

# Programme

**Sunday 3 July 2011**

## Registration

11:00 Sports Hall 1

## Introductions

13:30 Chichester Lecture Theatre

## Oral session

13:45 Chichester Lecture Theatre

**Chair: David Smith, *University of York, UK***

- K01 One-step hierarchical molecular ordering of polymer brush by hot pressing  
13:45 Takuzo Aida<sup>1,2</sup>, Nobuhiko Hosono<sup>1</sup>, Takashi Kajitani<sup>2</sup>, Takanori Fukushima<sup>2</sup>  
<sup>1</sup>The University of Tokyo, Japan, <sup>2</sup>Riken, Wako, Japan
- K02 BF<sub>2</sub>-Tetraarylazadipyrromethene Based *in vivo* Fluorescence Imaging Platforms  
14:15 Donal O'Shea  
*University College Dublin, Ireland*
- K03 Gas-Phase Supramolecular Chemistry  
14:45 Christoph Schalley  
*Freie Universität, Berlin, Germany*
- K04 Dynamic nano-assembly for labeling native protein  
15:15 Itaru Hamachi  
*Kyoto University, Japan*

## Tea/coffee

15:45 Sports Hall 1

## Oral session

16:15 Chichester Lecture Theatre

**Chair: Pavel Anzenbacher, *Bowling Green State University, USA***

- K05 Designing complexity and function within self-assembled chemical systems: new capsules and chemistry inside  
16:15 Jonathan Nitschke  
*University of Cambridge, UK*
- K06 Systems Chemistry: From Recognition to Self-Replication in Dynamic Molecular Networks  
16:45 Sjibren Otto  
*University of Groningen, The Netherlands*
- K07 Construction of complex nanostructures using orthogonal chemical interactions  
17:15 Kay Severin  
*EPFL, Lausanne, Switzerland*
- FP245 Hydrogen-Bond-Directed Supramolecular Modulation of Functional Dyes  
17:45 Shiki Yagai  
*Chiba University, Japan*
- FP57 Dissipative self-assembly using chemical fuels  
17:55 Rienk Elkema, Job Boekhoven, Jan van Esch  
*Delft University of Technology, The Netherlands*

- FP162      Finite Molecular Architectures *via* Metal-Ligand Coordination Towards Fluorescent  
18:05      Sensors for the Detection of Explosives  
Partha Sarathi Mukherjee  
*Indian Institute of Science, Bangalore, India*
- FP192      Controlling the Formation of Circular Helicates  
18:15      Craig Rice  
*University of Huddersfield, UK*
- FP193      Porphyrinic Multirotaxanes: Towards a Molecular Press  
18:25      Cécile Roche<sup>1,2</sup>, Nathan Strutt<sup>3</sup>, Angélique Sour<sup>1</sup>, Jean-Pierre Sauvage<sup>1</sup>, Maxwell  
Crossley<sup>2</sup>  
<sup>1</sup>*Université de Strasbourg, France*, <sup>2</sup>*The University of Sydney, Australia*,  
<sup>3</sup>*Northwestern University, USA*
- FP124      Sensing of biologically and environmentally relevant metal cations using  
18:35      lanthanide-based luminescent displacement assays in aqueous solution  
Oxana Kotova, Steve Comby, Thorfinnur Gunnlaugsson  
*Trinity College Dublin, Ireland*

### **Poster session A with wine reception**

**18:45      Sports Hall 1**

## Monday 4 July 2011

### Oral session

09:00 Chichester Lecture Theatre

Chair: **Michaele Hardie, University of Leeds, UK**

K08 Making the tiniest machines

09:00 David Leigh  
*University of Edinburgh, Edinburgh, UK*

K09 Light on Molecular Machines: Thermodynamic and Kinetic Photocontrol of  
09:30 Molecular Motions in Multicomponent Systems

*Tommaso Avellini, Massimo Baroncini, Monica Semeraro, Serena Silvi,  
Margherita Venturi, Alberto Credi*  
*Universita' di Bologna, Italy*

K10 In Control of Molecular Assembly & Motion

10:00 Ben Feringa  
*University of Groningen, The Netherlands*

O01 Self-assembly of metal-containing shape-persistent macrocycles

10:30 Mark MacLachlan, Peter Frischmann, Samuel Guieu  
*University of British Columbia, Canada*

