

Monday 2 July

9.00	Bloomsbury Lecture Theatre Plenary lecture: Paul Alivisatos, UC Berkeley, USA Session Chair: Paul O'Brien, <i>University of Manchester, UK</i>			
	Cruciform Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Chemistry Lecture Theatre
	Session: Materials at the Bio-Ceramic interface	Session: Bio-Nanotechnology	Session: Advanced Structural Probes Session Chair: Richard Catlow, <i>UCL</i>	Session: Materials Synthesis of Complex Structures (I)
10.10	Keynote: Jonathan Knowles <i>UCL Eastman Dental Institute, UK</i>	Keynote: Christof Niemeyer <i>Universität Dortmund, Germany</i>	Carbon Nanotube Atomic Force Microscopy Probes for Advanced Imaging Applications Julie MacPherson <i>University of Warwick, UK</i> Des McMorrow <i>University College London, UK</i>	Keynote: Hierarchical structure and mechanical function of biological materials Peter Fratzl <i>Max Planck Institute of Colloids and Interfaces, Germany</i>
10.50	TBA	Analytical transmission electron microscopy of mineralised tissues <i>V Jantou, Imperial College London</i>	High-throughput structure/function screening of materials with multiple spectroscopic techniques <i>M Tromp, University of Southampton, UK</i>	The diversity and assembly of photonic nanostructures in nature <i>Andrew Parker, Natural History Museum, UK</i>
11.10	Refreshments			
				Session Chair: Andrew Parker, <i>Natural History Museum, UK</i>
11.30	Inorganic-polymer composite particles for staged vaccine delivery via nasal inhalation <i>Gareth M Forde, Bioengineering Laboratory (BEL), Monash University, Australia</i>	Nanoengineering of particle surfaces in suspension via tri-phasic reverse emulsion for effective DNA hybridisation <i>Tapas Sen, University of Kent at Canterbury, UK</i>	Paul Barnes <i>Birkbeck College London, UK</i>	The use of Raman spectroscopy and X-ray diffraction for analysing nanocomposites and biomaterials <i>S J Eichhorn, University of Manchester, UK</i>
11.50	MAS-NMR studies of glass polyalkenoate cements <i>Norhazlin Zainuddin, Imperial College, UK</i>	Revealing intramolecular gene product modification by AFM of single molecules <i>Andrew N Round, University of Bristol, UK</i>	Analytical chemistry on the atomic scale David McComb <i>Imperial College London, UK</i>	Spider silk as an archetypal protein elastomer <i>David Porter, QinetiQ Ltd, UK</i>
12.10	Does magnesium substitute for calcium in the apatite lattice? <i>Sally Watts, Imperial College, UK</i>	Highly branched poly(N-isopropyl acrylamide): synthesis and applications in the life sciences <i>Stephen Rimmer, University of Sheffield</i>	Energy-dependent small-angle x-ray scattering - Probing the gelation and calcination of zirconia-silica gels with chemical selectivity Rudolf Winter, <i>University of Wales Aberystwyth, UK</i>	Modelling calcite crystallization on organic monolayer <i>Dorothy Duffy, University College London, UK</i>
12.30	Immobilization of hexa-arginine tagged esterase onto multiwalled carbon nanotubes via electrostatic attraction <i>A Laromaine, Imperial College London, UK</i>	Novel methods for bulk preparation of anisotropic colloids and dipolar Janus microparticles <i>Vesselin N Paunov, University of Hull, UK</i>	Ab initio computation of low-temperature phase diagrams <i>J C Schön, Max-Planck-Institute, Germany</i>	Apatite-gelatine- and calcite-gelatine-nanocomposites: development of bio-related hierarchical structures <i>Rüdiger Kniep, Max-Planck-Institute, Germany</i>
12.50	Lunch and posters			

	Cruciform Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Chemistry Lecture Theatre
	Session: Materials at the Bio-Ceramic Interface	Session: Bio-Nanotechnology	Session: Synthesis of Framework Materials by Design	Session: Solid State I Session Chair: Paul McMillan, UCL, UK
14.20	Keynote: Serena Best <i>University of Cambridge, UK</i>	Keynote: Darrin Pochan <i>University of Delaware, USA</i>	Keynote: Molecular tectonics: from simple molecules to complex molecular networks Wais Hosseini, <i>Universite Louis Pasteur, France</i>	Keynote: Reactivity of simple molecules under pressure: fundamentals and potential applications Roberto Bini <i>University of Florence, Italy</i>
