

International Symposia on Advancing the Chemical Sciences (ISACS)



## Challenges in Physical Chemistry and Nanoscience (ISACS2)

13-16 July 2010 • Budapest, Hungary

Programme and Abstracts



## Conference Committee

**Kazunari Domen**, University of Tokyo, Japan

**Terri W. Odom**, Northwestern University, USA

**Haw Yang**, Princeton University, USA

**Xueming Yang**, Dalian Institute of Chemical Physics,  
Chinese Academy of Sciences, China

## Tuesday 13 July 2010

1600 - 1900 Registration

1900 - 2000 Welcome drinks reception

## Wednesday 14 July 2010

0800 - 0900 Registration

0845 - 0900 Opening presentation

0900 - 0940 **Moungi G. Bawendi**  
Science and Technology of Semiconductor  
Nanocrystal Quantum Dots

0940 - 1020 **Hongkun Park**  
Optoplasmonic Engineering of  
Light-Matter Interactions

1020 - 1120 Coffee break

1120 - 1200 **Xueming Yang**  
Photocatalyzed Dissociation of Methanol on  
TiO<sub>2</sub>(110) Surface

1200 - 1240 **Mike N. R. Ashfold**  
 $\pi\sigma^*$  Excited States in Molecular Photochemistry

1240 - 1410 Lunch

1410 - 1450 **Martin Wolf**  
Dynamics of Electron Transfer at Polar  
Molecule/Metal Interfaces

1450 - 1530 **Jianguo G. Hou**  
Single Molecule Chemistry by Scanning  
Tunneling Microscope

1530 - 1630 Coffee break

1630 - 1710 **Lukas Novotny**  
Nanoscale Spectroscopy with Optical Antennas

1730 - 1830 **Poster session 1**  
A – Nanoscale and Nanotechnology

## Thursday 15 July 2010

0900 - 0940	Michael Orit Structure and Dynamics Probed with Single Molecules and Gold Nanoparticles
0940 - 1020	Vahid Sandoghdar Interferometric Microscopy And Spectroscopy of Single Nano-Objects in the Absence of Fluorescence
1020 - 1120	Coffee break
1120 - 1200	Kopin Liu Effects of Reactant Vibration on Chemical Reactivity
1200 - 1240	Alec M. Wodtke Energy Transfer at Interfaces Beyond the Born-oppenheimer Approximation: Observation of Vibrational Overtone Excitation
1240 - 1410	Lunch
1410 - 1450	Toshio Yanagida Single Molecule Nanobioscience: Fluctuation and Function of Life
1450 - 1530	Haw Yang Real-Time Single-Particle Tracking Spectroscopy for Probing Local Dynamics
1530 - 1630	Coffee break
1630 - 1710	Daniel M. Neumark Ultrafast Soft X-Ray Science and its Application to Molecules and Clusters
1710 - 1750	David C. Clary Combining Quantum Dynamics and Quantum Chemistry for Reactions of Polyatomic Molecules
1800 - 1900	Poster session 2 B – Energy, Catalysis And Sustainability C – Fundamental Physical Chemistry
1900 - 2100	Drinks reception

## Friday 16 July 2010

0900 - 0940	Teri W. Odom Concentrating Light using Anisotropic Nanopyramidal Shells
0940 - 1020	Tianquan Lian Multi-Exciton Dissociation in Semiconductor Quantum Dots
1020 - 1120	Coffee break
1120 - 1200	Dirk M. Guldi Nanotubes See the Light (!)
1200 - 1215	Closing remarks

**Royal Society of Chemistry**

Burlington House  
Piccadilly, London  
W1J 0BA, UK  
Tel: +44 (0)20 7437 8656  
Fax: +44 (0)20 7734 1227

Thomas Graham House  
Science Park, Milton Road  
Cambridge CB4 0WF, UK  
Tel: +44 (0)1223 420066  
Fax: +44 (0)1223 423623

Email: [isacs@rsc.org](mailto:isacs@rsc.org)  
[www.rsc.org/isacs](http://www.rsc.org/isacs)