

# Program for Human Resources Development: “Micro/Nano Innovator”

In order to sustain growth in the MEMS industry, it will be essential to establish a systematic strategy for cultivating the personnel required to support the expanding industry. This year, the MEMS Industry Forum (MIF) established a Committee for the Promotion of Human Resources Development (Chair: Ryutaro Maeda, Director of the AIST's Research Center for Ubiquitous MEMS and Micro Engineering) to implement the “Micro/Nano Innovator”, Program for Human Resources Development. The Committee comprises representatives of the National Institute of Advanced Industrial Science and Technology (AIST), the Kitakyushu Foundation for the Advancement of Industry, Science and Technology (FAIS), the New Industry Research Organization (NIRO) in Hyogo Prefecture, the MEMS Park Consortium in the Tohoku region, and the Micromachine Center (MMC), who are working together to establish a high-quality national program for developing human resources in MEMS fields. Please visit the MIF's Web site on this program (<http://mmc.la.coocan.jp/business/innovator/>) for a detailed description of the offered training courses and the enrollment procedure.

Below are some of the training courses that are scheduled for the coming months. It is our hope that businesses will incorporate these courses into their personnel training strategy.

## <FAIS>

### **Introductory course on manufacturing processes: manufacturing peripheral circuits for MEMS**

November 15–18 (now accepting enrollment)

Category: process/device/system innovator      Level: basic

“The design and manufacture of op-amps”

Place: the Semiconductor Center (Collaboration Center Building 2), Kitakyushu Science and Research Park

Length: 4 days      Capacity: 5 participants

Course fee: 25,000 yen

### **Advanced applications course: introduction to optical MEMS**

Category: device innovator      Level: applied/advanced

“Optical device technology learned by developing micro-mirrors, etc.”

Place: Ito Campus of Kyoto University

Length: 3 days      Capacity: 5 participants

Course fee: 25,000 yen

### **Advanced applications course: introduction to MEMS sensors**

Category: process/device innovator      Level: applied/advanced

“Basic technological training for the trial manufacture of MEMS sensors (lecture)”

Place: the Semiconductor Center and elsewhere

Length: 4 days      Capacity: 10 participants

Course fee: 15,000 yen

### **Advanced applications course: MEMS sensor applications**

Category: process/device innovator      Level: applied/advanced

“Sensor device technology learned by developing odor sensors (hands-on training)”

Place: the Semiconductor Center and elsewhere

Length: 4 days      Capacity: 5 participants

Course fee: 25,000 yen

## <MEMS Park Consortium>

### **MEMS Human Resources Development Project, introductory course**

Category: process/system/device innovator      Level: basic

### **MEMS Human Resources Development Project, hands-on trial manufacturing**

## <MMC>

### **Advanced applications course: the 15<sup>th</sup> MEMS Seminar, October 27 (now accepting enrollment)**

Category: system/device innovator      Level: applied/advanced

“New MEMS technologies (design, processing, and assessment) and products applying these technologies”

Lectures by Professors Hiroyuki Fujita and Isao Shimoyama and company representatives related to

“Green Innovation Made Possible with Next-Generation MEMS”

Place: Chuo University, Surugadai Memorial Hall (Ochanomizu)

Time: 13:00–18:00      Capacity: 20 participants

Course fee: 10,000 yen (includes costs of course materials and meals/refreshments)

### **Introductory course on MemsONE, November 18 and 19 (now accepting enrollment)**

Category: process/system/device innovator      Level: basic

“Introductory course on MEMS analysis using MemsONE”

Place: MMC Techno Salon

Length: 2 days      Capacity: 5 participants

Course fee: 16,000 yen for the general public and 6,000 yen for university students and faculty

### **Techniques for promoting MEMS commercialization, December 15 (now accepting enrollment)**

Category: system innovator      Level: applied/advanced

“A study of basic tools for commercializing MEMS-related products, with an instructive look at case studies”

Place: MMC Techno Salon

Length: 1 day      Capacity: 20 participants

Course fee: 20,000 yen (includes costs of course materials and meals/refreshments)

## <AIST Tsukuba>

### **Advanced process training: nanoimprint training**

Category: process innovator      Level: applied/advanced

“Lectures on nanoimprint technology by the AIST, with hands-on training”

Place: AIST Tsukuba East

Length: 2 days      Capacity: very limited

Course fee: 40,000 yen