15.00	TheraGlass: a vehicle for delivery of bioactive materials Xiaobin Zhao, <i>NovaThera Ltd, UK</i>	Rapid zeptomolar protease detection using peptide-functionalised gold nanoparticles A Laromaine, <i>Imperial College London, UK</i>	Open-framework molecular materials showing porosity and magnetic ordering Jaume Veciana, <i>Institut de Ciència Materials de Barcelona (CSIC), Spain</i>	X-ray scattering studies of levitated refractory oxide liquids Martin Wilding, <i>University of Wales, UK</i>
15.20	TBA	Understanding the molecular structure of Fmoc-peptide gels A M Smith <i>University of Manchester, UK</i>	Zeolitic organic-inorganic hybrids - a new class of porous metal phosphonate materials Ian J Shannon <i>University of Birmingham, UK</i>	The ultra-rapid microwave synthesis of transition metal carbides S Vallance, <i>University of Nottingham, UK</i>
15.40	Characterisation of the self-assembly of peptide-functionalised gold nanoparticles L Koh, <i>Imperial College London, UK</i>	Towards a molecular level understanding of peptide-mineral interactions: a computational and experimental study Siddharth V Patwardhan, <i>Nottingham Trent University, UK</i>	Solvent-free synthesis, and some 'design' aspects of metal-organic frameworks Stuart L James, <i>Queen's University Belfast, UK</i>	A high pressure study of gallosilicate natrolite G L Little, <i>University of Birmingham, UK</i>
16.00	Refreshments			
				Session Chair: Matthias Epple <i>Universität Duisburg-Essen, Germany</i>
16.30	Doped iron-oxide nanoparticles for tumour therapy via magnetic field hyperthermia Philip Drake, <i>Industrial Technology Research Institute, Taiwan</i>	Oxidation-responsive nanocarriers and inflammation targeting N Tirelli, <i>University of Manchester, UK</i>	Guanidine based hydrogen bonded networks Kari Rissanen, <i>University of Jyväskylä, Finland</i>	Application of TEDDI technique to 'image' the formation of crystalline aluminophosphate materials under hydrothermal conditions Simon D M Jacques, <i>University College London, UK</i>
16.50	The activity of diatom inspired synthetic polyamines in silicification David Belton, <i>Nottingham Trent University, UK</i>	Molecularly imprinted multi-layer core-shell nanoparticles via surface grafting Andrew G Mayes, <i>University of East Anglia, UK</i>	Ionothermal synthesis - designing new types of nanoporous framework material by changing the synthesis medium Russell E Morris, <i>University of St Andrews, UK</i>	Theoretical insights into high-k dielectrics on silicon J L Gavartin, <i>Accelrys Ltd, UK</i>
17.10	Does architecture of an additive have an important role to play in the precipitation and dissolution of silica? Siddharth V Patwardhan <i>Nottingham Trent University, UK</i>	A real-time study of the reversible supramolecular assembly of functionalized nanoparticles onto and from molecular printboards Xing Yi Ling, <i>University of Twente, The Netherlands</i>	Engineering functional materials by halogen bonding Pierangelo Metrangolo, <i>Politecnico di Milano, Italy</i>	Ordered TiOx nanostructures A C Papageorgiou, <i>University College London, UK</i>
17.30	A MAS-NMR and Rietveld study of mixed calcium/strontium apatites Adam Calver, <i>Imperial College London, UK</i>	Plant viral building blocks for the construction of functional arrays Nicole F Steinmetz, <i>John Innes Centre, UK</i>	A family of nanoporous materials based on an amino acid backbone Jean-Noël Rebilly, <i>University of Liverpool, UK</i>	Fluorine insertion reactions of brownmillerite phases E C Sullivan, <i>University of Birmingham, UK</i>
17.50	Close of sessions			

Tuesday 3 July

9.00	Plenary lecture: 'The Chemical Imagination at Work in Very Tight Places' Roald Hoffmann, Cornell University, USA Session Chair: Peter Edwards, <i>University of Oxford, UK</i> (Bloomsbury Lecture Theatre)			
	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre
	Session: Electronic and Opto-Electronic Polymers Session Chair: Joachim Steinke	Session: From Nanotubes to Nanowires	Session: Materials for Sustainable Energy: Fuel Cells, Hydrogen Generation and Storage (I) Session Chair: Patric Jannasch, <i>Lund University, Sweden</i>	Session: Solid State II
