

MONDAY 12 JULY 2010 - ORAL SESSIONS

Clyde Auditorium

Plenary: Han Meijer (DSM Award Winner)

10:15 - 11:15 PLENARY PLEN_01 **Mechanical Performance of Polymers**
Han Meijer, TU/e, Eindhoven, Netherlands

Clyde Auditorium

Plenary: Sebastian Conran

PLEN_02 **Deconstructing Value**
Sebastian Conran, Sebastian Conran Associates, London, United Kingdom

Room: Forth

Parallel 1: A1 Polymers for Tissue Engineering and Regenerative Medicine

Session Chair: Neil Cameron, Durham University, UK

14:15 KEYNOTE A1_O01 **New Materials based Strategies for Regenerative Medicine**
Molly Stevens, Imperial College London, London, United Kingdom

15:00 KEYNOTE A1_O02 **Defined Polymer Matrices for Guided Cell Growth and Differentiation in Regenerative Medicine**
Molly Shoichet, University of Toronto, Toronto, Ontario, Canada

Room: Alsh 1

Parallel 2: H26 Young Polymer Scientists

Session Chair: Eva Harth, Vanderbilt University, USA

14:30 INVITED H26_O01 **Thermoresponsive polymer-protein conjugates prepared by grafting-to and grafting-from via RAFT polymerization**
Brent Sumerlin, Southern Methodist University, Dallas, Texas, United States

14:55 INVITED H26_O02 **Protein Cages as Macromolecular Scaffolds**
Jeroen Cornelissen, Laboratory for Biomolecular Nanotechnology,
MESA+ Institute, University of Twente, Enschede, Netherlands

15:20 INVITED H26_O03 **Bio-responsive nanomaterials for enzyme sensing**
Molly Stevens, Imperial College London, London, United Kingdom

Room: Leven

Parallel 3: H28 DSM Performance Materials

14:15 INVITED H28_O01 **Fast Flow of Polymers. Problems and Perspectives**
Giuseppe Marrucci, University of Naples, Naples, Italy

15:00 INVITED H28_O02 **High-Performance Polymer Foils**
Theo Tervoort, Swiss Federal Institute of Technology, Zurich,
Switzerland

Room: Dochart 1&2

Parallel 4: C8 Click and Efficient Linking Chemistry in Polymer Synthesis

14:15 C8_O01 **Facile preparation of stimuli-responsive core cross-linked micelles using thiol-yne chemistry**
Niels ten Brummelhuis, Max Planck Institute of Colloids and Interfaces,
Potsdam-Golm, Germany

14:30 C8_O02 **Design and Functions of Two-Dimensional Macromolecules**
Donglin Jiang, Institute for Molecular Science, Okazaki, Japan

14:45 C8_O03 **One-pot tandem living radical polymerisation - Huisgens cycloaddition formation of multifunctional Giant Amphiphile nanoreactors.**
Kelly Velonia, University of Crete, Department of Materials Science and
Technology, Heraklion - Crete, Greece

15:00 KEYNOTE C8_O04 **Robust, Efficient and Orthogonal Chemistry for the Preparation of Functional Materials**
Craig Hawker, University of California, Santa Barbara, United States

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

14:15 KEYNOTE C10_O01 **Self-Controlled Supramolecular and Living Radical Polymerizations**

Virgil Percec, University of Pennsylvania, Philadelphia, United States

15:00 C10_O02 **Synthesis of Sterically-Stabilized Nanolatexes by Living Radical Polymerization**

Steven Armes, University of Sheffield, Sheffield, Yorkshire, United Kingdom

15:15 C10_O03 **Controlled Dispersion Polymerisation in Supercritical Carbon Dioxide: Designing scCO₂ Stabilisers and Preparing Living Block Co-Polymer Microparticles.**

Steven Howdle, University of Nottingham, Nottingham, United Kingdom

15:30 C10_O04 **Phenanthrene and Rhodamine-B derived RAFT agents. Synthesis of alpha-end-functionalized thermosensitive polymers and fluorescence studies.**

Marie-Thérèse CHARREYRE, ENS, Lyon, France

Room: Carron 1 & 2

Parallel 6: C12 Supramolecular Polymers and Self Assembly

14:15 INVITED C12_O05 **DEVELOPMENT OF HYDROGEN BONDING MODULES (HBM) AS BIOINSPIRED NANOSCALE ADHESION AGENTS**

Steven Zimmerman, University of Illinois, Urbana, IL, United States

14:45 C12_O06 **Probing the nucleation pathway in chemical self-assembly**

Tom de Greef, Institute for Complex Molecular Systems, Eindhoven, Netherlands

15:00 C12_O02 **Sequence-selective assembly of tweezer-molecules on oligomer and copolymer chains**

Howard Colquhoun, University of Reading, Berkshire, United Kingdom

15:15 C12_O03 **Mechanical Activation of Catalysts**

Rint Sijbesma, Eindhoven University of Technology, Eindhoven, Netherlands

15:30 C12_O04 **Studies on the effect of binding constants on healing ability of supramolecular polymer blends**

Wayne Hayes, University of Reading, Reading, Berkshire, United Kingdom

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

14:15 KEYNOTE D14_O01 **Fabrication of Uniform Microspheres for Biomedical Applications**

Younan Xia, Washington University, St. Louis, MO, United States

15:00 D14_O02 **Biological properties of polymer brush-afforded particles prepared by surface-initiated living radical polymerization: Circulation lifetime in the blood**

Kohji Ohno, Institute for Chemical Research, Kyoto University, Uji, Kyoto 611-0011, Japan

15:15 D14_O03 **Microgel Translocation Through Pores Under Confinement**

Andrew Lyon, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA, United States

15:30 D14_O04 **Preparation and function of stimuli-sensitive microgel containing silver nano-spheres**

Haruma Kawaaguchi, Kanagawa University, Yokohama, Japan

Room: Boisdale 1

Parallel 8: E16 Probing Single Macromolecules

Session Chair: Hagan Bayley, University of Oxford, UK and Ulrich Keyser, University of Cambridge, UK

14:15 KEYNOTE E16_O01 **Properties and Methods for Fabricating Nanopores**

Daniel Branton, Harvard University, Cambridge, MA, United States

15:00 E16_O02 **Probing bio-molecular complexes using nanopore force spectroscopy**

Jérôme Mathé, LAMBE - Université d'Evry Val d'essonne, EVRY, France

15:15 E16_O03 **Analysis of single DNA molecules with Nanocapillaries**

Lorenz Steinbock, Cambridge University, Cambridge, United Kingdom

15:30 E16_O04 **Single Molecule Interactions of Bio-adhesive-Inspired Polymers with Inorganic and Organic Surfaces**
Nicolas Willet, University of Liege, Liege, Belgium

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

14:15 KEYNOTE F19_O01 **Development of New Catalysts for the Synthesis of Biodegradable Polymeric Materials from Epoxides**
Geoffrey Coates, Cornell University, Ithaca, New York, United States

15:00 F19_O02 **Organoyttrium Initiators for Lactide Ring-Opening Polymerization**
Rachel Platel, Department of Chemistry, Imperial College London, London, United Kingdom

15:15 F19_O03 **Novel Catalysts for the Utilization of Carbon Dioxide as C1 Building Block**
Thomas Ernst Müller, CAT, RWTH Aachen University, Aachen, NRW, Germany

15:30 F19_O04 **Hetero-selective rac-lactide polymerization by new types of group 4 metal catalysts**
Moshe Kol, Tel Aviv University, Tel Aviv, Israel

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Steve Yeates, University of Manchester, UK

14:15 KEYNOTE G21_O01 **Title to be confirmed**
Donal Bradley, Imperial College London, London, United Kingdom

15:00 G21_O02 **Orthogonal Patterning for Organic Electronics: New Materials for New Devices**
Christopher Ober, Cornell University, Ithaca, NY, United States

15:15 G21_O03 **How π - π interactions in solution influence thin film organic semiconductor devices properties**
Marie-Beatrice Madec, University of Manchester, Manchester, United Kingdom

15:30 G21_O04 **Polymer Electret Materials**
Hans-Werner Schmidt, University of Bayreuth, Bayreuth, Germany

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Peter Budd, University of Manchester, UK

14:15 KEYNOTE G23_O01 **Thermally Rearranged Polymer Membranes Tuned for CO₂ Capture**

Young Moo Lee, Hanyang University, Seoul, Korea, Republic of

15:00 G23_O02 **Qualitative and quantitative comparison of different molecular probing techniques for the analysis of the free volume distribution of amorphous glassy perfluoropolymers.**

Johannes Carolus Jansen, Institute on Membrane Technology, ITM-CNR, Rende (CS), Italy

