

CONTENT

MICRONANO

2 0 0 9

Topic: MicroNano 2009 Report/ 1
Activities of the Micromachine Center / 2
Activities of the BEANS Laboratory / 6
Members' Profiles / 8

MICROMACHINE CENTER http://www.mmc.or.jp/

BEANS • TRA http://www.beanspj.org/lab/

No.69

Topic

MicroNano 2009 Report

MicroNano 2009 was held at Tokyo Big Sight, East Hall 5 on July 29–31. Despite temperatures reaching the high 80s in Tokyo, the event was a great success, receiving a total of 12,247 over the three days. The sponsors would like to express their appreciation to all who attended.



With a program of concurrent events that included the Exhibition Micromachine/MEMS and the International Micromachine/Nanotech Symposium held at the same time and place, MicroNano 2009 was organized with the aim of bringing together all the latest MEMS-related technologies at one venue and providing business opportunities for visitors and exhibitors alike.

Reflecting the current economic conditions, the number of exhibitors participating in the Exhibition Micromachine/MEMS was down 30 percent from last year (252 exhibitors with 320 booths). On the positive side, there was an increase this year in the number of exhibitors involved in nanoimprinting and MEMS foundries and only about a 10 percent decrease in attendance from last year. Thus, the event has been deemed a resounding success under the circumstances. This year the Micromachine Center (MMC) increased its exhibition area to six booths, our largest number to date, in order to introduce our activities on MemsONE, the Mems Mall, foundry service promotion, and international standardization. The MMC also launched a trial concierge service this year in order to more efficiently direct visitors to booths matching their interests.

A total of eight events were held concurrently in two special conference areas set up in the exhibition hall. These events were the 15th International Micromachine/Nanotech Symposium in which experts presented the latest MEMS-related information for promoting industrialization; the MEMS Forum providing an opportunity for the MEMS Industry Forum (MIF) to distribute information; presentations of results on the

Fine MEMS Project and the BEANS Project; the Japanese-German MicroNano Business Forum providing an opportunity for Japanese and German companies to make business contacts; the MEMS Packaging Forum focusing on MEMS packaging; presentations by exhibitors; and the Workshop on Industry-Academia Collaboration at which universities and research institutes affiliated with the MIF presented their latest research findings. The fact that all events attracted a large audience indicated a strong interest among visitors.

The 15th International Micromachine/Nanotech Symposium held this year as a project of the MIF International Exchange Committee featured ten lecturers both within and without the MIF talking on such topics as the concentration of MEMS R&D centers and MEMS applications. In the keynote session, representatives from LETI/MINATEC, Fraunhofer ENAS, and the MEMS Industry Group discussed trends toward concentrating MEMS R&D into major centers. The speakers in session 1 introduced some of the latest trends in MEMS applications including sensor networks, optical MEMS, and energy-related MEMS. The speakers in session 2 focused on fabrication processes as emerging technologies from the perspectives of wafer vendors, fabrication equipment (bonding equipment) vendors, and material vendors.

Unlike in previous years, there was no charge for attending the symposium, and the event was held during the exhibition in the exhibition hall, rather than at a separate location. While there was some concern whether the Symposium would maintain its high status or see a decline in attendance, all 230 seats in the conference area were filled. Further, more than half of the lecture materials were distributed to non-MIF members (nonmembers were charged 2,000 yen), indicating a strong and widespread interest among visitors. Thus, we can conclude that the value of the Symposium was not affected by the change in format.

MicroNano 2010 will be held next year around the same time (July 28–30). We expect to begin preparations for next year to ensure that this remains the world's largest event for micro- and nanotechnologies in both form and content by further expanding the concurrent program schedule and by adding a concurrent exhibition focusing on service robot fabrication technology (ROBOTECH) in order to create more business opportunities and provide visitors with the latest information of the highest quality.