10.00	Keynote: Putting organic polymers into molecular electronics Klaus Müllen, <i>Max-Planck Institute for Polymer Research, Germany</i>	Keynote: Alan Windle University of Cambridge, UK	Keynote: James McGrath Virginia Polytechnic Institute and State University, USA	Keynote: Richard Catlow University College London, UK
10.40	Preparation and properties of 2,7-linked-3,6-protected carbazole main chain polymers and copolymers Ahmed Iraqi, <i>University of Sheffield, UK</i>	New mechanical properties of carbon nanotube fibers Pierre Miaudet, <i>Centre de Recherche Paul Pascal, France</i>	Mesoporous poly (benzimidazole) J Weber, <i>Max-Planck-Institute of Colloids and Interfaces, Germany</i>	Room temperature ferromagnetism in Ge_{1-x}Mn_x nanowires Jaideep S Kulkarni, <i>University College Cork, Ireland</i>
11.00	Refreshments			
			Session Chair: Stuart Rowan	
11.30	Electronic and optoelectronic polymers Martin Heeney, <i>Merck Chemicals, UK</i>	Synthesis and characterisation of highly ordered cobalt-magnetite nanocable arrays Justin D Holmes, <i>University College Cork, Ireland</i>	"Microblock" ionomer-membranes: enhancement of membrane performance in fuel cells through control of ionomer sequence-distribution Howard M Colquhoun, <i>University of Reading, UK</i>	Manganese perovskite nanoparticles as potential new tools for cancer therapy by magnetic hyperthermia Graziella Goglio, <i>Université Bordeaux 1, France</i>
11.50	Exciton coupling in highly ordered oligo- and polythiophenes Johannes Gierschner, <i>University of Mons-Hainaut, Belgium</i>	Influence of silver ions on the growth mode of platinum on gold nanorods Marek Grzelczak, <i>Universidade de Vigo, Spain</i>	Development of innovative proton conducting materials for Polymer Electrolyte Membrane and Solid Oxide Fuel Cells Silvia Licoccia, <i>University of Rome Tor Vergata, Italy</i>	Sol-gel synthesis of indium oxide: formation of high pressure phase (corundum-type In₂O₃) under ambient conditions and ageing-induced mesocrystallisation Alexander Gurlo, <i>Darmstadt University of Technology, Germany</i>
12.10	Multi-layer gravure printing of organic TFTs J H G Steinke, <i>Imperial College London, UK</i>	Evolution of ferberite nanostructures: from 1-D nanowires to 3-D nanoflowers Yanqiu Zhu, <i>University of Nottingham, UK</i>	High throughput synthesis and screening of hydrogen storage and fuel cell catalyst materials Brian E Hayden, <i>University of Southampton, UK</i>	Ordering of the Bi-O' network in Bi³⁺+ Pyrochlores Andrew L Hector, <i>University of Southampton, UK</i>
12.30	Systematic investigation into the factors affecting the emission of electrophosphorescent materials Hugo Bronstein, <i>Imperial College London, UK</i>	Liquid crystal - nanotube dispersions Ingo Dierking, <i>University of Manchester, UK</i>	Proton-conducting membranes based on polysulfones carrying sulfonated and phosphonated aromatic side chains Patric Jannasch, <i>Lund University, Sweden</i>	Tunable shape-memory materials synthesised via entropy-driven ring-opening metathesis polymerisation of bile acid-based macrocycles Julien E Gautrot, <i>Université de Montréal, Canada</i>
12.50	Lunch			

	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre
	Session: Electronic and Opto-Electronic Polymers Session Chair: Saif Haque, <i>Imperial College London, UK</i>	Session: From Nanotubes to Nanowires	Session: Materials Synthesis of Complex Structures (II) Session chair: Rüdiger Kniep <i>Max-Planck-Institute for Chemical Physics of Solids, Germany</i>	Solid State III
14.20	Keynote: The use of heavy metal complexes in organic LEDs and solar cells Marc Thompson, <i>University of Southern California, USA</i>	Keynote: Siegmur Roth <i>Max Planck Institute for Solid State Research, Germany</i>	Keynote: Bionanotechnology approach in material synthesis and device fabrication by applying peptide/protein assemblies Hiroshi Matsui, <i>Hunter College - City University of New York, USA</i>	Keynote: Robert Cava <i>Princeton University, USA</i>