15:15 G23_O03 **Polymer membranes with in situ grown palladium nanoparticles: how to control interactions towards hydrogen**

Eliane Espuche, University of Lyon, University Lyon 1, Ingénierie des Matériaux Polymères/ Laboratoire des Matériaux Polymères et des Biomatériaux, UMR CNRS 5223, Villeurbanne, France

15:30 G23_O04 **Novel Si-containing highly permeable polymers: membrane materials for hydrocarbon separation**

Yuri Yampolskii, A.V.Topchiev Institute of Petrochemical synthesis, Moscow, Russian Federation

Room: Forth

Parallel 1: A1 Polymers for Tissue Engineering and Regenerative Medicine

Session Chair: Steve Rimmer, University of Sheffield, UK

16:15 INVITED A1_O03 **POLYMERS FOR TISSUE ENGINEERING AND WOUND MANAGEMENT**

Sheila MacNeil, University of Sheffield, Sheffield, United Kingdom

16:45 A1_O04 **Development of an alternative to the amniotic membrane for delivering cultured epithelial cells to the cornea using poly(lactide-co-glycolide) electrospun scaffolds**

Pallavi Deshpande, University of Sheffield, Sheffield, United Kingdom

17:00 A1_O05 **Biodegradable Thermosensitive Poly[(R)-3-hydroxybutyrate]-based Copolymers for Cell Sheet Technology**

Xian Jun Loh, Institute of Materials Research and Engineering,
Singapore, Singapore

- 17:15 A1_O06 **Development of Injectable and Mechanically Stable Composite Scaffolds for Bone Regeneration Applications.**
Cheryl Rahman, The University of Nottingham, Nottingham, United Kingdom
- 17:30 A1_O07 **Hydroxyapatite Pickering PolyHIPEs and "Thermo"HIPEs as Injectable Scaffolds for Tissue Engineering**
Shengzhong Zhou, Imperial College London, London, United Kingdom

Room: Alsh 1

Parallel 2: H26 Young Polymer Scientists

Session Chair: Rachel O'Reilly, University of Warwick, UK

- 16:15 INVITED H26_O04 **Novel Functional Highly and Hyper-branched Polymers**
Sebastien Perrier, University of Sydney, Sydney, NSW, Australia
- 16:40 INVITED H26_O05 **Self-assembly of copoly(2-oxazoline)s: From multicompartment micelles to UCST based thermoresponsive micellization**
Richard Hoogenboom, Radboud University Nijmegen, Nijmegen, Netherlands
- 17:05 INVITED H26_O06 **NEW STRATEGIES FOR CONTROLLING POLYMER SEQUENCES**
Jean-François Lutz, Fraunhofer IAP, Potsdam, Germany
- 17:30 INVITED H26_O07 **Reconfiguring Stereoisomers and Activating Catalysts using Mechanical Force**
Christopher Bielawski, The University of Texas at Austin, Austin, TX, United States

Room: Leven

Parallel 3: H28 DSM Performance Materials

- 16:15 INVITED H28_O04 **Advances in the Fracture Mechanisms of Filled Elastomers**
Costantino Creton, ESPCI ParisTech, Paris, France

17:00 INVITED H28_O03 **Optical Fiber Coatings: the Cavitation Demon**
Markus Bulters, DSM Research, Geleen, Netherlands

Room: Dochart 1&2

Parallel 4: C8 Click and Efficient Linking Chemistry in Polymer Synthesis

16:15 INVITED C8_O05 **CLICK CHEMISTRY: A PRECISION TOOL FOR CONTROLLING PRIMARY- AND SECONDARY- STRUCTURES IN SYNTHETIC POLYMERS**
Jean-François Lutz, Fraunhofer IAP, Potsdam, Germany

16:45 C8_O06 **One-pot synthesis of polyalkyne clickable scaffolds: towards click processes**
Giuseppe Mantovani, University of Nottingham - School of Pharmacy, Nottingham, United Kingdom

17:00 C8_O07 **Investigations on the glycopolymer-protein interactions using surface plasmon resonance spectroscopy**
C. Remzi Becer, University of Warwick, Coventry, United Kingdom

17:15 C8_O08 **Thio-sugars for the efficient postfunctionalization of polymers to build up complex glycopolymer architectures and their interaction with lectins**
Martina Stenzel, University of New South Wales, Sydney, Australia

17:30 C8_O09 **Highly Functionnalized PEGylated Poly(Alkyl Cyanoacrylate) Nanoparticles Designed by Click Chemistry for Biological Applications in Alzheimer's Disease.**
Benjamin Le Droumaguet, Laboratoire de Physico-Chimie, Pharmaceutique et Biopharmacie, UMR CNRS 8612, Univ. Paris-Sud 11, Châtenay Malabry, France

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

16:15 INVITED C10_O05 **Metal-Catalyzed Living Radical Polymerization for the Precision Synthesis of Functional Macromolecules**
Mitsuo Sawamoto, Kyoto University, Kyoto, Japan

16:45 C10_O06 **Synthesis of N-acryloxysuccinimide based homo- and co-polymers by nitroxide mediated polymerization**
Denis Bertin, University of Provence, Marseille, France

17:00 C10_O07 **Magnetic Nanotechnology applied to Controlled Radical Polymerization**
Ron Sanderson, Stellenbosch University, Stellenbosch, South Africa

17:15 C10_O08 **Development of Photosensitive Alkoxyamines for Nitroxide Mediated PhotoPolymerization**
Didier Gigmes, Université de Provence, Marseille, France

17:30 C10_O09 **Single-electron Transfer Living Radical Polymerization (SET-LRP) of Methyl Methacrylate (MMA) with a Typical RAFT Agent as An Initiator**
Zhengbiao Zhang, Provincial Key Laboratory of Organic Synthesis, College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou, China

Room: Carron 1 & 2

Parallel 6: C12 Supramolecular Polymers and Self Assembly

16:15 KEYNOTE C12_O01 **Two-step folding of chiral polymers; towards single-chain nanoparticles**
E.W. 'Bert' Meijer, Eindhoven University of Technology, Eindhoven, Netherlands

17:00 C12_O07 **Controlled Aggregation-Induced Emission Enhancement and Quenching in Thiophene-Containing Molecular Gels**
Koji Miyamoto, Kumamoto university, Kumamoto, kurokami, Japan

17:15 C12_O08 **Tuning Rod-Coil Block Copolymer Aggregation via Heterosequences**
Andreas Kilbinger, University of Mainz, Mainz, Germany

17:30 C12_O09 **Enzyme Controlled Self-Assembly of Peptide-Polymer Conjugates**
Hans Boerner, Humboldt-Universität zu Berlin, Berlin, Germany

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

16:15 INVITED D14_O05 **A Novel Synthesis of Multihollow Polymer Particles by Emulsion Polymerization By Utilizing Incorporation of**

Nonionic Emulsifier

Masayoshi Okubo, Kobe University, Kobe, Japan

16:45 D14_O06 **Flat latex particles**

Alex van Herk, Eindhoven University of Technology, Eindhoven, Netherlands

17:00 D14_O07 **Fabrication of anisotropic "patchy" polymer colloids particles.**

Attyah Alzhrani, Warwick University, Coventry, United Kingdom

17:15 D14_O08 **Metal containing latexes - Versatile hybrid nanostructures**

Clemens K. Weiss, Max-Planck-Institute for Polymer Research, Mainz, Germany

17:30 D14_O09 **MORPHOLOGY CONTROL OF POLY(3,4-ETHYLENEDIOXYTHIOPHENE) AND POLYANILINE NANO-OBJECTS SYNTHESIZED BY AQUEOUS DISPERSION POLYMERIZATION**

Henri CRAMAIL, Université Bordeaux 1, Bordeaux, France

Room: Boisdale 1

Parallel 8: E16 Probing Single Macromolecules

Session Chair: Hagan Bayley, University of Oxford and Ulrich Keyser, University of Cambridge

16:15 INVITED E16_O05 **Single molecule mechanical sequencing of DNA**

David Bensimon, ENS-LPS, Paris, France

16:45 INVITED E16_O06 **Assembling Polyelectrolytes and Fluorescent Nanoparticles by Single Molecule Cut & Paste**

Hermann Gaub, Ludwig Maximilians University, Munich, Germany

17:15 E16_O07 **Stiffening transition in semiflexible ring macromolecules**

Peter Cifra, Polymer Institute, Slovak Academy of Sciences, Bratislava, Slovakia

17:30 E16_O08 **Nanomechanics of membrane proteins probed by atomic force spectroscopy**

K. Tanuj Sapra, University of Oxford, Oxford, Oxfordshire, United Kingdom

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

16:15 F19_O05 **Stereocontrolled Synthesis of Polymer Stars: Control of Physical Properties and Biodegradation Rates**

