrialization, and the education of micromachine technology. And this summit put particular emphasis' on technical transfer and industrial infrastructure, the rapidly advancing field of biotechnology and nanotechnology such as lab-on-a-chip.

The Summit presented major initiatives such as the CEA in France, a huge site which is hosting research facilities of industry, university, government and related institutions such as NEXUS and EURIMUS. The CEA is designed as the largest micro and nanotechnology "innovation center" in Europe based on the close interdisciplinary and industry-university-government cooperation in research and the synergic effects brought by these collective research. Participants also heard about large-scale ultra-clean rooms such as IMEC, set up by the government of Flanders in Belgium. IMEC boasts 24-hour, seven-day operation, and performs

commercially-oriented joint research work based on the contract with over 450 private companies and research institutions worldwide.

The Japanese presentation discussed the set-up of the Council for Science and Technology Policy chaired by Prime Minister Koizumi. And the Council has taken up nanotechnology as one of the priority items to be industrialized effectively for new economy developments in Japan. And the Japanese delegation discussed that it will be needed to study a new technology called "micro-nano fusion area technology" which encompasses "top-down" development of micromachine technology that must be complemented by "bottom-up" development of nanotechnology.

The summit was attended by 74 delegates from 19 countries and regions, including three delegates and four observers from Japan. The 9th International Micromachine Summit will be held at the end of April, 2003, in Beijing, China.



The Eighth International Micromachine/Nanotech Symposium

Foundation of Industrial Technology in the 21st Century

1. **Date** : 14th Nov. 2002
2. **Place** : Science hall, Kagaku-Gijutsu-Kan, in Kitanomaru park, Tokyo
3. **Entrance fee** : 17,000 yen/person (Include Proceedings)
4. **Acceptance of participants** : (till) 31st Oct. 2002
5. **Information window** : Micromachine Center, International Exchange Dept.
Tel : 03-5835-1870 Fax : 03-5835-1873

***** PROGRAM (Tentative) *****

November 14, 2002

9:00 –	Registration	As of August 7 th
Session 1 : Opening		Chairman : Mr. T. HIRANO
9:30 – 9:35	Opening Remarks	Mr. Toshiro SHIMOYAMA, Chairman, Micromachine Center
9:35 – 9:40	Guest Speech	Director-General, Manufacturing Industries Bureau, METI
9:40 – 10:20	Special Guest Speech: strategy towards Fusion of Nano and Micro systems	Prof. Isao SHIMOYAMA, Tokyo University
Session 2 : The Path to New Industries in the 21st Century		Chairman : Prof. H. FUJITA
10:20 – 10:45	International Standardization of MEMS	Dr. Kuniki OHWADA, International Standardization Engineering Laboratory
10:45 – 11:10	Standardization of Tensile Testing Method for Thin Film Material –Round Robin Test of Thin Film Specimen–	Toshiyuki TSUCHIYA, Toyota Central R&D LABS INC
11:10 – 11:35	MEMS in China, Especially in Shanghai Area	Prof. Yilong HAO, Peking University (to be confirmed)
11:35 – 12:00	MMC's Initiative towards Foundry Service Network	Foundry Service Industry Committee
12:00 – 13:00	***** Lunch *****	
13:00 – 13:30	The Sensibility of Scaling Recognition	Prof. Kazuo KAWASAKI, Nagoya City University Medical School
Session 3 : Innovative R & D		Chairman : Prof. K. IKUTA
13:30 – 14:00	Health care Chip	Prof. Yasuhiro HORIIKE, Tokyo University
14:00 – 14:30	Micro-fluidics for pre-process of Dioxin Measurement	Dr. Ryo MIYAKE, Hitachi Ltd.
14:30 – 15:00	Advanced MEMS Research in US	(to be decided)
15:00 – 15:30	Nano Photonics	Prof. Kobos KUIPERS, MESA
15:30 – 16:00	***** Break *****	
Session 4 : National Strategy for Micro/Nano Fusion domain		Chairman : Prof. I. SHIMOYAMA
16:00 – 16:30	Strategy to enhance the application of micro @ nano-technology in France	Dr. Dirk BEERNAERT, European Commission
16:30 – 17:00	Cooperation Practice between Academy and Industry	Prof. Susumu SUGIYAMA, Ritsumeikan University
17:00 – 17:30	Bio Nano technology in 21st century, CELLOMIX	Prof. Teruo OKANO, Tokyo Women's Medical University
17:30 – 18:00	National Strategy on NEMS/MEMS in France	Dr. Constant AXELRAD, CRE
Session 5 : Closing		
18:00 – 18:10	Closing speech	Mr. Takayuki HIRANO, Executive Director, Micromachine Center