15.00	Spectroelectrochemical studies on novel pi-electron materials based on ter-thiophenes fused with TTFs or Fluorenes Jan E Lohr, <i>University of Strathclyde, UK</i>	Assembly of nanotube-nanoparticle networks Andrei N Khlobystov, <i>University of Nottingham, UK</i>	Surface modification of calcium phosphate nanoparticles and their application for gene transfer Matthias Epple, <i>Universität Duisburg-Essen, Germany</i>	Soft-lithographic patterning of functional oxides Sajid U Khan, <i>University of Twente, The Netherlands</i>
15.20	Functionalization of carbon nanotubes and carbon nanohorns for electronic applications S Campidelli, <i>Università di Trieste, Italy</i>	Covalent functionalization of single walled carbon nanotubes (SWCNTs) and fullerenes via a zwitterion approach Wei Zhang, <i>Massachusetts Institute of Technology, USA</i>	Ultrasonic nebulizer assisted routes to formation of ceramic structures D Walsh, <i>University of Bristol, UK</i>	Point defects in ZnO Alexey A Sokol <i>The Royal Institution of Great Britain, UK</i>
15.40	Tetrathiafulvalene derivatives as building blocks of electronic frameworks Concepció Rovira, <i>Institut de Ciència de Materials de Barcelona (CSIC), Spain</i>	Chemically modified single-walled carbon nanotubes: synthesis, properties and application in polymer composites Karl S Coleman, <i>University of Durham, UK</i>	Nanoengineered multifunctional polymer-based capsules: microreactors for (bio)-chemical reactions, sensing and delivery systems Gleb B Sukhorukov, <i>Queen Mary University of London, UK</i>	The family of Si-B-N-C ceramics: paving the way to industrial scale production Martin Jansen and Marcus Weinmann, <i>Max-Planck-Institute, Germany</i>
16.00	Refreshments			
16.30	Waveguiding, microcavity effects and optically pumped lasing in single polymer nanowires Gareth Redmond, <i>Nanotechnology Group, UK</i>	Synthesis of one-dimensional titanium dioxide nanostructures Milo Shaffer, <i>Imperial College London, UK</i>	Bio-inspired polymer-inorganic hybrid materials Ullrich Steiner, <i>University of Cambridge, UK</i>	Bismuth based perovskites synthesized at ambient pressure: searching for multiferroics John B Claridge, <i>University of Liverpool, UK</i>
16.50	Synthesis of novel silole copolymers as electroactive materials Sven Horst, <i>Imperial College London, UK</i>	Tantalum chalcogenide nanowires; growth, structure and properties Charlie Dunnill, <i>University of Glasgow, UK</i>	Breaking the mould: changing the face of crystal growth N B J Hetherington, <i>University of Bristol, UK</i>	Complex glasses as precursors for nanocomposites William T Petuskey, <i>Arizona State University, USA</i>
17.10	Synthesis of new iridium complexes bearing sulfonyl and fluorine substituents and effect of functionalization on their photophysical properties Roberta Ragni, <i>Università degli Studi di Bari, Italy</i>	Layered chalcogenide nanoparticles and nanotubes W Tremel, <i>Johannes Gutenberg-Universität Mainz, Germany</i>	Confinement effects in biosilicification mimetic studies Thibaud Coradin, <i>Chimie de la Matière Condensée de Paris, France</i>	Anion ordering and thermoelectric properties in chalcogen-containing skutterudites Paz Vaqueiro, <i>Heriot-Watt University, UK</i>
17.30	Electron transfer in nanostructured molecular solar cells Saif A Haque, <i>Imperial College London, UK</i>	The synthesis and characterisation of ferromagnetic CaMn₂O₄ nanowires D C Arnold, <i>University College Cork, Ireland</i>	Self-Assembly and mineralization of artificial spicules of marine sponges W Tremel, <i>Johannes Gutenberg-Universität Mainz, Germany</i>	New thermoelectric materials: the (Bi₂)_m(Bi₂Te₃)_n homologous series and Mn doped BiTe (m:n = 1:2) J W G Bos, <i>University of Edinburgh, UK</i>
17.50	Close of sessions			

Wednesday 4 July

9.00	Bloomsbury Lecture Theatre Plenary lecture: Heino Finkelmann, Albert-Ludwigs-Universität Freiburg, Germany Session Chair: Duncan Bruce, <i>University of York, UK</i>			
	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre
	Session: Nanoparticles Session Chair: Mark Green	Session: Catalysis and Green Materials Session Chair: John Evans <i>University of Durham, UK</i>	Session: Photoactive Thin Films and Particles Session Chair: Tony Jones <i>University of Liverpool, UK</i>	Session: Colloidal Crystal Materials Session Chair: David McComb <i>Imperial College London, UK</i>
