# WPI-AIMR and Fraunhofer ENAS Joint Workshop on Micro Integrated Devices

**Date:** 2013/02/22 Friday  
**Place:** Aoba Memorial Hall 4th floor (Aobayama Campus, Tohoku University)  
(http://www.eng.tohoku.ac.jp/map/?menu=campus&area=c&build=03)

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| 10:00 – 10:10 | **Opening Remarks**  
Director Prof. Motoko Kotani (WPI-AIMR) |
| 10:10 – 10:30 | **NEMS/MEMS and nanomaterial-enhanced passive components (JST-DFG Cooperative Program)**  
**Heterogeneous integration of MEMS and LSI using adhesive bonding**  
Prof. Masayoshi Esashi (WPI-AIMR) and Prof. Shuji Tanaka (Graduate School of Engineering, Tohoku University) |
| 10:30 – 11:00 | **Smart Systems Integration by using Micro- and Nanotechnologies**  
Prof. Thomas Gessner (Fraunhofer ENAS, Chemnitz University of Technology, WPI-AIMR) |
| 11:00 – 11:25 | **Nanomaterial integrated three dimensional inductors**  
Dr. Yu-Ching Lin (WPI-AIMR) |
| 11:25 – 11:50 | **Functional liquids within NEMS/MEMS fabrication**  
Mr. Felix Gabler (Fraunhofer ENAS, Chemnitz University of Technology) |
| 11:50 – 12:15 | **Wafer level bonding of heterogeneous substrates at low temperature**  
Mr. Jörg Frömel (Fraunhofer ENAS, Chemnitz University of Technology, Fraunhofer Project Center at Tohoku University) |
| | **Lunch break** |
| 13:30 – 14:00 | **[Special Speech] Dealloyed nanoporous metals for device applications**  
Prof. Mingwei Chen (WPI-AIMR) |
| 14:00 – 14:30 | **[Guest Speech] Piezoelectric MEMS mirror with wide scan angle actuated by Nb doped PZT film**  
Mr. Takayuki Naono (Fujifilm Corporation) |
| 14:30 – 14:50 | **MEMS switch using metallic glass thin film**  
Mr. Yu-Lang Chu (Fraunhofer ENAS) |
| 14:50 – 15:10 | **Integration and fabrication of magnetic metallic glass for MEMS micro-mirror system**  
Dr. Yao-Chuan Tsai (WPI-AIMR) |
| 15:10 – 15:30 | **Fabrication of L10FePt based patterned recording media**  
Dr. Neelam Kaushik (WPI-AIMR) |
| | **Coffee break** |
| 15:45 – 16:15 | **[Guest Speech] MEMS Technology challenges for RF-MEMS devices**  
Dr. Koichi Ikeda (Sony Corporation) |
| 16:15 – 16:35 | **Integrated Tactile Sensor Device**  
Dr. Masanori Muroyama (WPI-AIMR) |
| 16:35 – 16:55 | **Local redox cycling-based electrochemical chip device for high-throughput cell analysis**  
Dr. Kosuke Ino (Graduate School of Environmental Studies, Tohoku University) |
| 16:55 – 17:15 | **Microscale technologies to fabricate muscle tissues**  
Dr. Samad Ahadian (WPI-AIMR) |
| 17:15 | **Closing Address**  
Prof. Masayoshi Esashi |
| 18:00 – 20:00 | **Reception** |

Language: English  
Admission Free  
Registration Required for Reception (5000 Yen) by 2013.2.8  
Contact: Yu-Ching Lin  
E-mail: yclin@mems.mech.tohoku.ac.jp