Advanced Handling and Assembly in Microtechnology (ASSEMIC) A Marie Curie Research Training Network Coordinator: Institut für Mikro-und Feinwerktechnik, Technische Universität Wien- IMFT - Prof. Dr. Werner Brenner

IMT-Bucharest (Dr. Raluca Müller) is partner in ASSEMIC Network, coordinated by Prof. Dr. Werner Brenner, from IMFT TU-Vienna, which join 14 partners spread all over Europe.
The aim of the project is devoted to training and research in handling and assembly at the micro-dimension, involving advanced methods and tools and providing a multidisciplinary, complementary approach.

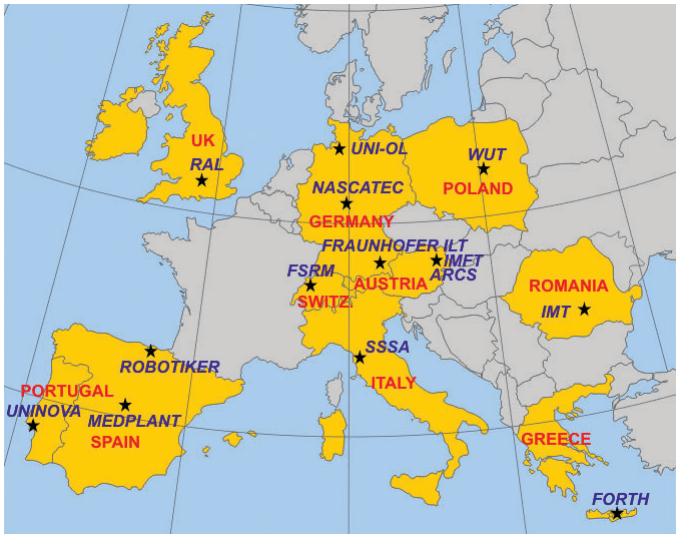
Associate Prof. Dr. Werner Brenner, the coordinator of ASSEMIC Network at Euronet Workshop, Sinaia, September, 2003

The Main Objectivs of the Network are:

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

Participants:

· Institut for Mikro-und Feinwerktechnik, Technische University Wien - IMFT
· Swiss Foundation for Research in Microtechnology - FSRM
· ARC Seibersdorf research GmbH - ARCS
· National Institute for Research and Development in Microtechnologies, Bucharest, Romania - IMT
· Warsaw University of Technology - WUT
· Instituto de Desenvolvimento de Novas Tecnologias - UNINOVA
· Carl von Ossietzky Universität Oldenburg - Uni-OL
· FUNDACIÓN ROBOTIKER - ROBOTIKER
· FOUNDATION FOR RESEARCH AND TECHNOLOGY - HELLAS - FORTH
· Medplant Genetics. S.L. - Medplant
· CLRC Rutherford Appleton Laboratory - RAL
· Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.v. - Fraunhofer ILT
· Scuola Superiore Sant'Anna - SSSA
· NANOSCALE TECHNOLOGIES GMBH - Nascatec GmbH



Multi-Material Micro Manufacture: Technologies and Applications (4M), NoE FP6 - priority 3, NMP Coordinator: Dr. Stefan Dimov - Cardiff University

The main aim of 4M is to develop Micro- and Nano-Technology (MNT) for the batch-manufacture of micro- components and devices in a variety of materials into user-friendly production equipment, processes and manufacturing platforms for incorporation into the factory of the future. To achieve this, 4M will integrate the currently fragmented European R&D capacity in non-silicon microtechnologies into a Virtual Centre of Excellence for MNT process and product development. The establishment of such world class expert resource and infrastructure at European level will be crucial to the future of European companies engaged in satisfying the growing demand for portable, wireless communication products and many lifestyle, health and transport related systems incorporating MNT. The foundations for a new European industrial sector and the achievement of sustainable, commercial and societal benefits for its citizens are the overall goals of 4M.
The establishment of the expertise resource will have an impact on interdisciplinary education and training, on work practices in society and on quality of life. 4M will develop strategic links to research organisations and manufacturing companies involved in complementary and supporting activities and connect to existing and new national programs and will thus have a major impact on the development of the ERA in MNT. Contact will be maintained with other related centres of excellence outside of the network to ensure that knowledge and excellence are spread throughout the EU. The 4M network will have a policy of training researchers from outside the network, including the use of distance computer-based learning, in order to counteract the shortage of skilled human resource in the MNT area and to generally spread knowledge and excellence beyond the network partners.

4M Partners:

· Belgium: KU Leuven
· France: CEA
· Germany: IMTEK, IZM, FZK, IPT, IBMT, IMM, Erlangen
· Netherlands: TNO
· Spain TEKNIKER;
· Sweden: IVF and KTH
· UK: Cardiff, Cranfield, RAL
· Bulgaria: BAS
· Denmark: DTU
· France: LPMO
· Germany: IZFM, HSG-IMAT and BLZ
· Hungary: BUTE
· Italy: Naples
· Romania: IMT
· Slovenia: UL
· Sweden: IMEGO
· UK: Bath and SCU