10.00	Keynote: Tuned light emission from nanoparticles of cadmium chalcogenides or of indium nitride Chris Murray <i>IBM Corporation, USA</i>	Keynote: John Evans <i>University of Southampton, UK</i>	Keynote: Tuned light emission from nanoparticles of cadmium chalcogenides or of indium nitride David Cole-Hamilton, <i>University of St Andrews, UK</i>	Keynote: Enhancing the optical response of colloidal crystals through materials chemistry Paul V Braun <i>University of Illinois, USA</i>
10.40	Synthesis and characterisation of lead chalcogenide nanoparticles Deborah Berhanu, <i>University of Manchester, UK</i>	Microfabricated reactor based in situ cells for studies of catalysts by X-ray absorption and Raman spectroscopy under reaction conditions Asterios Gavriilidis, <i>University College London, UK</i>	Tantalum nitride nanomaterials James Tabernor, <i>University of Manchester, UK</i>	Design of self-assembled metal oxide micelles for encapsulation of bacteria in bio-control applications Vadim G Kessler <i>SLU, Sweden</i>
11.00	Refreshments			
			Session Chair: Tony Jones, <i>University of Liverpool, UK</i>	
11.30	Characterisation of group IV semiconductor nanoparticles synthesised via a Zintl phase route in organic solvents Andrew J Pugsley <i>The Royal Institution of Great Britain, UK</i>	Mild synthetic routes to complex metal oxides with control of crystal chemistry and crystal form Richard I Walton, <i>University of Warwick, UK</i>	Exciting MgO nanocrystallites K P McKenna, <i>London Centre for Nanotechnology, UK</i>	Nanostructured organic thin films prepared by colloidal crystal templating M A McLachlan, <i>Imperial College London, UK</i>
11.50	Probing Au nanoparticles with EPR spectroscopy Victor Chechik, <i>University of York, UK</i>	The adsorption of CO with Pd clusters on CeO_{2-x} ultrathin films Q Chen, <i>University College London, UK</i>	Growth and characterisation of CdZnS window layers by metal organic chemical vapour deposition (MOCVD) for CdTe solar cells E W Jones, <i>University of Wales, Bangor, UK</i>	Mesoporous graphitic carbon nitride: a versatile material for catalysis and the generation of nanostructured metal nitrides Arne Thomas, <i>Max-Planck-Institute of Colloids and Interfaces, Germany</i>
12.10	Coinage nanoparticle in a metal oxide thin film prepared by aerosol assisted chemical vapor deposition Paolo Melgari, <i>University College London, UK</i>	Direct synthesis of hydrogen peroxide from H₂ and O₂ using supported Au-Pd catalysts Adrian Thomas, <i>Cardiff University, UK</i>	Single source routes to deposition of transition metal selenide and phosphide thin films by MOCVD Arunkumar Panneerselvam, <i>University of Manchester, UK</i>	Ordered nanoporous metal oxides: synthesis and application as gas sensors Michael Tiemann <i>Justus Liebig University, Germany</i>
12.30	Evolutionary algorithms for small sized inorganic nanoparticles Scott M Woodley <i>The Royal Institution of Great Britain, UK</i>	Towards nitrogen analogues of Mars-van Krevelen processes? J S J Hargreaves <i>University of Glasgow, UK</i>	Microwave-assisted synthesis in ionic liquids: a novel approach to nanoscale functional materials C Feldmann <i>University of Karlsruhe, Germany</i>	Directing colloidal self-assembly N Thomson <i>Imperial College London, UK</i>

12.50	Lunch and posters			
	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre
	Session: Nanoparticles Session Chair: John de Mello <i>Imperial College London, UK</i>	Session: Catalysis and Green Materials Session Chair: Gopinathan Sankar <i>The Royal Institution of Great Britain</i>	Session: Photoactive Thin Films and Particles Session Chair: Stuart Irvine, <i>University of Wales, Bangor, UK</i>	Session: Hierarchical Porous Materials Session Chair: Justin Holmes, <i>University College Cork, Ireland</i>
14.20	Keynote: Stephen Mann <i>University of Bristol, UK</i>	Keynote: Palladium, platinum, and gold nanoparticles stabilized by organic polymers Shu Kobayashi, <i>University of Toyko, Japan</i>	Keynote: Martyn Pemble <i>University College Cork, Ireland</i>	Keynote: Hierarchically porous inorganics: template free routes to porous functional materials Ram Seshadri, <i>UC Santa Barbara, USA</i>
