

Overseas Trends

Survey of Trends in the Industrialization of MEMS in Europe

From November 21 to 25 a study tour of foundries, research institutions, and companies which have successfully set up MEMS businesses in Europe – a leading region in the promotion of MEMS industrialization – was conducted with the aim of contributing to the promotion of MEMS industries and the development of a foundry service network in Japan.

The tour visited companies and research institutions; at each location, after explaining the situation regarding the promotion of MEMS industrialization in Japan and receiving explanations of the activities of the

company/institution, problems involved in promoting MEMS industrialization and methods for their resolution were discussed. Consequently, we were able to gather practical, up-to-the-minute information from the frontline in this field.

The following locations were chosen to ensure that the tour broadly covered the spectrum of MEMS industrialization and include MEMS foundries, MEMS device manufacturers, MEMS/nanotechnology research institutions, and organizations supporting MEMS industrialization.

<Locations Visited>



Locations visited

◆ VTT Technical Research Centre of Finland

- Finland's national research institution; conducts contracted research
- R&D of MEMS/nanoelectronics

◆ MST factory Dortmund

- Incubator for microsystem technology
- Supports raising the success probability of setting up MEMS businesses through reduction of costs and product development time

◆ IVAM

- Microtechnology association comprising 165 member businesses and research organizations based mainly in Europe
- Supports MEMS industrialization that builds bridges between businesses and users

◆ X-FAB Semiconductor Foundries

- Representative United States/European semiconductor company
- Also promotes MEMS foundry activities

◆ Robert Bosch, Automotive Electronics Division

- Largest manufacturer of in-car MEMS sensors
- MEMS process development

◆ ST Microelectronics

- Major semiconductor manufacturer; also manufactures MEMS sensors for consumer appliances

The study tour enabled the exchange of opinion on the situation in Europe regarding the promotion of MEMS-related projects, trends in foundry activities and MEMS device development, and industrialization support and provided valuable information with regard to the future course of this field. In particular, interest in Japan as a

market for consumer-use MEMS was high, with discussions at each location focusing on the possibility of market participation and/or business collaboration.

In addition to interaction between businesses, interaction between Japan and Europe in the area of industrialization support is sure to flourish in the future.

MICROMACHINE No. 54

MICROMACHINE is published quarterly by Micromachine Center (MMC) to promote the international exchange of information related to micromachines, R&D and other technical topics, and is circulated free of charge. Please send your comments about MICROMACHINE to the publisher :

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Date of Issue : February 14, 2006