

INTRODUCTION TO MICROCANTILEVER APPLICATIONS



Image Courtesy Nanoworld

This new training tool has been elaborated within the European FP6 project Pronano. It is available on the web and accessible via a personal password. Learning time is about one hour.

OBJECTIVES OF THE ON-LINE COURSE

- To show an overview of the possible applications of microcantilever technology as sensors and actuators in high growth markets (Biomedical, Security, and Environmental) and other industries.
- To provide the foundations for further reading into the field of microcantilevers.

CONTENT

- Why Microcantilevers?
- Microcantilever Applications:
 - Biomedical: Protein arrays, Viral detection, Micromanipulation, Biological imaging
 - Security: TNT sensor, Pathogenic Sensor, Biometrics, Infrared imaging
 - Chemical & Environmental: Calorimetry, Fluid Sensor, Vapour Detectors, Chemical Sensors
 - Other Applications: Data storage, Optical scanners, Microrobotics, Metrology

INTRODUCTION TO MICROCANTILEVER APPLICATIONS

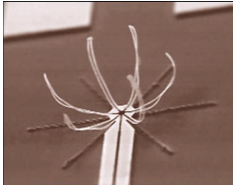
SOME PICTURES

Mobile Microrobot



Dr Thorbjorn Ebefors
Silex Microsystems AB

Microcage



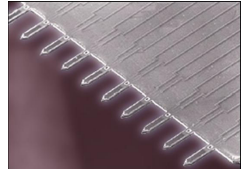
Dr Jack Luo
Cambridge University

Cantilever Arrays



Dr Vladislav Djakov, Central
Microstructure Facility, CCLRC

Calorimetry Array



Prof Ivo Rangelow
Technische Universität Ilmenau

TARGET GROUP

The on-line course addresses students, researchers and engineers from companies or institutes with expertise outside micro- and nano-technology, who are interested in the fundamental background or/and exploitation of microcantilever technology. We also encourage those actively working in the fields of micro- and nano-technology but who are new to the field of microcantilevers to participate.

REGISTRATION Please register by e-mail to locher@fsmr.ch. You will then receive a personal password giving you access to the on-line course and allowing you to work on it on your personal computer.

FEES Thanks to the support of the European FP6 project Pronano, the access to the course is free of charge.

INFORMATION Annette Locher, FSRM, locher@fsmr.ch

PRONANO

PRONANO (Technology for the **P**roduction of Massively Parallel Intelligent Cantilever Probe Platforms for **N**anoscale Analysis and Synthesis) is an Integrated Project of the European FP6 programme. More information about the Pronano project: www.pronano.org

To receive further course announcements by e-mail, <mailto:training@fsmr.ch>

Pronano partner FSRM • Ruelle DuPeyrou 4 • CH-2001 Neuchâtel • Tel +41 32 720 09 00 • www.fsmr.ch