15.00	From polyoxometalate-based building blocks to functional nanoclusters and frameworks Lee Cronin, <i>University of Glasgow, UK</i>	New insights into the enantioselectivity of trans-ruthenium(II) (diphosphine)(diamine) catalysed asymmetric hydrogenation of ketones. A computational study Devis Di Tommaso, <i>The Royal Institution of Great Britain, UK</i>	Highly efficient luminescent materials and LED-phosphors made out of nitridosilicates and oxonitridosilicates W Schnick, <i>University of Munich, Germany</i>	Functionalised metal oxoclusters as nanosized building blocks for the development of inorganic-organic hybrid materials Silvia Gross, <i>University of Padova, Italy</i>
15.20	Design of polymeric stabilizers for size-controlled synthesis of monodisperse gold nanoparticles in water Zhenxin Wang, <i>Chinese Academy of Sciences, China</i>	Structural selectivity by molecular interaction in microporous aluminophosphates synthesis R Catlow, <i>University College London, UK</i>	Nano-porous crystal 12CaO-7Al₂O₃: a playground for studies of ultraviolet optical absorption of negative interstitial species Peter V Sushko, <i>University College London, UK</i>	Tailoring porous silica particle and pore size using sol-gel processing techniques and post-synthesis treatments D A Keane, <i>University College Cork, Ireland</i>
15.40	Crystalline evolution of TiO₂ from aqueous solutions with soluble polymers Yanfeng Gao, <i>Musashi Institute of Technology, Japan</i>	Organic polymers for hydrogen storage: design, synthesis and simulation Andrew Cooper, <i>University of Liverpool, UK</i>	Colloidal crystal templated metallic films: improvement and control S Mahajan, <i>University of Southampton, UK</i>	Ultra-thin Silicalite-1 films as model catalysts A M Doyle <i>Manchester Metropolitan University, UK</i>
16.00	Refreshments			
		Session Chair: Russell Morris <i>University of St Andrews, UK</i>	Session Chair: Stuart Irvine	
16.30	Hybrid inorganic/organic TiO₂ nanoparticles synthesis by chemical design Stéphane Daniele, <i>Université Claude Bernard, France</i>	Formation of heteroatom active sites in zeolites by hydrolysis and inversion Judy To, <i>The Royal Institution of Great Britain, UK</i>	CVD of gallium and indium oxide films using donor-functionalised alkoxides Claire J Carmalt, <i>University College London, UK</i>	Functional nano-materials and living systems Luisa De Cola <i>Westfälische Wilhelms-Universität, Germany</i>
16.50	Simulation of the pre-nucleation stage of ZnS formation from aqueous solution Said Hamad, <i>The Royal Institution of Great Britain, UK</i>	The highly flexible nanoporous metalocarboxylates MIL-88: a new class of selective adsorbants? Christian Serre <i>Université de Versailles St-Quentin en Yvelines, France</i>	Supercritical fluid processing porous crystalline titania films for high-efficiency dye-sensitized solar cells Kaixue Wang, <i>University College Cork, Ireland</i>	Ordered mesoporous silicas inside bioactive ceramic scaffolds for local drug release B Onida, <i>Politecnico di Torino, Italy</i>
17.10	Dendrimers for an easy preparation of metal nanoparticles with controllable size Giacomo Bergamini, <i>Università di Bologna, Italy</i>	Nature of active cobalt sites in cobalt substituted aluminophosphates catalysts by in situ combined UV-VIS/XAFS/XRD technique Gopinathan Sankar, <i>The Royal Institution of Great Britain, UK</i>	Terpyridine Ru(II) complexes as sensitizers in nanocrystalline TiO₂ based solar cell S Balasubramanian <i>University of Madras, India</i>	Growth of conductive nanowire arrays within aligned nano-channel substrates Nikolay Petkov <i>University College Cork, Ireland</i>
17.30	Properties of a new metallopolymer:nanoparticle nanocomposite material Jennifer L Brennan, <i>Dublin City University, Ireland</i>	Starbons[®]: versatile mesoporous carbonaceous materials for catalysis K R Luque <i>University of York, UK</i>	Photoactive titania and nanoparticulate silver-titania composite thin films as potent antimicrobial surfaces Kristopher Page, <i>University College London, UK</i>	Polysiloxanes incorporating polyhedral silsesquioxane nanoparticles Mogon Patel, <i>Atomic Weapons Establishment, UK</i>
17.50	Close of sessions			

