

**Editorial**

Welcome to the first edition of the ASSEMIC newsletter. This newsletter will give you information about ASSEMIC, Marie Curie Research Training Network related to handling and assembly in microtechnology.

Once a year, ASSEMIC will inform the industry and the interested public about the progress of the research, the consortium and all issues related to the implementation of this 4 year project.

To make sure you receive all issues of the ASSEMIC newsletter register by sending an email to the co-ordinator:

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*Franz Sümecz*

**About ASSEMIC**

Start date: 1st January 2004

Duration: 4 years

Co-ordinator: Vienna University of Technology, Institute of Sensor and Actuator Systems (ISAS)

Consortium: 14 participants from 10 countries

Fellowships: More than 30 foreign researchers

Early Stage Researchers:

436 Person Months

Experienced Researchers:

132 Person Months

**Management**

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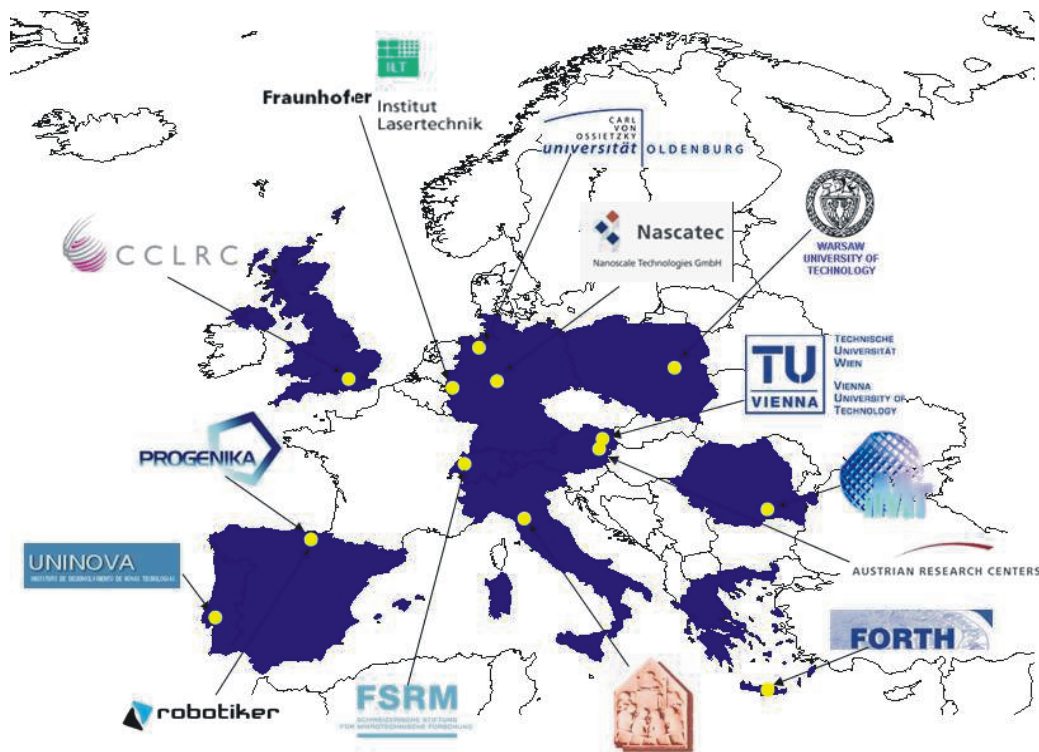
**Abstract**

ASSEMIC is devoted to training and research in handling and assembly in the micro-dimension, involving advanced methods and tools and employing a multidisciplinary, complementary approach. This is to be achieved by combining the research competence of R&D centres and universities, with the application oriented view from SME and industrial partners. The scientific and technical complementarity required by micro-handling and assembly - an intrinsically multidisciplinary topic - will be ensured by merging the partners' expertise in their respective fields such as design of hybrid MEMS and micro-tools, material physics and tribology, laser technology, advanced control techniques and artificial intelligence, etc.

The following work packages have been defined:

1. High resolution positioning systems, micromotors and microrobots.
2. Advanced tools & control for microhandling (visual/force feedback, haptic interfaces, etc.)
3. Microassembly tools and strategies (self-assembly, bonding, soldering...)
4. Quality management for industrial manufacturability
5. Know-how management (e-learning, technology transfer and dissemination, etc.)

Special focus will be placed on training and dissemination, including workshops, open-door days, summer schools, newsletters and e-learning. Optimized and cost efficient handling and assembly of hybrid microsystems keeps being a challenge, as assembly and packaging still make up a great part of MEMS manufacturing costs. ASSEMIC will raise the European technological competence and combine the research efforts in this field, by multidisciplinary training of both early-stage and experienced researchers in highly qualified research centres and universities, by developing research and by providing a practical focus for SME and industrial partners. ASSEMIC addresses topics from Priority 3-NMP, especially new production processes and devices (flexible and intelligent manufacturing systems), as well as nano-technologies and nanoscience (nanomanipulation, handling and control devices).



## List of Participants

- 1 IMFT – TU Wien (Austria)
- 2 FSRM (Switzerland)
- 3 Seibersdorf Research (Austria)
- 4 IMT (Romania)
- 5 Politechnika Warszawska –WUT (Poland)
- 6 Uninova (Portugal)
- 7 University of Oldenburg (Germany)
- 8 Fundacion Robotiker (Spain)
- 9 FORTH (Greece)
- 10 Medplant Genetics S.L. (Spain)
- 11 CCLRC – RAL (Great Britain)
- 12 Fraunhofer Gesellschaft – ILT (Germany)
- 13 Scuola Superiore Sant’Anna (Italy)
- 14 Nanoscale Technologies GmbH (Germany)

## Training and ToK

### Network based Measures

- Summer Schools
- Training Workshops
- Open Academic Seminars

### Individual Measures

- Basic Training at the host institution
- Secondments to other participants
- Other Training Activities
- Courses
- Tutorials
- Conferences...

## Events 2004

### Kick-Off Meeting

The ASSEMIC Kick-Off Meeting will take place from January 29<sup>th</sup> – 31<sup>st</sup>, 2004 in Vienna.

The 2<sup>nd</sup> day of the Kick-Off Meeting will be public and open to interested persons from universities as well as from companies promoting the ASSEMIC project and inviting them to become associated partners.

### 1<sup>st</sup> Open Academic Seminar

The first open academic seminar will be held in Vienna on November 4<sup>th</sup> – 5<sup>th</sup>, 2004. The aim of the seminar “Handling and Assembly in Micro-technology” is to give an overall introduction to the

thematic as well as an introduction to the network and the objectives of the Marie Curie programme. The seminar is open to all interested persons.

### 1<sup>st</sup> Summer School

On December 6<sup>th</sup> – 8<sup>th</sup>, 2004 the 1<sup>st</sup> ASSEMIC Summer School will take place in Neuchatel, Switzerland. This annual event is focused on the topic of “Handling and Assembly of MOEMS”.

## Fellows

Currently for the year 2004 11 fellow positions are free. If you are interested in getting trained in the frame of ASSEMIC send your application. Further details about the free positions can be found on the ASSEMIC Homepage: [www.assemic.net](http://www.assemic.net)

