

Info Day, Annual Meeting and Open Academic Seminar,
 organized in the frame of the FP6 Marie Curie Research Network
ASSEMIC: Advanced Handling and Assembly in Microtechnology
 (Project MRTNCT 2003 -504826)

www.assemic.net

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The Info Day, Annual Meeting and Open Academic Seminar of ASSEMIC, a FP6 Marie Curie Research Training Network: Advanced Handling and Assembly in Microtechnology, Project no.: 504826 (2004-2007) relating to handling and assembly in micro technology was held in Sinaia, Romania, from 13th May to 16th May 2007.

The project joined 14 different institutions from 10 EU countries. Every year, ASSEMIC inform the industry and the interested public about the progress of research activities, the consortium and different issues relating to the implementation of the project.

The meeting started with the Info Day, organized by Centre for Technological Transfer (CTT Baneasa) and IMT Bucharest in collaboration with selected contributions of ASSEMIC partners.

Ana Almansa - PROFACTOR Research and Solutions GmbH – Austria, the scientific coordinator of the project, presented the research results of the last year, of the collaborative work on handling and assembling in micro-nanotechnologies. Tens of early stage/experienced researchs were trained within the network, fulfilling the five main objectives: Micropositioning, *Microhandling*, *Microassembly*, *Industrial automation*, *Know-how management*. Different tools, concepts and prototypes were developed: novel concepts for micropositioning platform based on polymer cantilever arrays with vertical interconnects (RAL/Profactor), Position Sensitive Detector hardware prototype board (UNINOVA): microrobot platform integrating simplified Stewart platforms (Uni-Oldenburg), positioning stage and modular microrobotic simulator (IMT- Bucharest), gripper with electromagnetic actuation (ISAS), electrostatically actuated gripper (Nascatec), shape memory alloy polymer gripper (SSSA), theoretical and experimental study of adhesion aspects with special coatings (WUT), etc. The project addressed a multidisciplinary approach **developing an important number of advanced methods and tools for handling and assembly in microtechnology**, beyond the limits of traditional assembly of micro-components, demonstrated through a large numbers of prototypes, process and applications.



Ana Almansa – Profactor Research and Solutions GmbH - Sinaia



Dan Dascalu- IMT- Bucharest- Info Day, Sinaia



Prof. Werner Brenner presenting the progress of the project

Several Romanian and EU companies presented their results and interest in further cooperation in FP7 projects on key topics like micro-nano-biotechnologies. Between the speakers were: *Guido Tschulena* -Manager of the mst Network Rhein-Main, Germany; *Dan Dascalu* -IMT Bucharest, CTT Baneasa, Romania; *Marko Pudas*, University of Oulu, Finland; *Arantxa Renteria*, Robotiker -Tecnalia, Spain; *Vlado Stavrov*, Nano ToolShop Ltd, Bulgaria; *Pilar Saenz*, Progenika Biopharma S. A , Spain; *Corneliu Trisca Rusu*- MATNANTECH Romanian Program, Romania; *Dumitru Ulieru*, ROMES S.A.; *Vasile Ursu*, PRO OPTICA S.A., Romania and many others. **The Info Day** was a successful event which allows to establish pathways of exchange of ideas and expertise between participants. Discussions about new knowledge help participants to take the first steps in possible cooperations in the field of microhandling and microassembling, for preparing joint proposals, to foster collaboration links between industrial partners and academia.



Dana Cristea, from IMT Bucharest presenting mask design programme



ESR Silvia Bou from PROFACTOR

The next two days were devoted to the Annual Meeting of ASSEMIC project. After Prof. Werner Brenner gave an overview of the administrative and financial issues, every partner, early stage and experienced appointed researcher, trained within the network, presented their new results, their multidisciplinary collaborative work addressed to handling, assembling at micro scale and discussed the tasks and deliverables which have to be fulfilled till the end of the project (December 2007).



ESR Samuel Serra from RAL presenting last technological results

The event closed with an **Open Academic Seminar**, dedicated to the training of young appointed researchers on topic **MEMS/NEMS technologies for sensor and actuators applications**. Different lectures were presented and practical examples regarding design of masks.

Social events included an excursion in the surroundings of Sinaia, being an opportunity to strengthen the friendship between the participants, coming from different countries, spread all over Europe.

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ASSEMIC team photo



ASSEMIC's ESRs excursion