Michael P. Shaver, University of Prince Edward Island, Charlottetown, Canada

16:30 F19_O06 **Microstructure Design of Star-shaped Aliphatic Polyesters**

Karin Odellius, Fibre and Polymer Technology, Stockholm, Sweden

16:45 F19_P05 **Transesterification During Poly(ϵ -caprolactone)-Poly(lactide) Copolymers Synthesis**

Marc J.M. Abadie, School of Materials Science & Engineering, Nanyang Technological University, Singapore, Singapore

17:00 F19_O08 **Metal-catalysed ROP of macrolactones to unprecedentedly high molecular weight polyesters.**

Rob Duchateau, Eindhoven University of Technology, Eindhoven, Netherlands

17:15 F19_O09 **Highly active catalysts for the copolymerisation of carbon dioxide and functionalised epoxides at 1 atmosphere carbon dioxide pressure: synthesis, catalytic activity and mechanistic studies (kinetics, DFT)**

Antoine Buchard, Imperial College, London, United Kingdom

17:30 F19_O10 **Metal-Catalyzed Immortal Ring-Opening Polymerization of Cyclic Esters**

Sophie Guillaume, Laboratoire Catalyse et Organométalliques, CNRS - Université de Rennes 1 - Sciences Chimiques de Rennes (UMR 6226), Rennes, France

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: John Morrison, University of Manchester, UK

16:15 INVITED G21_O24 **Device physics of conjugated polymer semiconductors for flexible electronics**

Henning Sirringhaus, University of Cambridge, Cambridge, United Kingdom

- 16:45 G21_O06 **Dynamic/Living Conjugated Polymers with Tuneable Properties**
Will Skene, Université de Montréal, Montreal, QC, Canada
- 17:00 G21_O07 **Synthesis and supramolecular behaviour of conjugated block copoly(thiophene)s**
Guy Koeckelberghs, KULeuven, Heverlee, Belgium
- 17:15 G21_O08 **Synthesis of σ - π conjugated poly(diarylstannane)s in liquid ammonia**
Markus Trummer, ETH, Zürich, Switzerland
- 17:30 G21_O09 **An efficient route towards PTV derivatives: discovery of an acid induced conversion of the precursor polymers**
Hanne Diliën, Hasselt University, Diepenbeek, Belgium

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Neil McKeown, Cardiff University, UK

- 16:15 G23_O05 **Propylene/Propane Separation with Zeolite/Perfluoropolymer Mixed Matrix Membranes**
Giovanni Golemme, Department of Chemical Engineering and Materials of the University of Calabria, and INSTM Consortium, Rende (CS), Italy
- 16:30 G23_O06 **Permeation and sorption properties of PIM-1 Mixed Matrix Membranes filled with tailored nanoparticles**
Karel Friess, Institute of Chemical Technology Prague, Prague, Czech Republic
- 16:45 G23_O07 **Graft cellulosic copolymers with nano-structured architectures: Application to the purification of bio-fuels by a membrane separation process**
Anne Jonquieres, University of Nancy, Nancy, France
- 17:00 G23_O08 **Surface-functionalized track-etched membranes via living radical polymerization: stimuli-responsive properties and membrane adsorber applications**
Falk Tomicki, University of Duisburg-Essen, Essen, Germany
- 17:15 G23_O09 **Dehydration of isopropanol-water mixtures by pervaporation technique using zeolite-incorporated chitosan membrane**
Haryadi Haryadi, Chemical Engineering Departmet, Bandung State Polytechnic, Bandung, West Java, Indonesia

17:30 G23_O10 **Supercritical Carbon Dioxide Treatment of Electrospun PVDF Nano-fibrrous Membranes for Electrochemical Applications**
Wu Aik Yee, Nanyang Technological University, Singapore, Singapore

TUESDAY 13 JULY 2010 - ORAL SESSIONS

Clyde Auditorium

Plenary: Kiyohito Koyama

PLEN_03 Rheology Control and Material Design

Kiyohito Koyama, Yamagata university, Yonezawa, Japan

Room: Forth

Parallel 1: A1 Polymers for Tissue Engineering and Regenerative Medicine

Session Chair: Neil Cameron, Durham University, UK

09:45 INVITED A1_O08 **Clinical & Experimental Viewpoint of Bone Engineering by Combining Composite Scaffolds with Biological Competence**

Jan-Thorsten Schantz, Technische Universität München, München, Germany

10:15 A1_O09 **Photodegradable gels for studying the influence of gel structure on cell function**

April Kloxin, Howard Hughes Medical Institute and the Department of Chemical and Biological Engineering, University of Colorado at Boulder, Boulder, CO, United States

10:30 A1_O10 **Simultaneously physically and chemically cross-linked hydrogels based on thermosensitive triblock copolymers and hyaluronic acid**

Tina Vermonden, Utrecht University, Utrecht, Netherlands

10:45 A1_O11 **Protein Coupling to Resorbable Polymer Surfaces**

Ulrica Edlund, Royal Institute of Technology KTH, Stockholm, Sweden

Room: Alsh 1

Parallel 2: H26 Young Polymer Scientists

Session Chair: Andrew Naylor, Critical Pharmaceuticals, UK

09:45 INVITED H26_O08 **Synthesis and Supramolecular Self-Assembly of Nonlinear-Shaped Responsive Polymers**

Shiyong Liu, Department of Polymer Science & Engineering, University

of Science and Technology of China, Hefei, Anhui Province, 230026, China

10:10 INVITED H26_O09 **Fabrication of Advanced Hierarchical Soft Materials using Responsive, Architecturally-Defined Copolymers**
Jonathan Weaver, University of Liverpool, Liverpool, United Kingdom

10:35 INVITED H26_O10 **Exploiting Biocatalysis in Supramolecular Synthesis of Functional Nanostructures**
Rein Ulijn, University of Strathclyde, Glasgow, United Kingdom

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Manfred Bochmann, University of East Anglia, UK

09:45 KEYNOTE B6_O01 **MANIPULATING CENTER-SURFACE AND CENTER-CENTER COOPERATIVE EFFECTS FOR THE CATALYTIC SYNTHESIS OF NEW POLYMERIC MATERIALS**
Tobin Marks, Northwestern U., Evanston IL, United States

10:30 INVITED B6_O02 **Custom Polyethylene by Molecular Design**
Edmund Carnahan, Dow Chemical Company, Freeport, United States

Room: Dochart 1&2

Parallel 4: C8 Click and Efficient Linking Chemistry in Polymer Synthesis

09:45 INVITED C8_O10 **"Thio-click" chemistry toward functional polymers: How to optimize it?**
Filip Du Prez, Ghent University, Ghent, Belgium

10:15 C8_O11 **Clickable poly(2-oxazoline)s**
Richard Hoogenboom, Radboud University Nijmegen, Nijmegen, Netherlands

10:30 C8_O12 **Patternable and nanostructured functional thin polymer films making use of click chemistry**
Brigitte Voit, Leibniz Institute of Polymer Research Dresden, Dresden, Germany

10:45 C8_O13 **Construction and Ordering of Complex Polymeric Architectures by "Click"-Chemistry**

Wolfgang H. Binder, Martin-Luther University Halle Wittenberg, Faculty of Natural Sciences II, Institute of Chemistry, Chair of Macromolecular Chemistry, Halle (Saale), von Danckelmannplatz 4, D-06120, Germany

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

09:45 KEYNOTE C10_O10 **ATRP- from mechanism to materials**
Krzysztof Matyjaszewski, Carnegie Mellon, Pittsburgh, United States

10:30 C10_O11 **Novel amphiphilic block copolymers and conetworks by combining click chemistry, quasiliving atp and carbocationic polymerizations**

Béla Iván, Department of Polymer Chemistry and Material Science, Institute of Materials and Environmental Chemistry, Chemical Research Center, Hungarian Academy of Sciences, H-1525 Budapest, Pusztaszeri u. 59-67, Budapest, Hungary

10:45 C10_O12 **Control of Molecular Weight using the Reverse Iodine Transfer Polymerization (RITP)- Emulsion Technique**
Yejin Lee, Inha university, Incheon, Korea, Republic of

Room: Carron 1 & 2

Parallel 6: C12 Supramolecular Polymers and Self Assembly

09:45 INVITED C12_O10 **Artificial Polymerases and Molecular Chaperons**
Akira Harada, Osaka University, Toyonaka, Osaka, Japan

10:15 C12_O11 **Supramolecular Polymers in Water Mediated by Cucurbiturils**

Oren A. Scherman, Melville Laboratory for Polymer Synthesis, Department of Chemistry, University of Cambridge, Cambridge, United Kingdom

