## ♦ Fine MEMS Project Interim Achievements Seminar

Sponsor: Fine MEMS Project Committee/ Micromachine Center

## (1) Purpose

This seminar will cover the interim achievements of the Highly Integrated / Complex MEMS Manufacturing Technology Development Project (Fine MEMS), a three-year NEDO-sponsored project initiated in fiscal 2006 to develop the key technologies that will support the growth of the MEMS industry.

The purpose of the Fine MEMS Project is to develop key manufacturing technologies that will make it possible to create more advanced methods for three-dimensional microstructure processing and develop more complex and integrated functions through the use of nanomaterials and heterogenous materials.

## (2) Program

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

## Fine MEMS Project Interim Achievements Seminar

Date & time: Friday, July 27, 2007 1:00 p.m. - 4:30 p.m.

Venue: Tokyo Big Sight (special venue set up within West No. 3 Hall) Sponsor: Fine MEMS Project Committee/ Micromachine Center

Admission fee: Free

MC: Tomoyuki Koike, Micromachine Center		
Session 1	Opening	
13:00 - 13:05	Greeting from invited guest	Masami Takayasu, Director, New Energy and Industrial Technology Development Organization (NEDO)
13:05 - 13:10	Greeting from invited guest	Hiroaki Okahashi, Deputy Director, Ministry of Economy, Trade and Industry (METI)
13:10 - 13:25	Overview of Fine MEMS Project	Isao Shimoyama, Chair, Fine MEMS Project Committee (Professor and Dean, Graduate School of Information Science and Technology, The University of Tokyo)
Session 2	Achievements of Commissioned Fine MEMS Pr	ojects (1)
13 : 25 - 13 : 45	Nano-mechanical structure fabrication technology	Isao Shimoyama, Professor and Dean, Graduate School of Information Science and Technology, The University of Tokyo
13:45 - 14:05	Selective Modification Technologies for Biomaterials (e.g. Proteins)	Sachio Suzuki, Research Scientist, Research Center of Advanced Bionics, National Institute of Advanced Industrial Science and Technology (AIST)
14:05 - 14:25	Technology to selectively structure nano-materials such as single-wall carbon nanotubes (CNT)	Kenji Hata, Team Leader, Research Center for Advanced Carbon Materials National Institute of Advanced Industrial Science and Technology (AIST)
14:25 - 14:30	Break	
Session 3	Achievements of Commissioned Fine MEMS	Projects (2)
14:30 - 14:50	Exploration of novel sensing principle for piezoresistance of nano scale Si and its application to high-functional sensing devices	Hisayuki Toriyama, Professor, Faculty of Science & Technology, Ritsumeikan University
14:50 - 15:10	Integrate Lateral connection MEMS and IC (Low Temperature Integration Technology)	Jun Akedo, Project Leader, Advanced Manufacturing Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
15:10 - 15:30	MEMS-LSI Chip Lateral Interconnection Technology (High density packaging technology using low temperature chip stacking)	Mitsumasa Koyanagi, Professor, Department of Bioengineering and Robotics, Tohoku University
15 : 30 - 15 : 50	Low-Stress Dicing for Multi-layered MEMS Wafer	Masayuki Fujita, Chief Researcher, Institute for Laser Technology
Session 4	Closing	
15:50 - 16:00	Regarding the Fine MEMS Knowledge Database	Keiichi Aoyagi, Executive Director Micromachine Center
16:00 - 16:30	Technical Consultation Corner	Exhibition Area Booth C-032