

A promotional banner for a demonstration day. On the right side, there is a close-up photograph of a woman with short brown hair wearing clear safety goggles and a white lab coat. The background of the banner is a blurred blue and green. On the left side, there is a smaller version of the Masmicro logo. The text "Demonstration Day" is in a large, white, bold font, followed by "4th October 2006" in a slightly smaller white font. Below that, "Universität Stuttgart, Stuttgart, Germany" is written in a smaller white font. At the bottom right, the text "The first Masmicro Demonstration Day" is written in a bold, orange font on a black background.

**Demonstration Day**  
**4th October 2006**  
Universität Stuttgart, Stuttgart, Germany

**Masmicro**

**The first Masmicro  
Demonstration Day**

**Date:** 4<sup>th</sup> October 2006

**Location:** Universität Stuttgart, Germany

## **Project Overview**

With a total budget of €21.5 million, the four year Masmicro project will develop an integrated production facility for mass-manufacture of miniature and micro-products. Launched in July 2004, Masmicro is an integrated project supported by the European Commission under Framework Programme 6 (FP6). Coordinated by the University of Strathclyde, the consortium gathers 36 partners from 13 EU countries, including 18 SMEs.

To date, manufacture of miniature and micro-products still largely relies on the techniques based on the removal of the materials, either by chemical or mechanical means. The objective of the Masmicro project is to convert miniature and micro-materials into engineering products by high rate plastic deformations.

This type of technology will greatly reduce costs and equipment size for the manufacture of miniature and micro-components for the electronics, automotive, aerospace, automation and medical sectors. Technologies and systems to be developed will bring

technological and organisational measures to realise mass production of miniature and micro-products in a scale that has not been achieved so far.

## **Aim of the Event**

The main goal of the event is to disseminate to industry the results and achievements of the project to date. Delegates are invited from industry, academia and potential investors to learn of the results of the project so far through both presentations on each section of the project and an exhibition area. The day will also provide a forum for delegates from industry and academia to collaborate on similar projects.

## **About Stuttgart**

Charmingly embedded in one of the largest winegrowing regions of Germany, Stuttgart has beautiful squares, noble castles and buildings with differing architectural styles and diverse cultural offerings.

Prominent in the Stuttgart cultural life is the State Theatre Stuttgart with renowned plays, the world famous Stuttgart Ballet and the State Opera, which has received many awards and also received the coveted title "Opera House of the Year" in 1998, 1999, 2000 and 2002.

The two musicals in the unique SI experience centre, the fascinating State Gallery Stuttgart or the numerous museums such as the automobile museums from Mercedes-Benz and Porsche are further magnets for the public. The "House of History" and the cultural mile enrich to a great extent the Stuttgart museum life. With around 2,200 square metres, the impressive building, which was built according to the plans of the British star architect James Stirling, presents an exciting overview of the history of southwest Germany.

In the Wilhelma, Europe's largest zoological-botanical gardens, you can gaze at more than 10,000 animals and exotic plants, exquisite garden art and Moorish architecture. There are many festivals to attend throughout the year including the Summer Festival, the Stuttgart Wine Village, the Cannstatter Beer Festival and the atmospheric Christmas Market.

[Stuttgart Tourist Information](#)  
[City Map](#)

## **Accommodation**

A list of nearby hotels is available to registered delegates on request. Alternatively, hotels are available in the centre of Stuttgart and there are excellent rail links to the University. Full details can be obtained from the Tourist Information (link above).

