

The 6th International Micromachine Symposium

The 6th International Micromachine Symposium was held at the Science Museum in Kitanomaru Park, Tokyo, for two days from November 9 to 10, 2000.

On the first day, the opening ceremony of the program started with the speeches of three honored guests, Mr. Shinichiro Oota, director-general of the Machinery and Information Industries Bureau in the Ministry of International Trade and Industry, Dr. Koji Kajimura, director-general of the Agency of Industrial Science and Technology, and Mr. Hiroshi Mitsukawa, executive director of NEDO. The total registered participants for the two-day program numbered 447 (51 of them were from overseas).

The first lecture in the symposium on the first day was "Artificial Heart Research by the Use of Micromachine" by Dr. Shinichi Nitta, professor of the Inst. of Develop. Aging and Cancer, who is also vice-president of Tohoku University. He introduced the audience to current R&D on artificial organs such as artificial hearts as well as outlining future expectations and prospects.

This year's program included a study on health and micromachines in Session 3 entitled, "Thinking of Micromachines". Front-line researchers made presentations on today's hot topics related to micromachine technologies, such as medical practices making use of information derived from the deciphering of the genome, telehealth, and robot surgery.

Medical treatment technology has been regarded as one of the most promising micromachine application fields. We were impressed by those presentations that showed how micromachine technology has possibilities for medical care in the near future. The content of the special guest speech is presented on the following pages for your reference.

Other sessions of the program held on the first day include Session 2 "The Path to New Industries in the 21st Century," Session 4 "Overseas Activities," and Session 5 "Innovative R&D." There were 16 invited lecturers, including 8 from abroad, who made presentations in the sessions. The following list shows lecturers from abroad.

Jean Philippe Gouy / LIMMS / CNRS-IIS
Michael Gaitan / National Institute of Standards
and Technology
Ming Wu / UCLA
Masako Miyazaki / University of Alberta
Hermann Sandmaier / HSG-IMIT
Paolo Dario / Scuola Superiore Sant' Anna
Young-Ho Cho / KAIST

The second day of the program was intended for the Japanese national project "Micromachine Technology" under the Industrial Science and Technology Frontier Program. Mr. Yoshikazu Yamaguchi, Director for Machinery and Aerospace R&D of the Agency of Industrial Science and Technology reported the current status of R&D activities under the project. He also introduced the status quo and future prospects in conjunction with three national research institutes, including the Mechanical Engineering Laboratory under the Agency of Industrial Science and Technology. Furthermore, Mr. Tatsuaki Ataka, chairman of the R&D working group of Micromachine Center presented state-of-the-art R&D activities in the second phase. Four chief examiners of the R&D working group of Micromachine Center disclosed the results of the technological trend surveys. Also seven other presentations were made concerning achievements of the ISTF projects.

The planning and contents of the presentations in this symposium were highly appreciated by the participants, as proved by their comments in the questionnaire sheets collected upon completion of the whole program.

The schedule for the next symposium is shown below.

The 7th International Micromachine Symposium

Period: October 31 (Wed) to November 1 (Thu), 2001

Place: Science Hall, Science Museum in Kitanomaru Park, Tokyo



View of Symposium Hall