### Tea/coffee

10:50 Sports Hall 1

### Oral session

11:20 Chichester Lecture Theatre

Chair: **Andrew Wilson, University of Leeds, UK**

K11 Luminescent Functional Supramolecules and Molecular Shuttles

11:20 He Tian  
*East China University of Science & Technology, China*

FP222 From anion- to redox-sensitive gelators - improving our understanding of self-  
11:50 assembled gels

Pall Thordarson  
*The University of New South Wales, Australia*

FP46 Functional coordination cages: switchable guests, interpenetration, and ion  
12:00 sensing

Guido Clever<sup>1</sup>, Mitsuhiko Shionoya<sup>2</sup>, Anna Torras Galan<sup>1</sup>, Martin Pawliczek<sup>1</sup>,  
Wataru Kawamura<sup>2</sup>  
<sup>1</sup>Georg-August-Universitaet Goettingen, Germany, <sup>2</sup>The University of Tokyo,  
Japan

FP109 Responsive "clickates" for chemo- and biosensing in vitro and in vivo.

12:10 Mike Watkinson, Stephen Goldup, Kajally Jobe, Caroline Brennan  
*Queen Mary, University of London, UK*

FP161 Anion- $\pi$  interactions in pentafluorophenyl ammonium and phosphonium salts

12:20 Michael Mueller<sup>1</sup>, Markus Albrecht<sup>1</sup>, Arto Valkonen<sup>2</sup>, Kari Rissanen<sup>2</sup>  
<sup>1</sup>RWTH Aachen University, Germany, <sup>2</sup>University of Jyväskylä, Finland

FP143 Oriented Salts: Dimension-Controlled Charge-by-Charge Assemblies from Planar  
12:30 Receptor-Anion Complexes

Yohei Haketa, Hiromitsu Maeda  
*Ritsumeikan University, Japan*

FP71 Anion-switchable supramolecular gels for controlling pharmaceutical crystal  
12:40 growth  
Jonathan Foster, Jonathan Steed  
*University of Durham, UK*

## Lunch

12:50 Sports Hall 1

## Oral session

14:20 Chichester Lecture Theatre

**Chair: Sally Brooker, *University of Otago, New Zealand***

K12 Anion Recognition Using Synthetic Peptides as Receptors

14:20 Katrina Jolliffe, Stephen Butler, Philip Young  
*The University of Sydney, Australia*

K13 Halogen Bonding: A New Paradigm in Supramolecular Chemistry

14:50 Pierangelo Metrangolo<sup>1,2</sup>, Giuseppe Resnati<sup>1,2</sup>, Tullio Pilati<sup>3</sup>, Giancarlo Terraneo<sup>1,2</sup>, Gabriella Cavallo<sup>2</sup>, Serena Biella<sup>1,2</sup>  
<sup>1</sup>NFMLab-DCMIC, Politecnico di Milano, Italy, <sup>2</sup>CNST-IIT@POLIMI, Italy, <sup>3</sup>ISTM-CNR, Italy

K14 Self-assembled cage receptors for anion recognition and separation

15:20 Radu Custelcean  
*Oak Ridge National Laboratory, USA*

## Tea/coffee

15:50 Sports Hall 1

## Plenary lectures

16:20 Chichester Lecture Theatre

**Chair: Thorri Gunnlaugsson, *Trinity College Dublin, Ireland***

Plen01 WINNER OF THE 2011 BOB HAY LECTURESHIP

16:20 The Power of Many - Hard Facts About Soft Matter  
David Smith  
*University of York, UK*

17:05 Chichester Lecture Theatre

**Chair: Professor Roger Harrison, *Brigham Young University, USA***

Plen02 WINNER OF THE INAUGURAL CRAM LEHN PEDERSEN PRIZE

17:05 Binding and releasing anions with CH hydrogen-bonded receptors  
Amar Flood<sup>1</sup>, Yuran Hua<sup>1</sup>, Kevin McDonald<sup>1</sup>, Semin Lee<sup>1</sup>, Yong-jun Li<sup>2</sup>  
<sup>1</sup>Indiana University, USA, <sup>2</sup>ICCAS, Beijing, China

