

NAMIS

[An international network on Nano and Micro Systems]

Centre for International Research on MicroNano Mechatronics

<http://namis.iis.u-tokyo.ac.jp>



Objectives

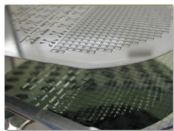
- To stimulate scientific exchanges through workshops, international schools, working groups and laboratory visits
- To promote and organize mobility within the network of PhD students, post-docs and visiting researchers
- To settle challenging research projects using the complementary expertises of NAMIS partners with international or national financial support.
- To allow sharing of know-how and simulation, fabrication, and test resources

Partners



- Institute for Engineering and System Sciences, National Center for Scientific Research (CNRS/INSIS), France
- The Institute of Industrial Science (IIS)–The University of Tokyo, Japan
- Institut de Microtechnique, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
- Departement of Microsystems Engineering (IMTEK), University of Freiburg, Germany
- Inter–University Semiconductor Research Center (ISRC), Seoul National University (SNU), Korea
- Valtion Teknillinen Tutkimuskeskus (VTT), Finland
- École Polytechnique de Montreal (EPM), Regroupement Stratégique en Microsystèmes du Québec (ResmiQ) et Regroupement Québécois sur les Matériaux de Pointe (RQMP), Canada
- Korea Institute of Machinery and Materials (KIMM), Korea
- Université Paris Est (UPE), France
- Micro/Nano Machining and Education Research Center (MNC), Tohoku University (TU), Japan
- Institute of Nano Engineering & Microsystems (iNEMS), National Tsing Hua University (NTHU), Taiwan
- University of Washington (UW), USA

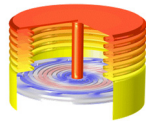
Research topics



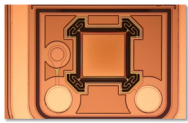
Stencil lithography (EPFL)



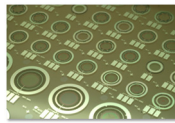
Optical scanner with deformable mirror (Tohoku University)



Blood pressure energy harvester (CNRS./IEF)



13 MHz Piezo-driven SOI Resonator (VTT)



Fully integrated optofluidics irises (IMTEK)

Fabrication technologies

Sensors and Actuators

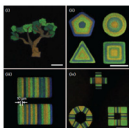
Modelling and design

Characterization, testing and reliability

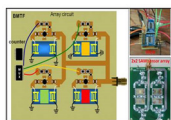
Integration & packaging technologies

Applications of micro and nano devices

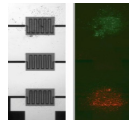
Nano sciences, technologies & systems



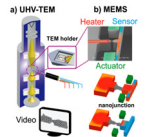
Structured color Printing (SNU)



Electronic nose with SAW sensors (NTHU)



Cell chip on a thermo responsive polymer (UW)



Heat transfer through a nanocontact measured by UHV-TEM (IIS/Univ.Tokyo)

Activities in 2006-2013

- 10 International workshops on Nano and Micro Systems successively organized in France, Switzerland, Finland, Korea, Germany, Japan, Canada, Taiwan, France & Japan
- 6 international autumn schools organized in Tokyo (3 times), in Toulouse (France) and in Neuchatel (Switzerland) & Besançon (France)
- 5 international joint projects launched
- Website with partner links and contacts, job offers,...

Next events: 11th NAMIS workshop in Seattle (USA) (July 2013) and 7th NAMIS international school in Seoul (Korea) (Sept 2013)

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