

# Sendai 仙台フィンランド健康福祉センター Finland Wellbeing Center

In this center, Sendai and Finland are working together in Good collaboration.  
The aims of this Center are ...

- ◆ Development of new services and products for world market from SENDAI
- ◆ Realizing independent life of the elderly utilizing high-value-added technology

## SENDAI



Companies, Tohoku Welfare University, Tohoku Welfare Corporation, Tohoku University, Development Bank of Japan (DBJ), City of Sendai, Sendai City Industrial Promotion Organization (SIPO), etc

## FINLAND



Companies, Finnish Foreign Trade Association (Finpro), National Technology Agency (TEKES), National Research and Development Center for Welfare and Health (STAKES), City of Oulu, University of Oulu, Finnish Institute.

## Sendai-Finland Wellbeing Center



### R&D Unit ( by SIPO )

- Development of services and equipment utilizing technology including ICT
- Joint R&D activities of regional and Finnish companies
- Joint R&D activities of regional and Finnish universities



### Care Unit ( by Tohoku Welfare Corporation )

- New care service adapting Finnish care concept.
- Providing the needs information of the elderly to the R&D unit.
- Evaluation and collection of data of the services and equipment developed in the R&D unit.

Collaboration

[Finnish care concept is emphasizing] Privacy / Prevention of hypofunction / Maintain sociality to realize independent life of the elderly

Sendai-Finland Wellbeing Center consists of two units; the Care Unit as a practical field of advanced elderly services and the R&D Unit as a Research and Development field of advanced elderly services and products. The user's voices from the Care Unit are introduced to the R&D Unit to accelerate the development of services and products that provides satisfaction of the elderly, their families and care persons. These Research and Development activities by Finnish and Japanese companies, researchers and universities are supported by the participating governmental organizations

- Established in October 2004 in Sendai
- Function : Information exchange, Human development, Research & development, International collaboration (CSEM in Switzerland, Fraunhofer Institute in Germany etc.)
- Chairman : Masayoshi Esashi (Tohoku Univ., Sendai city regional fellow)  
Vice Chairman : Etsuro Igarashi (Sendai City), Masaaki Endo (Miyagi Prefecture),  
Dennosuke Uchida (SEMI Japan), Yuko Harayama (Tohoku Univ.), Hiroki Kuwano (Tohoku Univ.)
- Annual Fee (Minimum) : ¥50,000 (approximately \$400)
- Number of member company : approximately 108 (2005/10)



Tohoku Univ.



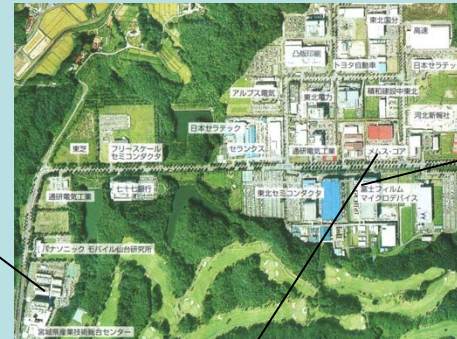
Venture Business Laboratory



MEMS Laboratory

ITIM  
(Industrial Tech. Inst. Miyagi Pref.)

**MEMS Park Consortium**  
([www.memspc.jp](http://www.memspc.jp))



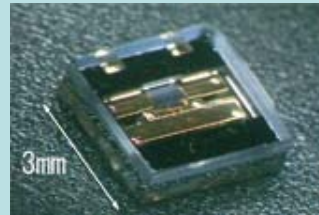
Industrial park  
(Izumi park town)

Freescale  
Semiconductor  
Japan Ltd.  
  
(MEMS  
Accelerometers)



MEMS Core  
Co.Ltd.  
  
(MEMS  
foundry)

Product by collaboration



MEMS Relay for LSI tester  
(Advantest Laboratories Ltd. in Sendai)



# MEMS

P A R K C O N S O R T I U M

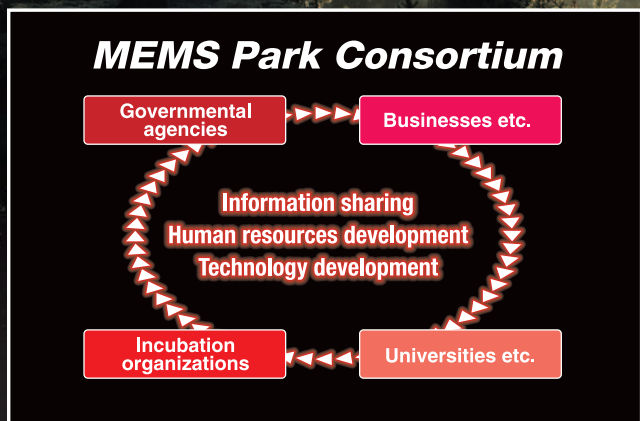
M E M S パークコンソーシアム



**Masayoshi Esashi**  
Professor,  
Department of Nanomechanics,  
Graduate School of Engineering,  
Tohoku University

## MEMS Park Consortium provides an open environment where researchers can share information and facilities.

Put simply, the potential of MEMS Park Consortium lies in its strong ability to produce highly competitive goods, achieved through information sharing in an open environment. In the early stage of research and development, various types of MEMS research information is not kept secret among particular parties, but is shared openly with others so that themes can be explored together and needs can be grasped at an early stage. In many cases, finding the technologies for concrete solutions in such a way, and using them in the area of product development in each company is much more mutually beneficial. The Consortium was established with the motivation to create an environment for such activities. We believe that this is one of the most effective ways of aiming for product development with the wide scope and potential of MEMS.

