



Nano FIB 2005

Advances in Focused Ion Beam microscopy

Oral Programme:

- 10.00 Registration, Tea and Coffee
- 10.25 **Welcome: Dr Beverley J Inkson**
- Session One** **Chair: Prof Mark Blamire**
- 10.30 **(Invited) Prof P E Russell** - North Carolina State University
Focused ion beam sample preparation of complex devices
- 11.00 **Dr S Orso** - MPI für Metallforschung, Stuttgart
A novel insitu method for mechanical testing of biological samples at the micrometer scale
- 11.20 **Dr P A Warburton** - University College London
Three-dimensional ion and electron beam fabrication using a cross-beam microscope
- 11.40 **Dr W Li** - University of Salford
Rectifying nano-'homo' contacts of W-Ga-C composite pad and nanowires fabricated by focused ion beam assisted chemical vapour deposition
- 12.00 **(Invited) Prof P Prewett/Dr J Teng** - University of Birmingham
FIB fabrication of MEMS components
- 12.30 **Lunch and Poster Session**
- Session Two**
- 13.30 **(Invited) Dr J Gierak** - CNRS
Exploration of the ultimate patterning potential achievable with focused ion beams
- 14.00 **(Invited) R Forbes** - University of Surrey
- 14.30 **Dr R Jain** - Credence System Co.
Nano-patterning using a coaxial photon-ion column
- 14.50 **Dr F Pérez-Willard** - University of Karlsruhe
FIB patterning of magnetic metamaterials at telecommunication frequencies
- 15.10 **(Invited) Dr L Bischoff** - Forschungszentrum Rossendorf
The application of FIB from mass separated alloy LMIS
- 15.40 **Tea and Coffee / Poster Session**

Session Three **Chair: Dr Beverley J Inkson**

- 16.10 **(Invited) Prof M Milani** - University of Milano-Bicocca
FIB applications and perspectives in life sciences
- 16.40 **Dr P Gnauck** - Carl Zeiss Ltd.
High resolution investigation of the interface between biological cell tissue and hard substrate materials using crossbeam technology
- 17.00 **Dr T Kamino** - Hitachi Science systems
Application of a dedicated FIB system to 3D structural characterisation of biological cells
- 17.20 **Close of Meeting**

Posters

1. **Paul Cook** - University of Salford
Exposure dose affected electrical properties of TiO₂ nanotube
2. **Frances Docherty** - University of Glasgow
Sample preparation for nanoanalytical electron microscopy using the FIB liftout method and low energy ion milling
3. **Francisco Hernández** - Universitat de Barcelona
Nanocontacts fabricated by Focused Ion Beam (FIB): characterisation and application to nanometre-sized materials
4. **Emanuela Ricci** - STMicroelectronics, Italy
FIB preparation of TEM samples: “sacrificial” lamella approach
5. **Damjana Drobne** - University of Ljubljana
Lipid secretion in the digestive glands investigated by the FIB / SEM system
6. **Yizhong Huang** - University of Oxford
Bioerosion of titanium by RAW264.7 macrophagic cells in vitro
7. **Giles Graham** - Lawrence Livermore National Laboratory, USA
Small Particle Manipulation By Focused Ion Beam Microscopy: Spores to Stardust
8. **Paul F.A. Alkemade** - Delft University of Technology
Milling Foils
9. **Zhaorong Huang** - Cranfield University
Combining Ar ion milling with FIB lift-out techniques to prepare high quality site- specific TEM samples
10. **Wei Zhou** - Nanyang Technological University
Approaches to Surface Nanopatterning by Focused Ion Beam