Thursday 5 July

9.00	Bloomsbury Lecture Theatre Plenary lecture: George M Whitesides, Harvard University, USA Session Chair: Richard Templar, Imperial College London, UK			
	Chemistry Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre
	Session: Materials for Sustainable Energy: Fuel Cells, Hydrogen Generation and Storage (II) Session Chair: Peter Edwards	Session: Nanostructured Polymers Session Chair: Leonard Interrante, Rensselaer Polytechnic Institute, USA	Session: Functional Liquid Crystals Session Chair: Isabel Saez, University of York, UK,	Session: Hydrogels and Peptide Self-Assembly
10.00	Keynote: Hydrogen storage materials: potentials and limitations Andreas Züttel <i>Universitat Fribourg, Switzerland</i>	Keynote: Ian Hamley <i>University of Reading, UK</i>	Keynote: Stuart Rowan <i>Case Western Reserve University, USA</i>	Keynote: Jörg Tiller <i>Albert-Ludwigs Universität Freiburg, Germany</i>
10.40	Electronic structure and stability of lithium aluminium and lithium nitrogen hydrides for hydrogen storage applications Y Song, Harbin Institute of Technology at Weihai, China	Integration of top-down and bottom-up methods: generating templates for nanowire devices T G Fitzgerald, <i>University College Cork, Ireland</i>	Ionic self-assembly for the production of nanostructured materials with addressable function Charl F J Faul, <i>University of Bristol, UK</i>	One dimensional self-assembly of β-sheet peptides at surfaces Conor Whitehouse, <i>University of Leeds, UK</i>
11.00	Refreshments			
	Session Chair: Howard Colquhoun, <i>University of Reading, UK</i>	Session Chair: Wayne Hayes, <i>University of Reading, UK</i>	Session Chair: Andrew Cammidge <i>University of East Anglia, UK</i>	
11.30	Gas sorption in porous metalocarboxylates Christian Serre, Université de Versailles St Quentin en Yvelines, France	Hybrid block copolymer assemblies and nanoparticle co-assemblies Ulrich Wiesner, <i>Cornell University, USA</i>	Complex soft matter structures formed by self-organization of programmed low molecular weight polyphilic molecules C Tschierske, Martin-Luther-University Halle-Wittenberg, Germany	Water-organising properties of insect antifreeze proteins from atomistic simulation David R Nutt, <i>University of Heidelberg, Germany</i>
11.50	The grand challenge of hydrogen storage Peter P Edwards, <i>University of Oxford, UK</i>	Controlled pattern formation in polymer-inorganic hybrid materials Ullrich Steiner, <i>University of Cambridge, UK</i>	Formation of periodic stripe patterns in nematic liquid crystals doped with functionalized gold nanoparticles T Hegmann, <i>University of Manitoba, Canada</i>	Behaviour of hydrogel films studied using embedded holograms Andrew G Mayes, <i>University of East Anglia, UK</i>
12.10	Towards polymer-based hydrogen storage materials Neil B McKeown, <i>Cardiff University, UK</i>	Freestanding nanowire arrays from soft-etch block copolymer templates Edward J W Crossland, <i>University of Cambridge, UK</i>	Supramolecular electronics by self-assembly of π-conjugated oligomers using biomolecules as a template A P H J Schenning, <i>Eindhoven University of Technology, The Netherlands</i>	Surface modification of biobased substrates by controlled polymerization Eva Malmström, <i>Royal Institute of Technology, Sweden</i>
12.30	High H₂ adsorption by co-ordination framework materials Peter Hubberstey, <i>University of Nottingham, UK</i>	Inorganic-organic hybrid polymers from metal oxide clusters as nanosized building blocks U Schubert, <i>Vienna University of Technology, Austria</i>	[60]Fullerene: a versatile building-block for the synthesis of liquid-crystalline functional dendrimers Robert Deschenaux, <i>Université de Neuchâtel, Switzerland</i>	β-lactoglobulin fibres under capillary flow Valeria Castelletto, <i>University of Reading, UK</i>

12.50	Lunch and posters			
	Chemistry Lecture Theatre	Cruciform Lecture Theatre	Chemistry Lecture Theatre	Cruciform Lecture Theatre
	Session: Materials for Sustainable Energy: Battery Materials	Session: Nanostructured Polymers Session Chair: Charlotte Williams, <i>Imperial College London, UK</i>	Session: Functional Liquid Crystals Session Chair: Isabel Saez, <i>University of York, UK</i>	Session: Hydrogels and Peptide Self-Assembly
