

# Micromachine Asia Seminar

Micromachine seminars were held in Malaysia, Singapore, and Thailand November 19 (Sun) through 28 (Tue), 2000. Micromachine Center hold overseas seminars twice a year for the purpose of circulating information originating in Japan, collecting information abroad, and promoting interaction between countries. It was the second occasion for the Micromachine Center to hold the seminars in Asia; the first one was conducted in 1997.

The list below shows the Japanese lecturers and titles of the seminars.

**“MMC Activities and Prospect of Micromachine”**

by Takayuki Hirano, Micromachine Center

**“Multiple Distributed Micromachine Systems”**

by Munehisa Takeda, Mitsubishi Electric

**“In-pipe Wireless Inspection Micromachine”**

by Hideaki Nishikawa, Denso

**“The Experimental Microfactory System in Japanese National R&D Project”**

by Kazuyoshi Furuta, Seiko Instruments

**“Medical Application of Micromachine”**

by Takashi Mihara, Olympus Optical

**“Novel Actuators for Microrobots”**

by Koichi Suzumori, Micromachine Center

The following reports were on the respective seminar events.

### (1) Seminar on Micromachine Technology

The seminar was held in cooperation with SIRIM Berhad in Kuala Lumpur, Malaysia on November 21 (Tue), 2000. SIRIM is an organization owned by the Malaysian government and responsible for the standardization of industrial technologies and R&D activities. A total of 47 participants from organizations related to SIRIM and Malaysian universities joined the seminar.



Seminar in Malaysia

After the keynote speech by Dr. Othman, vice-president of SIRIM, 6 lectures were made by Japanese, who received a lot of technology related questions.

### (2) Singapore-Japan Forum on MEMS

The forum was held in Singapore on November 23 (Thu), 2000. “Gintic” which cooperated with MMC for the forum is a national research institute established as an independent institute out of Nanyang Technological University. Gintic conducts research activities for production technologies in various industrial fields. The seminar was held at the Grand Hyatt Hotel located at the center of Singapore. It was a success with about 90 participants from institutes, universities, private companies, and government organizations throughout Singapore. In addition to the 6 Japanese lectures, presentations by Singapore University and Nanyang Technological University were given. Those included “MEMS Tunneling & its applications,” “Microgyroscopes and packaging process,” “MEMS simulation technology,” and “Optical MEMS.”

### (3) Micromachine Technology Seminar

The seminar was held in Bangkok, Thailand, on November 27 (Mon), 2000, as part of an education program hosted by Technology Promotion Association (TPA). TPA was established for the promotion of technological exchange programs between Thailand and Japan by Thai engineers and business men/women who had once studied or worked in Japan. The seminar was attended by 28 enthusiastic participants from Thai companies and universities etc.

The atmosphere and manner mentioned above differ from one country to another. However, these countries without exception seemed to be actively promoting the new technologies and their industrial application.



Seminar in Thailand