## **Presentations**

### **A Design Advisory System for Micro Manufacturing**

Prof. Neal Juster

### **Key Techniques in Micro Mechanical Modelling**

Dr J G Lin

### **Micro Materials Testing Methods and Devices**

Dr Johan Michler

### **Fabricating Micro and Nano Structures of Polymer Materials**

Dr Ioannis S Chronakis

**Laser Based Material Interfacial Heat Transfer Measurement**

Mr Finbarr Waldron

**Surface Coating of Micro Tools**

Dr Gonzalo Fuentes

**Heat Treatment Considerations for Micro Tools**

Dusan Kesner

**Micro/Nano Machining and the Bench Type Machine**

Prof. Kai Cheng

**High Speed Spindles for Micro/Nano Cutting**

Dr Frank Wardle

**Freeform Cutting Tools**

Dr Andrew Cox

**Condition Monitoring in Micro Machining**

Prof. George Chryssoloukis

**Optical Online Stent Inspection System**

Mr Herwig Mairer

**Optical Thickness Measurement of the 3D Parts**

Mr Christian Hofer

**Handling for Micro Machining Applications**

Prof. Antonio Sanchez-Salmeron

**Dynamics Testing of the Miniature-Machinery**

Dr Piero Larizza

**Micro-assembly System Design Considerations**

Nikolas Paldan

**Piezo-actuators for Micro Machining Applications**

Dr Ronan Le Letty

**Laser-systems for Micro Forming Applications**

Dr Hans Wilhelm

**Materials for Micro Products for Forming Applications**

Dr W Hornig

**Cold Forging of Industrial Micro Components**

Dr Mogens Arentoft

**Micro-sheet Forming and the Testing Machine**

Dr Yi Qin

**Testing Machine for Micro Hydro Forming**

Prof. Christoph Hartl

**Laser Assisted Forming and Tools**

Mr Jens Holtkamp

**Micro-EDM and Forming Tools Fabrication**

Markus Roehner

**PCE & PEF of Micro-parts**

Mr Barry Eggington

**Web Service Technology Based Factory IT-Landscapes**

Matthias Meier

**MES Client Applications**

Mr Paul Murphy

**Masmicro KBDS Development and Prototype**

Dr Nikolaos Mekras

**Mobile-Robot Design for Transporting in Micro Manufacturing**

Mr Raul Sebastián

**Masmicro E Collaborative Platform**

Mr Serge Bertrand

Presentation will also be given from invited guest speakers. Further details of these, including presentation details, will be available shortly.

## **Registration for Attendees**

Registration for the event is free to all personnel within industry, academia and research establishments. To register for the event, please email the following details to [nicola.brown@namtec.co.uk](mailto:nicola.brown@namtec.co.uk)

**NAME:**

**COMPANY NAME:**

**EMAIL ADDRESS:**

**BUSINESS SECTOR:**

Delegates will be required to register for specific presentations. Presentation Registration forms will be sent to registered delegates shortly.

## **Project Partners**

1. University of Strathclyde (UK)
2. Abbott Vascular Devices (Ireland)
3. Centro de Ingenieria Avanzada de Superficies (Spain)
4. BPE International (Denmark)
5. Contour Fine Tooling Ltd (UK)
6. CEDRAT Technologies S.A. (France)
7. Gammastamp SpA (Italy)
8. Latronics GmbH (Germany)

9. Leister Technologies GmbH (Germany)
10. Loadpoint Ltd. (UK)
11. MASMEC s.r.l. (Italy)
12. Noliac (Denmark)
13. Pinol (Denmark)
14. Robotnik Automation S.L.L (Spain)
15. Solas Data (Ireland)
16. Specicom (Belgium)
17. Pascoe Precision Engineering (UK)
18. Comtes FHT (Czech Republic)
19. Carinthian Tech Research AG (Austria)
20. Swiss Federal Laboratories for Materials Testing and Research (EMPA) (Switzerland)
21. Swedish Institute for Fibre and Polymer Research (Sweden)
22. Fraunhofer Institute Laser Technology (Germany)
23. Fraunhofer Institut Produktionstechnik und Automatisierung (Germany)
24. Fraunhofer Institute Production System and Design Technology (Germany)
25. Institute for Product Development (Denmark)
26. National Manufacturing Research Centre (Ireland)
27. Tekniker (Spain)
28. Upper Austrian Research GmbH (Austria)
29. University of Applied Science Cologne (Denmark)
30. University of Birmingham (UK)
31. Leeds Metropolitan University (UK)
32. University of Patras (Greece)
33. Polytechnic University of Valencia (Spain)
34. Tecan (UK)
35. Anter Ltd (Greece)
36. National Metal Technology Centre (UK)

## Organising Bodies

National Metals Technology Centre

Nicola Brown      [nicola.brown@namtec.co.uk](mailto:nicola.brown@namtec.co.uk)

Fraunhofer Institut Produktionstechnik und Automatisierung

Matthias Meier      [matthias.Meier@ipa.fraunhofer.de](mailto:matthias.Meier@ipa.fraunhofer.de)

University of Strathclyde

Dorothee Loziak      [dorothee.loziak@strath.ac.uk](mailto:dorothee.loziak@strath.ac.uk)