

Wednesday 30<sup>th</sup>

UKSPM PROGRAMME

Scientific Organiser: Laurent Bozec (University College London)

09.00 – 12.45	<b>Registration and visit to exhibition</b>	
12.45 – 13.40	<p>Welcome and Plenary (then move upstairs)</p> <p><b>Welcome from Laurent Bozec (organiser)</b></p> <p><b>Toshio Ando Invited Plenary Speaker</b> Dynamic visualization of protein molecules in action by high-speed AFM</p>	
	<b>Session 1</b>	<b>Session 2</b>
13.45 – 14.15	<p><b>Nano Bio I</b> <i>Invited Talk</i> <b>Yuri Korchev</b> Beyond the Optical Resolution in Living Cells: Biomedical Applications of Scanning Ion Conductance Microscopy</p>	<p><b>SNOM</b> <i>Invited Talk</i> <b>Peter Dunstan</b> Near-field investigations of semiconductor crystals and biological complexes</p>
14.15 – 14.35	<p><b>R Turner</b> AFM analysis reveals a novel means of cell division in Staphylococcus aureus (MRSA)</p>	<p><b>N Mullin</b> Imaging mid-infrared plasmonic antenna structures by apertureless scanning near-field optical microscopy</p>
14.35 – 14.55	<p><b>A Kramer</b> Nanomechanical Studies Reveal Inner Structure of Nuclear Pore Complexes</p>	<p><b>E ul Haq</b> Parallel Scanning Near-Field Photolithography: The Snomipede</p>
14.55 – 15.30	<b>Coffee and exhibition</b>	
15.30 – 16.00	<p><b>Nano Bio II</b> <i>Invited Talk</i> <b>Vasileios Koutsos</b> Microbubble Agents for Biomedical Applications studied by Atomic Force Microscopy</p>	<p><b>Materials &amp; Nanostructures</b> <i>Invited Talk</i> <b>Rachel Oliver</b> Highly-doped marker layers reveal the relationship between island coalescence and unintentional doping in GaN on sapphire</p>
16.00 – 16.20	<p><b>M Chiesa</b> Large-scale nanopatterning of single proteins used as carriers of magnetic nanoparticles</p>	<p><b>M Kalloudis</b> Amphiphilic Diblock Copolymer Nanostructures on Mica Surfaces studied by Atomic Force Microscopy</p>
16.20 – 16.40	<p><b>A R Nair</b> Live cell imaging using Approach-Retract-Scan (ARS) mode of Scanning ion conductance microscopy</p>	<p><b>M Zach</b> Vesicle adsorption and phospholipid bilayer formation on chemically and topographically nanostructured surfaces</p>
16.40 – 17.00	<p><b>D Sicard</b> AFM study of the P. aeruginosa Lectin PA-IL-glycoconjugates arrangements</p>	<p><b>F Frehill</b> Nanopatterns of organosilanes produced by vapor deposition combined with particle lithography</p>
17.00 – 18.25	<b>Poster Prize and Drinks Reception</b>	
18.30	<b>Conference Dinner and Party on the Plaza</b>	



We would like to thank Asylum Research for sponsoring the drinks reception

	Session 1	Session 2
09.15 – 09.45	<b>Spectroscopy</b> <i>Invited talk</i> <b>Craig Prater</b> Nanoscale infrared spectroscopy with the Atomic Force Microscope	<b>STM I</b> <i>Invited talk</i> <b>Geoff Thornton</b> Imaging and spectroscopy of wet electron states on TiO <sub>2</sub>
09.45 – 10.05	<b>F Yarrow</b> Surface IR absorption imaging of polymer nano- and microstructures with sub-diffraction limited resolution	<b>B Bryant</b> Scanning Tunneling Microscopy of Bilayer Manganites
10.05 – 10.25	<b>E M van Schrojenstein Lantman</b> An integrated AFM-Raman study of surface enhanced Raman spectroscopy (SERS) over supported silver nanoparticle catalysts	<b>V Korolkov</b> STM Unveils Molecular Conformation for Adsorbed 1-Adamantanethiol on Gold
10.25 – 10.45	<b>K Jones</b> Scanning Microwave Microscopy (SMM) - advances and applications in semiconductor and materials research	<b>A Bettac</b> QPlus NC-AFM at temperatures between 5 K and 1083 K with small oscillation amplitudes and high frequencies
10.45 – 11.20	<b>Coffee and Exhibition</b>	
11.20 – 11.50	<b>Probes &amp; Calibration</b> <b>M Reitsma</b> Nanotribological metrology: toward quantitative calibration methods for lateral force microscopy	<b>Theory &amp; Simulations</b> <i>Invited Talk</i> <b>Matthew Watkins</b> Manipulating atoms and molecules in vacuum and water using dynamic force microscopy: atomistic simulations
11.50 – 12.10	<b>R Dunn</b> Polymer Scanning Probes	<b>D Gethin</b> Simulation of atomic force microscopy operation via three-dimensional finite element modelling
12.10 – 12.20	<b>M Munz</b> Imaging surfaces of nano-scale roughness by AFM with carbon nanotubes as tips	<b>D Platz</b> Intermodulation Response to Surface Stiffness in Atomic Force Microscopy
12.20 – 13.30	<b>Lunch and Exhibition</b>	
13.30 – 14.15	Plenary (then move upstairs)  <b>Leo Gross <i>Invited Plenary Speaker</i></b> Individual Molecules Investigated by Noncontact AFM	
14.15 – 14.45	<b>Novel approach</b> <i>Invited talk</i> <b>Oleg Kolosov</b> Nondestructive nanomechanical mapping of solid state materials by Ultrasonic Force Microscopy - from graphene layers to subsurface quantum dots	<b>STM II</b> <b>S Schofield</b> Attaching Organic Molecules to Silicon: Toward Single Molecule Conductance
14.45 – 15.05	<b>J H Kindt</b> Real time interaction force analysis enables quantitative nanomechanical imaging	<b>A Stannard</b> Intermolecular Disorder Studied by Scanning Tunnelling Microscopy and Monte Carlo Modelling
15.05 – 15.25	<b>R Woolley</b> Automated Scanning Probe Microscopy: A step closer to atomically precise engineering?	<b>A Vick</b> Nanoscale Silicide-Silicon Schottky Barrier Height Measurements via Scanning Probe Spectroscopy
15.25 – 15.45	<b>A J Smith</b> <i>In-Situ</i> Atomic Force Microscopy: SEM Meets AFM	<b>S Gangopadhyay</b> Scanning Tunnelling Microscopy/Spectroscopy of Si(100) at High Currents: Tunnelling and Beyond
15.45 – 16.00	<b>Tribute to Mike Horton, given by Heinrich Horber</b>	
16.00 – 16.40	<b>Closing Remarks</b>	