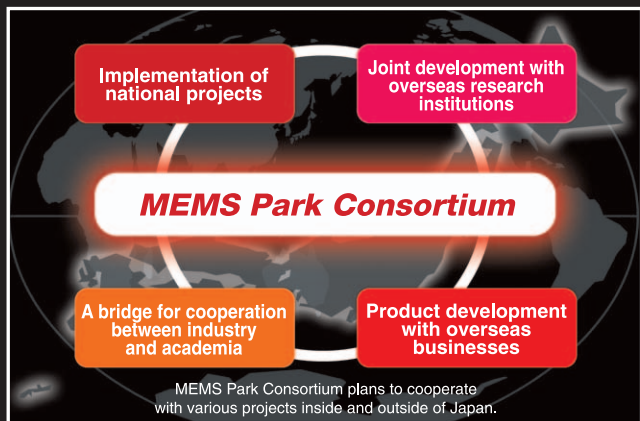


## The competitive advantage of MEMS is the ability to achieve high performance with minimum resources.

### Three issues in the industrialization of MEMS:

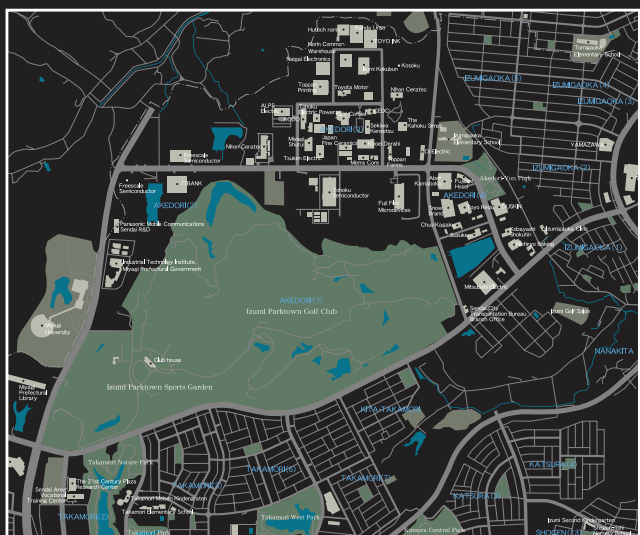
- ① Systematization of technology seeds and sharing of information for research and development
- ② Fostering of engineering directors who can integrate technologies in a comprehensive manner
- ③ Clarification of specific applications

MEMS Park Consortium is working actively to make MEMS technology a key industry by overcoming these issues through mutual efforts among industry, academia, and government, including businesses, economic organizations, universities, national government, and local public authorities. In the vicinity of Izumi-ku, Sendai City where the MEMS Park Consortium has its base for its activities, superior semiconductor-related companies have accumulated, and the promotion of new technology development through mutual cooperation, as well as the enhancement of industrial competitiveness is expected.



## MEMS Park Consortium's uniqueness displayed in cooperation with national and international projects

In the global competition for technological development, it is becoming standard to utilize universities' advanced research and development abilities as well as other companies' technology and know-how. While cooperating with various industrial-academic joint projects that have been developed in the region, the MEMS Park Consortium aims at commercialization of these projects using MEMS technology. For example, it is expected that research and joint development will be conducted using MEMS technology in the "Sendai-Finland Wellbeing Center Project" where the Republic of Finland and Sendai City are working together for the research and development of health and welfare equipment and services with high added value. Furthermore, the MEMS Park Consortium functions as a bridge in national projects, such as the Knowledge Cluster Initiative which is to develop into the Industrial Cluster Plan. MEMS Park Consortium will promote its activities while displaying its uniqueness by cooperating with various industrial-academic joint projects in the region, as well as with international projects, such as those in Switzerland, Germany, the U.S., and Taiwan, all conducted at a national level.



### Access

#### ◆Public transportation

- Take the subway and get off at Izumi-Chuo Station (15 minutes from Sendai Station). Take a bus for 'Izumi Park Town Shako (Depot)' from Bus Station Stop No. 3:
- Via Katsura, Takamori, and Miyagi University (18 minutes) → Get off at 'Sports Garden Mae'. → 3-minute walk
  - Via Katsura and Takamori 3-chome (17 minutes) → Get off at 'Takamori 3-chome'. → 5-minute walk
  - Via Teraoka and Murasakiyama (12 minutes) → Get off at 'Takamori Shopping Plaza'. → 8-minute walk

#### ◆By car

- About 40 minutes from Sendai Station (JF)
- About 10 minutes from Izumi-Chuo Station (Subway)
- About 10 minutes from the Izumi Interchange Exit on the Tohoku Expressway

## MEMS Park Consortium Office

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