10:30 C12_O12 **Syntheses of CD-based insulated molecular wires through the polymerization of fixed rotaxanes**

Jun Terao, Kyoto University, Kyoto, Japan

10:45 C12_O13 **Temperature Sensitive Supramolecular Self Assembly of per-6-PEO- β -cyclodextrin and α,ω -diadamantyl-PNIPAM in water**

Philippe Guegan, University of Evry, Evry, France

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

09:45 KEYNOTE D14_O10 **Title to be confirmed**

Alfons van Blaaderen, Utrecht University, Utrecht, Netherlands

10:30 D14_O11 **Patterned Colloidal Polymer Coatings via Evaporative Lithography**

Joseph Keddie, University of Surrey, Guildford, Surrey, United Kingdom

10:45 D14_O12 **Self-Assembled Phoretic Swimmers**

Jonathan Howse, University of Sheffield, Sheffield, United Kingdom

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: Andrei Zvelindovsky, University of Central Lancashire, UK

09:45 KEYNOTE E17_O01 **Macroscopic Arrays of Block Copolymers With Areal Densities of 10 Terabit/inch² and Beyond**

Thomas P. Russell, University of Massachusetts, Amherst, MA, United States

10:30 E17_O02 **3D structural observation of novel frustrated phase separation structures of block copolymers induced by the 3D confinement effect of nanoparticle**

Takeshi HIGUCHI, WPI-AIMR, Tohoku University, Sendai, Japan

10:45 E17_O03 **Hierarchical, two-dimensional superstructures of nanorods obtained through co-assembly with block copolymers in thin films**

Roy Shenhar, Hebrew University of Jerusalem, Jerusalem, Israel

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

09:45 INVITED F19_O11 **Synthesis and applications of renewable block polymers**

Marc Hillmyer, University of Minnesota, Minneapolis, MN, United States

10:15 F19_O12 **Biohybrid Copolymers Prepared by Living NCA Ring Opening Polymerization**

Gijs Habraken, Eindhoven University of Technology, Eindhoven, Netherlands

10:30 F19_O13 **Biorenewable plastics: Ring opening polymerization of a carbohydrate derived lactone and its copolymerization with (S,S)-lactide**

Min Tang, Imperial College, London, United Kingdom

10:45 F19_O14 **Tailor-made Biodegradable Polymers from Organocatalysed ROP**

Blanca Martin Vaca, Paul Sabatier University, Toulouse, France

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Marie-Beatrice Madec, University of Manchester, UK

09:45 KEYNOTE G21_O10 **Polymeric Semiconductor and Dielectric Materials for Printed Transistors and Circuits**

Antonio Facchetti, Northwestern University and Polyera Corporation, Evanston, IL, United States

10:30 G21_O11 **NEW CROSS-LINKABLE SYSTEMS USING HUISGEN REACTION FOR NON-LINEAR OPTICAL APPLICATIONS**

clement cabanetos, university of Nantes, CEISAM UMR 6230, Nantes, France

10:45 G21_O12 **Nanoparticle-Polymer Hybrids: From Orientation to Applications**

Rudolf Zentel, University of Mainz, Mainz, D-55099, Germany

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Yuri Yampolskii, RAS Institute of Petrochemical Synthesis, Russia

09:45 INVITED G23_O11 **Structure-Property Relations in Polymers for Gas Separations**

Benny Freeman, University of Texas, Austin, Texas, United States

10:15 G23_O12 **Prediction of gas permeability and permselectivity in polyimide membranes**

Corine BAS, Université de Savoie, Le Bourget-du-Lac, France

10:30 G23_O13 **Polymer and Ion Dynamics in 'Single Ion' Polymer Electrolytes**

James Runt, Penn State University, University Park, PA, United States

10:45 G23_O14 **Synthesis and Properties of Novel Anion Conductive Aromatic Ionomers**

Kenji Miyatake, University of Yamanashi, Yamanashi, Japan

Room: Forth

Parallel 1: A2 Polymer Networks and Responsive Polymers in the Life Sciences

Session Chair: Steve Rimmer, University of Sheffield, UK

11:30 KEYNOTE A2_O01 **Versatile synthetic extracellular matrix mimics via thiol-ene photopolymerization**

Kristi Anseth, University of Colorado, Boulder, CO, United States

12:15 A2_O02 **DEGRADABLE, AMPHIPHILIC END-LINKED POLYMER CONETWORKS: SYNTHESIS BY RAFT POLYMERIZATION AND DEGRADATION STUDIES**

Maria Rikkou, University of Cyprus, Nicosia, Cyprus

12:30 A2_O03 **Smart surfaces for pH-controlled cell staining**

Simona Argentiere, National Nanotechnology Laboratory of CNR-INFM, Lecce, Italy

12:45 A2_O04 **Smart in situ Biodegradable Hydrogels with Tailored Structures and Characteristics**

WU DE CHENG, Institute of Materials Research and Engineering, Singapore, Singapore

Room: Alsh 1

Parallel 2: H26 Young Polymer Scientists

Session Chair: Sebastien Perrier, University of Sydney, Australia

11:30 INVITED H26_O11 **Activated Esters in Polymer Chemistry: Synthesis of well-defined Functional Polymers and Block**

Copolymers

Patrick Theato, University of Mainz, Mainz, Germany

11:55 INVITED H26_O12 **Interactions of Conjugated Polymers with Single-Walled Carbon Nanotubes**

Alex Adronov, McMaster University, Hamilton, Canada

12:20 INVITED H26_O13 **Selenophene based polymers for photovoltaic and transistor applications.**

Martin Heeney, Imperial College London, London, United Kingdom

12:45 INVITED H26_O14 **Magnetic Assembly and Colloidal Polymerization of Dipolar Nanoparticles: A New Concept in Polymer Science**

Jeffrey Pyun, University of Arizona, Tucson, AZ, United States

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Scott Collins, University of Akron, USA

11:30 B6_O03 **Tandem Catalyst System for Linear Low Density Polyethylene with Short and Long Branching**

Stephen Miller, University of Florida, Gainesville, Florida, United States

11:45 B6_O04 **Scalable Production of Precision Polyolefins via Living Coordinative Chain-Transfer Polymerization**

Lawrence Sita, University of Maryland, College Park, United States

12:00 B6_O05 **Coordinative Chain Transfer Polymerisation (CCTP¹) - The Polymerisation of Ethylene in a Highly Controlled Fashion**

Rhett Kempe, Universität Bayreuth, Bayreuth, Germany

12:15 B6_O06 **Isoselective polymerization of propylene by group 4 complexes of halo-Substituted Salan ligands**

Moshe Kol, Tel Aviv University, Tel Aviv, Israel

12:30 B6_O07 **Catalytic Synthesis of Styryl-Capped Isotactic Polypropylenes**

Jinyong Dong, Institute of Chemistry, The Chinese Academy of Sciences, Beijing, China

12:45 B6_O08 **New Palladium Aryl Sulfonate Phosphine Catalysts for the Preparation of Functionalized Polyolefins: Synthesis, Characterization and Studies of Intermediates.**

Jean-Christophe Daigle, University of Quebec at Montreal, Montreal, Quebec, Canada

Room: Dochart 1&2

Parallel 4: C8 Click and Efficient Linking Chemistry in Polymer Synthesis

11:30 INVITED C8_O14 **Thiol-Click Chemistries in Polymer Synthesis and Modification**

Andrew Lowe, University of New South Wales, Sydney, NSW, Australia

12:00 C8_O15 **Miktoarm core cross-linked star polymer derived from linear-dendritic and linear macromonomers and its prospective "click" modifications**

Søren Hvilsted, Technical University of Denmark, Kgs. Lyngby, Denmark

12:15 C8_O16 **Incorporation of polyethylene segments into macromolecular architectures**

Franck D'Agosto, CNRS -UMR C2P2 - LCPP Team, Villeurbanne, France

12:30 C8_O17 **Synthesis of Hetero-Telechelic α,ω Functionalized Polymers Utilizing Nucleophiles and Electrophiles.**

Patrick Theato, University of Mainz, Mainz, Germany

12:45 C8_O18 **Click Chemistry-Type Postfunctionalization of Aromatic Polymers for Organic Electronic Applications**

Tsuyoshi Michinobu, Tokyo Institute of Technology & PRESTO, JST, Tokyo, Japan

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

11:30 INVITED C10_O13 **Designing Nanostructured Materials with Peptide-Polymer Conjugates**