14.20	Keynote: Jean-Marie Tarascon <i>Université de Picardie Jules Verne, France</i>	Keynote: Thomas Russell <i>University of Massachusetts, USA</i>	Keynote: Organic nanostructures from self-assembly of rod amphiphiles Myongsoo Lee <i>Yonsei University, South Korea</i>	Keynote: Molly Shoichet <i>University of Toronto, Canada</i>
15.00	Single source precursors for the chemical vapour deposition of ME₂ (M = Ti, Zr, Hf; E = S, Se) Stuart D Reid, <i>University of Southampton, UK</i>	Graft-copolymers of a cross-linkable, cyclolinear, polycarbosilane with poly(methyl methacrylate): precursors to ultralow-k films and nanoporous ceramics Leonard V Interrante, <i>Rensselaer Polytechnic Institute, USA</i>	Star-shaped mesogens containing chromophores: synthesis and properties of functional liquid crystals M Lehmann, <i>Chemnitz University of Technology, Germany</i>	Bio-functionalized conjugated oligomers and polymers for advanced enantioselective sensing Gianluca M Farinola, <i>Università degli Studi di Bari, Italy</i>
15.20	Mesoporous materials as positive electrodes for Li-ion batteries Peter G Bruce, <i>University of St Andrews, UK</i>	Self-assembling "pseudo-polymers" W Hayes, <i>University of Reading, UK</i>	Incorporating functional units into the columnar mesophases Andrew N Cammidge, <i>University of East Anglia, UK</i>	Thermo-reversible PNIPAAm - peptide bio-conjugate hydrogels F Stoica, <i>University of Manchester, UK</i>
15.40	Ion conducting solid electrolytes based on nanostructured polymers Trang Phan, <i>Université d' Aix-Marseille 1, France</i>	Thermoresponsive "particle pumps": controlled release of organic nanoparticles from macroporous polymers Haifei Zhang, <i>University of Liverpool, UK</i>	Cellulose fibers functionalized with liquid crystalline polymers prepared by ATRP Eva Malmström, <i>Royal Institute of Technology, Sweden</i>	Oligomeric precursors to amphiphilic networks for use in tissue engineering J Collier, <i>University of Sheffield, UK</i>
16.00	Refreshments			
		Session Chair: Ian Hamley, <i>University of Reading, UK</i>	Session Chair: Robert Deschenaux, <i>Université de Neuchâtel, Switzerland</i>	
16.30	Varying the carrier concentration in lithium conducting garnets Michael P O'Callaghan, <i>University of Nottingham, UK</i>	Functionalised polymers by surface modification M G Moloney, <i>University of Oxford, UK</i>	Anisotropic nanoparticles in anisotropic fluids: carbon nanotube-liquid crystal composites Jan P F Lagerwall, <i>Universität Stuttgart, Germany</i>	Synthesis of novel amphiphilic pseudo-peptides and their self-assembling within supramolecular stimuli-sensitive hydrogels Andreea Pasc-Banu, <i>Henri Poincaré University Nancy 1, France</i>
16.50	Supercapacitors based on partial pyrolysis of polyacrylonitrile F J Davis, <i>University of Reading, UK</i>	Inorganic-organic hybrid materials as "composite precursors" for the development of homogeneous nanostructured mixed oxides Silvia Gross, <i>University of Padova, Italy</i>	Frustration in a non-chiral ordered fluid Verena Görtz, <i>University of York, UK</i>	Responsive microgels for restoring the mechanical properties of degenerated intervertebral discs Brian R Saunders, <i>University of Manchester, UK</i>
17.10	Ions: the neglected carriers in organic electronics George G Malliaras, <i>Cornell University, USA</i>	Synthesis of new electroactive polymers for light emitting devices Charlotte K Williams, <i>Imperial College London, UK</i>	Chirality transfer from an optically active mesogenic oligomer to macroscopic order in the liquid crystalline phase Atsushi Yoshizawa, <i>Hirosaki University, Japan</i>	Peptide-based enzyme-responsive polymer hydrogel particles Rein V Uljin, <i>University of Manchester, UK</i>
17.30	Substituted pyridine ligands for use in solar cell dyes Lucy P Moorcraft, <i>University of Edinburgh, UK</i>	Charge transfer interaction can influence the self-assembly of fullerene/copolymer mixtures Ari Laiho, <i>Helsinki University of Technology, Finland</i>	TBA	The self-assembly of 'surfactant-like' peptides Dave J Adams, <i>Unilever Corporate Research, UK</i>
17.50	Close of conference			