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## Close of session

17:50

## Tuesday 5 July 2011

### Oral session

**09:00 Chichester Lecture Theatre**

**Chair: Eric Anslyn, *University of Texas at Austin, USA***

- K15 How Aromatic Interactions Control Your Genes: A Molecular View of Biomolecular  
09:00 Recognition  
*Marcey Waters, UNC Chapel Hill, USA*
- K16 Development and Applications of Bioinspired Nanoscale Adhesion Agents -  
09:30 Supramolecular Coupling Using DNA Base-Pair Analogues  
*Steven Zimmerman, Cyrus Anderson, Ying Li, Ellen Briggs*  
*University of Illinois, USA*
- K17 Three-Dimensional DNA Structures with Moving Parts: Loading and Selective  
10:00 Release of Cargo for Biological and Materials Applications.  
*Hanadi Sleiman, McGill University, Canada*
- O02 DNA as a Supramolecular Scaffold for Functional Molecules  
10:30 *Eugen Stulz, Jonathan Burns, Daniel Singleton, Ashley Brewer*  
*University of Southampton, UK*

### Tea/coffee

**10:50 Sports Hall 1**

### Oral session

**11:20 Chichester Lecture Theatre**

**Chair: Zoe Pikramenou, *University of Birmingham, UK***

- K18 Macroscopic Self-Organization through Molecular Recognition  
11:20 *Akira Harada, Ryo Kobayashi, Yoshinori Takashima, Akihito Hashidzume, Hiroyasu*  
*Yamaguchi*  
*Osaka University, Japan*
- O03 Boronic acid based receptors for carbohydrate and anion sensing  
11:50 *Tony James*  
*University of Bath, UK*
- O04 Inhibition of protein-protein interactions using designed molecules  
12:10 *Andrew Wilson, University of Leeds, UK*
- O05 Selective Anion Binding to Hydrophobic Pockets: A Major Facet of the Hofmeister  
12:30 Effect?  
*Bruce Gibb, Haiying Gan, Corinne Gibb*  
*University of New Orleans, USA*

### Lunch

**12:50 Sports Hall 1**

### Social activities

- 14:00** Tours of the Royal Pavilion for those that have booked in advance and the opportunity to explore Brighton town centre.

### Poster session B with ale tasting and "Best of British" buffet

**17:30 Sports Hall 1**

## Wednesday 6 July 2011

### Oral session

**09:00 Chichester Lecture Theatre**

**Chair: Jonathan Sessler, *University of Texas at Austin, USA***

K19 Self-Organizing Sensors : Protein Recognition and Analysis

09:00 *Pavel Anzenbacher*  
*Bowling Green State University, USA*

K20 Intelligent Fluorescent Chemosensors

09:30 *Juyoung Yoon*  
*Ewha Womans University, Republic of Korea*

K21 Glowing rotaxanes: a new paradigm for optical imaging

10:00 *Bradley Smith*  
*University of Notre Dame, USA*

### Tea/coffee

**10:30 Sports Hall 1**

### Oral session

**11:00 Chichester Lecture Theatre**

**Chair: Makoto Fujita, *University of Tokyo, Japan***

K22 The Development and Applications of Differential Sensing Routines

11:00 *Eric Anslyn*  
*University of Texas, Austin, USA*

K23 2011: A small space odyssey with luminescent molecules

11:30 *AP de Silva*  
*Queen's University, Belfast, UK*

K24 Lanthanide coated nanoparticles as luminescent probes in imaging applications

12:00 *Zoe Pikramenou*  
*University of Birmingham, UK*

### Lunch

**12:30 Sports Hall 1**

### Plenary lecture and oral session

**14:00 Chichester Lecture Theatre**

**Chair: David Leigh, *University of Edinburgh, UK***

WINNER OF THE 2010 RSC SUPRAMOLECULAR CHEMISTRY AWARD

Plen03 Molecular Organisation: Working with Molecules on the Nanoscale

14:00 *Neil Champness*  
*University of Nottingham, UK*

K25 Metal organic framework materials with dynamic components: MIMs in MOFs.

