

## ◆ Meeting for announcing results of FineMEMS Project

### (1) Purpose

This conference is held to disclose the interim achievements of the "Highly Integrated and Complex MEMS Manufacturing Technology Development Project," a three-year project that has been implemented since FY 2006 by NEDO. This project, also known as the "Fine MEMS" project, seeks to develop key manufacturing technologies for the creation of complex and integrated functions through the creation of advanced tiny three-dimensional structure processing technologies and the use of nanomaterials and different types of materials. This is a key technology supporting the development of the MEMS industry.

### (2) Program

Highly Integrated and Complex MEMS Manufacturing Technology Development Project (FY 2006 - 2008) (commissioned by / subsidy provided by NEDO)

## Meeting for announcing results of FineMEMS Project

Date & Time: July 31, 2008 (Thursday) 12:30 - 4:30 p.m.

Venue: Tokyo Big Sight (Tokyo International Exhibition Center, West Hall 1)

19<sup>th</sup> Exhibition Micromachine/MEMS special venue

Sponsor: New Energy and Industrial Technology Development Organization (NEDO) / Micromachine Center

Support: Ministry of Economy, Trade and Industry (planned)

Attendance: Free of charge but first-come-first-serve due to limited seating capacity (200) and quantity of extended abstracts

Session 1	Opening	Chair: Tomoyuki Koike, Micromachine Center
12 : 30 - 12 : 35	Opening Remarks	Akira Uehara, NEDO
12 : 35 - 12 : 50	MEMS industry strategies and expectations for the Fine MEMS Project	Motoki Korenaga, Ministry of Economy, Trade and Industry
12 : 50 - 13 : 10	Overview of Fine MEMS Project	Isao Shimoyama, The University of Tokyo
Session 2	Achievements of Fine MEMS Project consignment projects (1)	Chair: Mitsumasa Koyanagi, Tohoku University
13 : 15 - 13 : 35	Selective nanomachine structure formation technology	Isao Shimoyama, University of Tokyo
13 : 35 - 13 : 55	Selective modification technologies for biomaterials (proteins, etc.)	Yoshio Suzuki, AIST
13 : 55 - 14 : 15	Selective formation technologies for nanomaterials (CNT, etc.)	Kenji Hata, AIST
14 : 15 - 14 : 35	Low-stress dicing technology for multilayer wafer level joints	Masayuki Fujita, Institute for Laser Technology
14 : 35 - 14 : 45	Break	
Session 3	Achievements of Fine MEMS Project consignment projects (2)	Chair: Susumu Sugiyama, Fine MEMS Project Subleader
14 : 45 - 15 : 05	Development of a fine MEMS system design platform	Professor Gen Hashiguchi, Shizuoka University
15 : 05 - 15 : 25	General monolithic manufacturing technologies for MEMS - semiconductor processing (the search for a new sensing principle)	Hisayuki Toriyama, Ritsumeikan University
15 : 25 - 15 : 45	MEMS - semiconductor transverse wiring technologies (high-density low temperature laminate integration mounting technologies)	Jun Akedo, AIST
15 : 45 - 16 : 05	MEMS - semiconductor transverse wiring technologies (high-density low temperature laminate integration mounting technologies)	Mitsumasa Koyanagi, Tohoku University
16 : 05 - 16 : 15	Fine MEMS knowledge database	Toshio Sakamizu, Micromachine Center
Closing		
16 : 20 - 16 : 30	Closing Remarks	Keiichi Aoyagi, Micromachine Center

## ◆ Micro / Nano 2008 MEMS Forum

### (1) Purpose

The MEMS Forum is a forum for the exchange of information and views regarding the various activities of the MEMS Industry Forum. Its purpose is to achieve a deeper common recognition of the issues that must be resolved for the expansion and development of MEMS related industries. The Forum introduces the status of activities by the MEMS Industry Forum and affiliate members (local clusters, publicly funded laboratories and academia), from the perspective of building an infrastructure for the MEMS industry and the creation and development of a MEMS technical infrastructure through industry-academic collaboration.

### (2) Program

## Micro / Nano 2008 MEMS Forum

### – For the Development of MEMS Industries –

Date & Time: August 1, 2008 (Friday) 10:30 a.m. - 4:35 p.m.

Venue: Tokyo Big Sight (Tokyo International Exhibition Center, West Hall 1)

19<sup>th</sup> Exhibition Micromachine/MEMS special venue

Sponsor: MEMS Industry Forum / Micromachine Center

Attendance: Free

Chair: Shun'ichi Adegawa, Micromachine Center

Opening		
10 : 30 - 10 : 35	Opening remarks	Koichi Imanaka, Assistant Director, MEMS Industry Forum
Session 1	Advancement of MEMS industries and technologies	
10 : 35 - 10 : 50	Overview of MEMS Industry Forum activities	Keiichi Aoyagi, Micromachine Center
10 : 50 - 11 : 20	Strengthening of MEMS industry infrastructure	Isao Shimoyama, The University of Tokyo
11 : 20 - 11 : 40	Toward MEMS market expansion: 1st generation MEMS - 3rd generation MEMS (BEANS)	Junji Adachi, Micromachine Center
11 : 40 - 12 : 00	Technical strategy roadmap for the MEMS field	Hideaki Watanabe, NEDO
12 : 00 - 13 : 10	Lunch / break	
Session 2	Industry-Academic Collaboration Session	Organizer: Professor Kazuo Sato, Nagoya University
13 : 10 - 13 : 20	Remarks at the beginning of the industry-academic collaboration session	Kazuo Sato, Nagoya University
13 : 20 - 13 : 40	Wearable microsensors: an advanced general sensing technology for achieving a safe and secure society	Kazusuke Maenaka, University of Hyogo
13 : 40 - 14 : 00	Mass production of next-generation optical elements through ultra-precision micro three-dimensional machine processing	Eiji Shamoto, Nagoya University
14 : 00 - 14 : 20	Introduction to the Micro Energy Research Council, Micro/Nano Optical Specialist Forum, Japan Society of Mechanical Engineers	Hiroki Kuwano, Tohoku University
14 : 20 - 14 : 30	Break	
Session 3	Issues for MEMS Industry Development	
14 : 30 - 14 : 50	International standardization trends in MEMS fields	Professor Kunie Owada, Teikyo University
14 : 50 - 15 : 10	AIST training of micro/nano manufacturing personnel, focusing on industry-academic personnel training partnership projects	Ryutaro Maeda, AIST
15 : 10 - 15 : 30	Strengthening of MEMS Foundry infrastructure	Susumu Sugiyama, Ritsumeikan University
15 : 30 - 15 : 50	Activities for the establishment of a MEMS foundry network	Fumihiko Sato, Omron Corporation
15 : 50 - 16 : 10	Case studies of the use of MEMS technologies in research and development assistance by the Kanagawa Industrial Technology Center	Manabu Yasui, Kanagawa Industrial Technology Center
16 : 10 - 16 : 30	MemsONE functions and future plans (MEMS design and analysis support system) Ver. 1.1	Yukihisa Maeda, MemsONE Consortium, Nihon Unisys Excelutions
Closing		
16 : 30 - 16 : 35	Closing Remarks	Keiichi Aoyagi, Micromachine Center