Sebastien Perrier, University of Sydney, Sydney, NSW, Australia

12:00 C10_O14 **Development and Application of Switchable RAFT agents.**

Graeme Moad, CSIRO, Clayton, Victoria, Australia

12:15 C10_O15 **Some recent advances in the MADIX process**

Mathias Destarac, Université Paul Sabatier, Toulouse, France

12:30 C10_O16 **Synthesis of stimuli-responsive block copolymers based on poly(N,N-diethylacrylamide) by RAFT polymerization**
Sophie Monge, Institut Charles Gerhardt, Montpellier, France

12:45 C10_O17 **Anionic Polymerizability of N,N-Dialkylmethacrylamides**
Takashi Ishizone, Tokyo Institute of Technology, Tokyo, Japan

Room: Carron 1 & 2

Parallel 6: C12 Supramolecular Polymers and Self Assembly

11:30 C12_O14 **Semicrystalline Organometallic Block Copolymer Micelles with symmetrically substituted Poly(ferrocenylsilane) compartments**
Felix Schacher, University of Bristol, Bristol, United Kingdom

11:45 C12_O15 **Self-Assembled ABC Triblock Copolymer Helices**
Hongjing Dou, Shanghai Jiao Tong University, Shanghai, China

12:00 C12_O16 **New building blocks and driving forces in constructing nanoparticles and supermicelles**
Daoyong Chen, Fudan University, Shanghai, China

12:15 C12_O18 **Unusual photo-driven size change in vesicles of azobenzene endcapped polyethylene glycol**
Jinhua Hu, Nanyang Technological University, Singapore, Singapore

12:30 C12_O19 **Synthesis and solution properties of telechelic poly(2-alkyl-2-oxazolines) bearing perfluorodecanyl end groups.**
Francoise M Winnik, universite de Montrea;, Montreal QC, Canada

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

11:30 D14_O17 **Waterborne functional nanoparticles of tunable crystallinity by self-assembly of amphiphilic ethylene copolymers**
Francoise M. Winnik, Universite de Montreal, Montreal QC, Canada

11:45 D14_O14 **Fabrication of Large-Area Patterned Photonic Crystals by Ink-Jet Printing**
Jingxia Wang, Institute of Chemistry, Beijing, China

12:00 D14_O15 **Stimulus-Responsive Liquid Marbles**
Damien Dupin, University Of Sheffield, Sheffield, United Kingdom

12:15 D14_O16 **LIGHT DIFFRACTION ON THIN LAYERS OF POLYMER PARTICLE ARRAYS IN THE OPTICAL NEAR-FIELD AND MIDDLE-FIELD**

Juergen Wagner, Fraunhofer Institute for Applied Polymer Research, Potsdam-Golm, Germany

12:30 D14_O13 **From spherical colloids to one-dimensional polymer assemblies by electrospinning**

Andreas Greiner, University of Marburg, Marburg, Germany

12:45 D14_O18 **Synthesis of cerium oxide-stabilized nanocomposite latexes through miniemulsion polymerization**

Elodie Bourgeat-Lami, Université de Lyon - CNRS - ESCPE, VILLEURBANNE, France

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: Xiaosong Wang, University of Leeds, UK

11:30 E17_O04 **Hierarchical Structures based on Self-Assembled Diblock Copolymers within Honeycomb Micro-Structured Porous Films**

Maud SAVE, IPREM-Equipe de Physique et Chimie des Polymères, CNRS-University of Pau, PAU, France

11:45 E17_O05 **Multiple Strategies Toward Block Copolymer Based Nanoporous Thin Films**

Charles-André Fustin, Université catholique de Louvain, Louvain-la-Neuve, Belgium

12:00 E17_O06 **Phase Separation in PMMA-PS Block Copolymers Tethered to Gold Surfaces**

Benjamin O'Driscoll, University of Reading, Reading, United Kingdom

12:15 E17_O07 **Block Copolymer Surface Pattern Based Ultrahigh-Density Data Storage Using AFM Tip Hammering Nanolithography**

You Wang, Harbin Institute of Technology, Harbin, Heilongjiang Province, China

12:30 E17_O08 **Selective hydrophilization of nanoporous 1,2-Polybutadiene through UV induced grafting of acidic and 'pegylated' azides**

Anton Berthold, Technical University of Denmark, Copenhagen, Denmark

12:45 E17_O09 **Ampholytic Polymer Based Janus Particles**
André Gröschel, University of Bayreuth, Bayreuth, Germany

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

11:30 F19_O15 **Biodegradable Thermoplastic Elastomers : Synthesis & Properties**
Marc J.M. Abadie, School of Materials Science & Engineering, Nanyang Technological University, Singapore, Singapore

11:45 F19_O16 **'Click' Functionalization of Biodegradable Aliphatic Polyesters Prepared by Step-Growth Polymerization**
Leen Billiet, Department of Organic Chemistry, Polymer Chemistry Research Group, Ghent, Belgium

12:00 F19_O17 **Isosorbide, a green diol for polymers**
Françoise Fenouillot-Rimlinger, Université de Lyon, INSA Lyon, IMP UMR CNRS 5223, 69621 Villeurbanne Cedex, France

12:15 F19_O18 **EPOXY FATTY ACID DIESTER / CO₂ SYSTEMS: SOLUBILITY, CARBONATION KINETICS AND POLYURETHANE SYNTHESIS**
aurelie boyer, LCPO, pessac, France

12:30 F19_O19 **Preparation of cellulose/graphene oxide composite film with enhanced mechanical properties**
Lifeng Yan, University of Science and Technology of China, Hefei, Anhui, China

12:45 F19_O20 **Preparation of Vegetable Oil Polymers by a Green Processing Method**
Zengshe (Kevin) Liu, NCAUR, ARS, USDA, Peoria, IL, United States

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Marie-Beatrice Madec, University of Manchester, UK

11:30 G21_O13 **Understanding the origin of control in the kumada catalyst transfer polycondensation for the synthesis of poly(3-hexylthiophene)**

Christine Luscombe, University of Washington, Seattle, WA, United States

11:45 G21_O14 **Synthesis and Degradation Studies on Novel TIPS Pentacene Analogues**
John Morrison, University of Manchester, Manchester, United Kingdom

12:00 G21_O15 **Incorporating fullerene into the back-bone of a block copolymer for a photovoltaic device**
Roger C. Hiorns, CNRS (IPREM), Pau, Aquitaine, France

12:15 G21_O16 **OTFT fabrication using polymeric materials to control the morphology of small-molecule semi-conductors in spin coating, ink jet printing and aerosol jet printing.**
David Bird, PETEC/CPI, Sedgefield, United Kingdom

12:30 G21_O17 **Design, Synthesis, and Electrochromic Properties of Novel Aromatic Polymers Based on Electroactive Tetraphenyl-p-Phenylenediamine (TPPA) Moieties**
Hung-Ju Yen, Institute of Polymer Science and Engineering, National Taiwan University, Taipei, Taiwan

12:45 G21_O18 **Rigid rod poly(p-phenylene sulfonic acid) PEMs: High conductivity at low relative humidity due to “frozen-in-free volume”**
Morton Litt, Case Western Reserve University, Cleveland, Ohio, United States

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Howard Colquhoun, University of Reading, UK

11:30 INVITED G23_O15 **Sulfonated and phosphonated aromatic ionomers as proton-exchange membranes for fuel cells**
Patric Jannasch, Lund University, Lund, Sweden

12:00 G23_O16 **Composite fuel cell membranes based on an inert polymer matrix and proton-conducting phosphonated hybrid nanoparticles**
Renaud Perrin, CEA-DAM, Monts, France

12:15 G23_O17 **ORGANIC PROTON-CONDUCTING CRYSTALS AS MEMBRANE MATERIALS FOR FUEL CELLS**
Markus Klapper, Max-Planck-Institute for Polymer Research, Mainz, Germany

12:30 G23_O18 **Polybenzimidazole Membranes for the Use in Fuel Cell**
Tushar Jana, University of Hyderabad, Hyderabad, AP, India

12:45 G23_O19 **Proton Transfer Reactions and Dynamics at Hydrophilic Groups of Nafion[®]: Born-Oppenheimer Molecular Dynamics (BOMD) Simulations on Model Systems**
Kritsana Sagarik, School of Chemistry, Institute of Science, Suranaree University of Technology, 111 University Avenue, Nakhon Ratchasima 30000, Thailand

Room: Forth

Parallel 1: A2 Polymer Networks and Responsive Polymers in the Life Sciences

Session Chair: Antonio Fernandez Barbero, University of Almeria, Spain

14:30 INVITED A2_O05 **Stimulus responsive particle gels: Principles, construction and potential for application in the life sciences**
Brian Saunders, University of Manchester, Manchester, United Kingdom