14:45 *Stephen Loeb, V. Nicholas Vukotic, Kelong Zhu, Darren Mercer*  
*University of Windsor, Canada*

K26 Exploiting and Controlling Energy Transfer in Lanthanide Containing Arrays

15:15 *Stephen Faulkner*  
*University of Oxford, UK*

## Tea/coffee

15:45 Sports Hall 1

## Oral session

16:15 Chichester Lecture Theatre

**Chair: Lee Cronin, *University of Glasgow, UK***

O06 Self-assembly of light-harvesting antennae based on dendrimers

16:15 *Paola Ceroni, Giacomo Bergamini, Maria Elena Gallina*  
*University of Bologna, Italy*

O07 Supramolecular Polymers Based on Threaded Structure Connections

16:35 *Feihe Huang, Feng Wang, Shengyi Dong, Zibin Zhang, Xuzhou Yan, Shijun Li*  
*Zhejiang University, China*

## Plenary lecture

16:55 Chichester Lecture Theatre

**Chair: Reed Izatt, *Brigham Young University, USA***

Plen04 History of the ISMSC and the Izatt-Christensen Award

16:55 *Reed Izatt*  
*Brigham Young University, USA*

WINNER OF THE 2011 IZATT-CHRISTENSEN AWARD

Plen04 Protein Surface Recognition: A Supramolecular Approach to Controlling  
17:10 Biological Function

*Andrew Hamilton*  
*University of Oxford, UK*

## Conference photograph

17:55 Chichester Lecture Theatre steps

## Conference banquet

19:00 Brighton Dome

The banquet will take place at the Brighton Dome, for those that have booked tickets in advance.

## Thursday 7 July 2011

### Oral session

09:00 Chichester Lecture Theatre

Chair: Eugen Stulz, *University of Southampton, UK*

K27 Programmable non-equilibrium Oxide-Materials for Redox-Solar-Cells

09:00 Lee Cronin  
*University of Glasgow, UK*

K28 Fullerene-containing Nanostructures: Synthesis and Applications

09:30 Jean-Francois Nierengarten  
*CNRS - ECPM - UDS, Strasbourg, France*

O08 Anion transport and anticancer activity relationships of small bioactive molecules

10:00 Daniel Moreno<sup>1</sup>, Borja Diaz de Greñu<sup>1</sup>, Paulina Iglesias Hernández<sup>2</sup>, Tomas Torroba<sup>1</sup>, Anatalia Araujo Javier<sup>2</sup>, Ricardo Pérez-Tomás<sup>2</sup>, Roberto Quesada<sup>1</sup>  
<sup>1</sup>*Universidad de Burgos, Spain*, <sup>2</sup>*Universidad de Barcelona, Spain*

O09 Anion Binding in Water with Use of a new Uranyl-salophen receptor

10:20 Antonella Dalla Cort<sup>1</sup>, Gianpiero Forte<sup>1</sup>, Luca Schiaffino<sup>2</sup>  
<sup>1</sup>*Università La Sapienza, Italy*, <sup>2</sup>*Università degli Studi di Tor Vergata, Italy*

### Tea/coffee

10:40 Sports Hall 1

### Oral session

11:10 Chichester Lecture Theatre

Chair: Craig Rice, *University of Huddersfield, UK*

K29 Functionalized Calixpyrroles: From Recognition and Sensing to Self-assembly

11:10 Jonathan Sessler<sup>1</sup>  
<sup>1</sup>*The University of Texas, Austin, USA*, <sup>2</sup>*Yonsei University, Republic of Korea*

K30 Transmembrane ion transporters made from various natural products

11:40 Jeffery Davis, Soheila Bahmanjah, Ning Zhang, William Harrell  
*University of Maryland, USA*

K31 Molecular and Solid State Self-assembly Based on Weak Supramolecular Interactions

12:10 Kari Rissanen  
*University of Jyväskylä, Finland*

### Lunch

12:40 Sports Hall 1

### Oral session followed by closing remarks

14:00 Chichester Lecture Theatre

Chair: Jim Tucker, *University of Birmingham, UK*

O10 Controlled assembly of functional five fold symmetry molecular capsules

14:00 Colin Raston<sup>1</sup>, Adam Martin<sup>1</sup>, Ramiz Boulos<sup>1</sup>, Lee Hubble<sup>2,1</sup>, Karel Hartlieb<sup>1</sup>  
<sup>1</sup>*The University of Western Australia, Australia*, <sup>2</sup>*CSIRO, Australia*

O11 Further developments in the use of fused [n]polynorbornane receptors for anions

14:20 Fred Pfeffer  
*Deakin University, Australia*

K32 Iron and cobalt spin crossover complexes and [M<sub>3</sub>Ln] macrocyclic single-molecule magnets

14:40 Sally Brooker

*University of Otago, New Zealand*

K33 Emergent Self-assembly of Molecular Spheres

15:10 Makoto Fujita

*University of Tokyo, Japan*

**Meeting ends**

**16:00**