15:00 A2_O06 **Photo-induced creep and stress relaxation in crosslinked polymers using b-scission of allylic thio-ether units in network strands**
Wayne Cook, Depart. of Materials Engineering, Monash University, Clayton, Melbourne, Victoria, Australia

15:15 A2_O07 **Amphoteric Core-Shell Microgels: Contraphilic Two Compartment Colloidal Particles**
Maria Vamvakaki, Foundation for Research and Technology, Institute of Electronic Structure and Laser, Heraklion, Crete, Greece

15:30 A2_O08 **Highly permeable and mechanically sound polymerised-Pickering-High Internal Phase Emulsions**
Angelika Menner, Imperial College London, London, United Kingdom

15:45 A2_O09 **Selective Molecular Networks to Unravel Cell Signalling**
Chirag Patel, Imperial College, London, United Kingdom

Room: Alsh 1

Parallel 2: H26 Young Polymer Scientists

Session Chair: Craig Hawker, University of California, Santa Barbara, USA

14:30 INVITED H26_O15 **The use of click coupling to construct functionalised cyclic polymers**

Scott Grayson, Tulane University, New Orleans, Louisiana, United States

14:55 INVITED H26_O16 **Utilization of 'Click'-chemistries for tailored Polyester Nanosponges with encapsulated Therapeutics**

Eva Harth, Vanderbilt University, Nashville, United States

15:20 INVITED H26_O17 **Synthesis of functional, architecturally diverse degradable polymers**

Andrew Dove, University of Warwick, Coventry, United Kingdom

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Moshe Kol, Tel Aviv University, Israel

14:30 INVITED B6_O09 **New kinetic insight into catalytic olefin polymerization**

Vincenzo Busico, Federico II University of Naples, Naples, Italy

15:00 B6_O10 **Why two cocatalyst are better in the polymerization of α -olefins catalysed by group 4 benzamidinate complexes, and why TIBA is the best cocatalyst for isolobal organoactinides?**

Moris Eisen, Technion -Israel Institute of Israel, Haifa, Israel

15:15 B6_O11 **Copolymerization of Ethylene with Cycloolefin or Cyclodiolefin by Bis(beta-diketiminato)titanium Complexes Activated with Modified Methylaluminoxane**

Yuesheng LI, Changchun Institute of Applied Chemistry, Changchun, China

15:30 B6_O12 **Post-Metallocene Catalysts Based on Dianionic Tridentate Ligands Built on a Quinoline Scaffold: Access to Structurally and Compositionally Diverse Polyolefins**

Sandor Nagy, Equistar Chemicals LP, Cincinnati, Ohio, United States

15:45 B6_O13 **Title: Truly selective ethylene tetramerisation. Fact or fiction?**

Rob Duchateau, Eindhoven University of Technology, Eindhoven, Netherlands

Room: Dochart 1&2

Parallel 4: C8 Click and Efficient Linking Chemistry in Polymer Synthesis

- 14:30 C8_O19 **Functionalised Materials By “Click” Surface Modification**
Mark Moloney, University of Oxford, Oxford, United Kingdom
- 14:45 C8_O20 **Self-assembly and drug loading of amphiphilic PCL-based graft polyesters prepared by click chemistry**
Vincent Darcos, IBMM, Artificial Biopolymers group, Montpellier, France
- 15:00 C8_O21 **Rapid Approach to Telechelics through Two One-Pot Thiol-Ene Click Reactions**
Gerard Lligadas, Rovira i Virgili University, Tarragona, Spain
- 15:15 C8_O22 **Reactive Polymeric Platforms via Diels-Alder/retro Diels-Alder Strategy**
Amitav Sanyal, Bogazici University, Istanbul, Turkey
- 15:30 C8_O23 **Quantitative synthesis of highly shape-anisotropic and persistent phenylene imine macrocycles based on reversible interchange of linear polymers**
Toshihiko Matsumoto, Tokyo Polytechnic University, Atsugi, Kanagawa 243-0297, Japan
- 15:45 C8_O24 **Step growth polymerization of starch-derived dianhydrohexitol stereoisomers: versatile platform for the design of linear polymers and polymer networks with original properties.**
Eric Drockenmuller, Ingénierie des matériaux polymères, Lyon, France

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

- 14:30 INVITED C10_O18 **Synthesis of Biomolecule-Reactive Telechelic Polymers Using Controlled Radical Polymerizations and Therapeutic Applications of the Resulting Protein Dimer-Polymer Conjugates**
Heather Maynard, University of California, Los Angeles, Los Angeles, CA, United States
- 15:00 C10_O19 **Precisely Synthesised Hollow Polymer Nanocapsules**
Michael Whittaker, Centre for Advanced Macromolecular Design, Sydney, NSW, Australia
- 15:15 C10_O20 **Controlled Radical Polymerization of Vinyl Acetate Mediated by a Vanadium Catalyst**

Michael P. Shaver, University of Prince Edward Island, Charlottetown, Canada

15:30 C10_O21 **Compartmentalized Designer Catalysts via Living Radical Polymerization**

Takaya Terashima, Laboratory of Macromolecular and Organic Chemistry, Eindhoven University of Technology, Eindhoven, Netherlands

15:45 C10_O22 **Controlled Photopolymerization of *n*-Butyl Methacrylate in Microemulsion Mediated by HO-TEMPO**

Xiaoxuan Liu, Guangdong University of Technology, Guangzhou, Guangdong, China

Room: Carron 1 & 2

Parallel 6: C12 Supramolecular Polymers and Self Assembly

14:30 INVITED C12_O20 **Star, Block and Graft Copolymers By Self-Assembly of Complementary Host- and Guest-Functionalized Polymeric Building Blocks**

Harry W. Gibson, Virginia Polytechnic Inst. & State U, Blacksburg, VA, United States

15:00 C12_O21 **Porous Organic Polymers and Networks: Structures and Properties**

Abbie Trewin, University of Liverpool, Liverpool, United Kingdom

15:15 C12_O22 **Thermally induced morphology switching polymeric nanostructures**

Rachel O'Reilly, University of Warwick, Coventry, United Kingdom

15:30 C12_O23 **A Trimethylsilyl-labeled RAFT-Agent as NMR-Probe for Reversible Block Copolymer Self-Assembly**

Jan Weiss, University of Potsdam, Potsdam, Germany

15:45 C12_O24 **Recognition of proteins and peptides using amphiphilic polymer nano-assemblies**

S. Thayumanavan, UMass Amherst, Amherst, MA, United States

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

14:30 INVITED D14_O19 **From Well-defined Macromonomers to Sterically-Stabilized Latexes to Pickering Emulsions to Covalently**

Cross-linked Colloidosomes: Exerting Control Over Multiple Length Scales

Steven Armes, University of Sheffield, Sheffield, United Kingdom

- 15:00 D14_O20 **The synthesis and in-depth characterization of colloidosomes with tunable particle packing.**
Joris Salari, Polymer Chemistry, Eindhoven University of Technology, Eindhoven, Netherlands
- 15:15 D14_O21 **Nonaqueous Emulsions as a Tool for Novel Polymer Particles**
Robert Haschick, Max Planck Institute for Polymer Research, Mainz, Germany
- 15:30 D14_O22 **Octadecyl acrylate - methyl methacrylate block and gradient co-polymers from ATRP: Comb-like stabilizers for the preparation of micro- and nano-particles of poly(methyl methacrylate) and poly(acrylonitrile) by non-aqueous dispersion polymerization.**
Simon J. Holder, University of Kent, Canterbury, Kent, United Kingdom
- 15:45 D14_O23 **Nanoscale Control and Morphological Manipulation of Prussian Blue Coordination Polymers using Miniemulsion Periphery Polymerization (MEPP)**
Ronan McHale, University of Leeds, Leeds, United Kingdom

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: Robert Magerle, Chemnitz University of Technology, Germany

- 14:30 INVITED E17_O10 **Supramolecular hierarchical self-assemblies based on polypeptide complexes**
Olli Ikkala, Helsinki University of Technology/Aalto University, Department of Applied Physics, P.O. Box 5100, 02150 Espoo, Finland
- 15:00 E17_O11 **A New Supramolecular Route for Using Rod-Coil Block Copolymers in Photovoltaic Applications**
Raffaele Mezzenga, ETH Zurich, Zurich, Switzerland
- 15:15 E17_O12 **Rigid-Flexible Hinged Copolymers Designed for Crystallization Control**
Josee Brisson, Université Laval, Québec, Québec, Canada
- 15:30 E17_O13 **Shake 'N' Bake Blocks: Spontaneous Gradient Copolymers with Block Copolymer Properties**

Simon Harrisson, CSIRO Molecular and Health Technologies, Clayton,
VIC, Australia

15:45 E17_O14 **Incorporation of weak links into the backbone of water soluble polymers via redox polymerisation**
Emilia Kot, Imperial College London, London, United Kingdom

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

14:30 INVITED F19_O21 **Carbohydrates as Chemical Feedstock: Synthesis of Saccharide-Derived Functional Polymers**
Joachim Thiem, University of Hamburg, Hamburg, Germany

15:00 F19_O22 **Metathesis and other efficient (catalytic) approaches to renewable monomers and polymers**
Michael Meier, University of Potsdam, Potsdam, Germany

15:15 F19_O23 **Sustainable Polyethylene Terephthalate (PET) Mimics Derived from Lignin**
Stephen Miller, University of Florida, Gainesville, Florida, United States

15:30 F19_O24 **Aza- and phospho-Michael addition as key step for the straightforward synthesis of triglyceride-based renewable thermosets**
Juan Carlos Ronda, University Rovira i Virgili, Tarragona, Spain

15:45 F19_O25 **Semi-crystalline Polyesters from Plant Oils**
Dorothee Quinzler, University of Konstanz, Konstanz, Germany

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Mike Turner, University of Manchester, UK

14:30 INVITED G21_O19 **Bulk and Interfacial Voltage Modulation in Polymeric Semiconductor Devices**
Howard Katz, Johns Hopkins University, Baltimore, MD, United States

15:00 G21_O20 **Perturbation of Optical Absorption Energy in Low Bandgap Conjugated Polymers by the Incorporation of Rhenium Complexes**
Wai Kin Chan, The University of Hong Kong, Hong Kong, Hong Kong

- 15:15 G21_O21 **Magnetic properties of undoped thiophene-based conjugated polymers**
Steven Vandeleene, KULeuven, Heverlee, Belgium
- 15:30 G21_O22 **Development of Self-Organizing, Self-Directing Molecular Nanowires: Conjoined DNA-2,5-bis-(2-Thienyl)pyrrole Oligomers.**
Gary Schuster, Georgia Institute of Technology, Atlanta, Georgia, United States
- 15:45 G21_O23 **Solid-State Processing of Organic Semiconductors**
Natalie Stingelin, Imperial College, London, United States

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Peter Budd, University of Manchester, UK

- 14:30 G23_O20 **Aromatic Ionomers with Controlled Distribution of Ionic Substituents: A New Approach to High-Temperature Fuel-Cell Membranes**
Howard Colquhoun, University of Reading, Reading, Berkshire, United Kingdom
- 15:00 G23_O22 **Enhancement of proton transport by supramolecular nano-channels in N-heterocycle functionalized comb polymers**
S. Thayumanavan, UMass Amherst, Amherst, MA, United States
- 15:15 G23_O23 **Exploring the concept of intrinsic microporosity in polymers and oligomers.**
Neil McKeown, Cardiff University, Cardiff, United Kingdom
- 15:30 G23_O24 **Stable, Unstable and Reversible Porosity in Nanoporous Polymers**
Jens Weber, Max Planck Institute of Colloids and Interfaces, Department of Colloid Chemistry, Potsdam-Golm, Germany
- 15:45 G23_O25 **Synthesis of Luminescent Conjugated Microporous Polymers and Their Potential Applications for Photocatalysis**
Jiaxing Jiang, University of Liverpool, Liverpool, United Kingdom

Room: Alsh 2

Parallel 1: H27 Polymer Education

- 17:00 INVITED H27_O01 **International Polymer Education in the Internet Age**
Christopher Ober, Cornell University, New York, United States
- 17:15 INVITED H27_O02 **Implementing an IUPAC Pilot Research Program to foster networking between excellent young polymer scientists**
Werner Mormann, University of Siegen, Siegen, Germany
- 17:30 INVITED H27_O03 **Polymer education in Japan**
Mitsuo Sawamoto, Kyoto University, Kyoto, Japan
- 17:45 INVITED H27_O04 **French Education Committee for Polymer Teaching**
Bernadette Charleux, University Claude Bernard, Lyon 1, Lyon, France
- 18:00 INVITED H27_O05 **Growth and Impact of Polymer Education Programs Driven by ACS Polymer Divisions**
Dennis Smith, Clemson University, Clemson, United States
- 18:15 INVITED H27_O06 **Teaching Polymer Science in Schools**
Graham Coverdale, Brockworth Enterprise School, Brockworth, United Kingdom

TUESDAY 13 JULY 2010 - POSTER SESSIONS

Hall 5

A1: Polymers for Tissue Engineering and Regenerative Medicine

A1_P01 Highly-aligned Poly- γ -Glutamic Acid Scaffolds for Musculoskeletal Tissue Engineering Applications

Jessica Rose May, Imperial College London, London, United Kingdom

A1_P02 A New Type Branched Biodegradable Photopolymers For Cell Growth

Gülay Bayramoglu, Yalova University, Yalova, Turkey

A1_P03 Modified Poly(2-Hydroxyethyl Methacrylate) Scaffolds with Oriented Pores for Spinal Cord Injury Repair

Daniel Horák, Institute of Macromolecular Chemistry ASCR, Prague 6, Czech Republic

A1_P04 DELIVERY OF MESENCHYMAL STEM CELLS (MSCS) USING A CHEMICALLY DEFINED CELL CARRIER

Paula Eves, The Kroto Research Institute, University of Sheffield, Sheffield, United Kingdom

A1_P05 Formation and guest-release behaviour of supramolecular hydrogel core-shell particles

Mingyu Guo, Institute for Complex Molecular Systems; Eindhoven University of Technology, Eindhoven, Netherlands

A1_P06 Cryogels: Multi-featured scaffolds as novel carrier for the bioengineering applications.

Anuj Tripathi, Indian Institute of echnology Kanpur, Kanpur, Uttar Pradesh, India

A1_P07 PLGA and PCL-based scaffolds for bladder tissue engineering

Neil Cameron, Durham University, Durham, United Kingdom

A1_P08 Electrospinning Photocrosslinkable Methacrylate Monomers for Tissue Engineering

Farina Muhamad, Department of Materials, Imperial College London, London, United Kingdom

A1_P10 CO₂-phlic poly(vinyl acetate)-based block copolymer surfactants synthesis by RAFT and their applications on preparation of emulsion-templated poly(acrylamide)

Bien Tan, Huazhong University of Science & Technology, Wuhan, China

A1_P11 Cell Adhesion on Nanopatterned Fibronectin Surfaces

Dan Liu, University of Surrey, Guildford, Surrey, United Kingdom

A1_P12 Bio-fabrication and Evaluation of Nano-cellulose Artificial Skin

Lina Fu, College of Life Science & Technology, Huazhong University of Science & Technology, Wuhan, Hubei, China

A1_P13 Development of polymer systems for use as cellular scaffolds to treat retinal degeneration.

Andrew John Treharne, School of Chemistry, University of Southampton, Southampton, United Kingdom

A1_P14 Nanopatterning of Emulsion Templated Scaffolds

Priya Viswanathan, University of Sheffield, Sheffield, United Kingdom

A1_P16 Retinal pigment epithelial (RPE) cells growth on Elastin-like recombinamers substrates

Girish K. Srivastava, IOBA-University of Valladolid, Castilla Leon Regenerative Medicine and Cell Therapy Network Center, Valladolid, Spain

A1_P17 Preparation and Characterization of High Strength Poly(acrylic acid)-Chitosan-Silica Hydrogels

Hong-Ru Lin, Southern Taiwan University, Yung-Kang, Tainan, Taiwan

A1_P18 Chitosan-Based Nanofibrous Webs as Post-Operative Anti-Adhesion Membranes

Oh Hyeong Kwon, Department of Polymer Science and Engineering, Kumoh National Institute of Technology, Gumi, Korea, Republic of

A1_P19 Modification of electrospun biodegradable polymers for potential biomedical applications

Gisela Buschle-Diller, Auburn University, Auburn, AL, United States

A1_P20 Responsive Particles Gels for Reversible Building and Deconstruction of 3D Cell Environments

Racha Cheikh Al Ghanami, University of Nottingham, Nottingham, United Kingdom

A1_P21 Chemical cross-linking of collagen and elastin hydrolysates

Alina Sionkowska, Nicolaus Copernicus University, Torun, Poland

A1_P22 Highly Porous Scaffolds Based on Star-shaped Functional Poly(ϵ -caprolactone)

Stefan Theiler, RWTH Aachen University, Institute of Technical and Macromolecular Chemistry, Aachen, Germany

A1_P23 Synthesis and evaluation of thiolated poly(galacturonic acid) as an anti-adhesive film for preventing postsurgical adhesion
Hsiu-H Peng, Biomedical Engineering, Taipei, Taiwan

A1_P24 Photo curable molecules for use in biodegradable hybrid polymers
Matthias Beyer, University of Wuerzburg, Lehrstuhl fuer Chemische Technologie der Materialsynthese, Wuerzburg, Germany

A1_P25 PREPARATION OF POROUS POLYLACTIDE MATERIALS FOR BIOMEDICAL APPLICATIONS
Giada Lo Re, University of Palermo, Dipartimento di Ingegneria Chimica dei Processi e dei Materiali , Viale delle Scienze, ed. 6, 90128, Palermo, Italy

A1_P26 Fatigue of hydrogel fibers
Laurent Corté, Mines-ParisTech, Centre des Matériaux CNRS UMR7633, Evry, France

A1_P27 Nanofibrous composite scaffold made of resorbable polymers for bone tissue engineering.
Izabella Rajzer, ATH - University of Bielsko-Biala; Faculty of Materials and Environmental Sciences; Institute of Textile Engineering and Polymer Materials, Department of Polymer Materials, Bielsko-Biala, Poland

A1_P28 Bioactivity of modified PLA fibres
Izabella Rajzer, ATH - University of Bielsko-Biala, Faculty of Materials and Environmental Sciences; Institute of Textile Engineering and Polymer Materials, Department of Polymer Materials, Bielsko-Biala, Poland

A1_P29 Tissue engineering in bone defects: Development of biodegradable porous copolymer scaffolds stimulating cell growth and bone regeneration
Staffan Dänmark, Department of Fibre and Polymer Technology, School of Chemical Science and Engineering, Royal Institute of Technology, Stockholm, Sweden

A1_P30 Development of photocrosslinkable bioadhesives based on lactic acid
Dina Marques, Chemical Engineering Departement, University of Coimbra, Coimbra, Portugal

A1_P31 Synthesis, characterization and molecular architecture of electroactive and degradable polymers
Baolin Guo, Royal Institute of Technology, stockholm, Sweden

A1_P32 Protection of Amine-Functional Peptides with Novel Aryl Sulphonamides for Deprotection by the Enzyme Glutathione-S-

Transferase.

Katherine Brown, University of Sheffield, Sheffield, United Kingdom

A1_P33 Design of bioactive PCL scaffolds for ligament tissue engineering

Géraldine Rohman, Université Paris 13 - Institut Galilée, Villetaneuse, France

A1_P34 Surface modification of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) films for promoting adhesion of bladder urothelial cells

Isabel Quijada-Garrido, Instituto de Ciencia y Tecnología de Polímeros (ICTP), Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain

A1_P35 Micro- and nanofibres composed of polyaniline and polylactide

Jaroslav Janicki, University of Bielsko-Biala, Institute of Textile Engineering and Polymer Materials, Bielsko-Biala, Poland

Hall 5

A2: Polymer Networks and Responsive Polymers in the Life Sciences

A2_P01 Preparation of functional polycarbonate-based hydrogels by metal-free ring-opening polymerization

Laetitia Mespouille, University of Mons, Laboratory of Polymeric and Composite Materials, Mons, Belgium

A2_P02 Preparation of Poly(vinylamine-co-N-vinylamide)/DNA Polyion Complex

Wanpen Tachaboonyakiat, Chulalongkorn University, Bangkok, Thailand

A2_P04 Design and Fabrication of Nanocomposite Hydrogels with Controllable Structure and Properties

Meifang Zhu, Donghua University, Shanghai, China

A2_P05 Functional and responsive polymeric sequestering agents for radiological decontamination of aqueous solutions

David Crouch, University of Manchester, Manchester, United Kingdom

A2_P06 Silk as a Module for New Polymeric Biomaterials

Heather A. Currie, Tufts University, Medford, MA, United States

A2_P07 Macroporous sponge-like hydrogel scaffolds by cryogelation.

Irina Savina, Brighton University, Brighton, United Kingdom

A2_P08 Thermoresponsive Composite Gels from Self-Assembling Peptide and Polymer-Peptide Conjugate

Antons Maslovskis, University of Manchester, School of Chemical Engineering and Analytical Science and Manchester Interdisciplinary Biocentre, Manchester/Lancashire, United Kingdom

A2_P09 Development of Polysiloxane Biomaterials for Ophthalmic Applications

Xiaojuan Hao, CSIRO Molecular and Health Technologies, Clayton, Victoria, Australia

A2_P10 NON-LINEAL ORGANOMETALLIC MICROGELS SOLUBLE IN WATER

Antonio Romerosa, Universidad de Almeria, Almeria, Spain

A2_P11 Influence of poly(N-isopropylacrylamide) molecular weight and grafting density on the viscoelastic properties of thermoresponsive poly(N-isopropylacrylamide)/hyaluronan hydrogels synthesized via "click" chemistry and RAFT polymerization.

David Eglin, AO Research Institute Davos, Davos, Switzerland

A2_P12 Synthesis of Functional Methacrylate Based Polymers that Exhibit an Upper Critical Solution Temperature (UCST) in Water

Idriss Blakey, The University of Queensland, Brisbane, Queensland, Australia

A2_P13 Co-nonsolvency of zwitterionic phosphorylcholine-containing polymer brushes

Steve Edmondson, Loughborough University, Loughborough, United Kingdom

A2_P14 Physical studies of enzymatically cross-linked fish gelatin networks for tissue repair

Franziska Bode, King's College London, London, United Kingdom

A2_P15 Responsive Dendritic Polymeric Nanostructures with Multifunctional Groups via One-step Living/Controlled Synthetic Approach for Tissue Engineering and Drug Delivery Applications

Hongyun Tai, Bangor University, Bangor, United Kingdom

A2_P16 Novel tetraglycidyl amines and their thermosets: synthesis and characterization

Humaira Masood Siddiqi, quaid-i-Azam university, Islamabad, Pakistan

A2_P17 Synthesis and characterization of Polyimide-epoxy composites

Humaira Masood Siddiqi, quaid-i-Azam University, Islamabad, Pakistan

A2_P18 Photo-Mechanical Materials and Devices Using Azobenzene-Containing Polymers

Christopher Barrett, McGill University, Montreal, Canada

A2_P19 Poly(ethylene glycol) (PEG) Based Cryogels with Cleavable Disulfide Linkages

Tugba Dispinar, Ghent University, Department of Organic Chemistry, Polymer Chemistry Research Group, Ghent, Belgium

A2_P20 Thermo- and pH-sensitive hydrogels based on 2-(2-methoxyethoxy)ethyl methacrylate (MEO₂MA)

Rodrigo París, Instituto de Ciencia y Tecnología de Polímeros, Consejo Superior de Investigaciones Científicas (ICTP-CSIC), Madrid, Spain

A2_P21 Injectable Pluronic-PAA Liquid Suppository Using In Situ Gelling Technique

Hong-Ru Lin, Southern Taiwan University, Yung-Kang, Tainan, Taiwan

A2_P22 Magneto-responsive hydrogels based on maghemite/triblock terpolymer hybrid micelles

Stefan Reinicke, University of Bayreuth, Bayreuth, Germany

A2_P23 Magnetic and Thermo-responsive Composite pNIPAA/Fe₃O₄ prepared by modified frontal polymerization

Josué David Mota Morales, CINVESTAV Unidad Querétaro, Querétaro, Mexico

A2_P24 THE STATES OF WATER IN HYDROGELS SYNTHESIZED FROM DIEPOXY-TERMINATED POLY(ETHYLENE GLYCOL)S AND ALIPHATIC POLYAMINES

Bogdan Cursaru, POLITEHNICA University of Bucharest, Faculty of Applied Chemistry and Material Science, Department of Polymer Science and Technology, Bucharest, Romania

A2_P25 Enzyme-Responsive Polymeric Materials for Controlled Release and Sensing Applications

Paul Thornton, Dublin City University, Dublin, Ireland

A2_P26 Functional Polyester–Glycidylmethacrylate–Divinylbenzene (Pes-GMA-DVB) Microspheres by High Internal Phase Emulsion Approach

E. Hilal MERT, Yalova University, Yalova, Turkey

A2_P28 Shrinking Kinetics of Poly(N-isopropylacrylamide) Hydrogels Containing a Nonionic Surfactant

Hiroki Takeshita, Nagaoka University of Technology, Nagaoka, Niigata, Japan

A2_P29 Preparation of functional environmentally responsive supports

Alexandros Lamprou, ETH Zurich, Inst. f. Chemical & Bioengineering, Zurich, Switzerland

A2_P30 Dual-responsive thermo-crosslinked hydrogel based on methacrylate substituted polyphosphazene

Virginia P. Silva Nykänen, Aalto University of Science and Technology, Espoo, Finland

A2_P31 Enzymatically tuneable peptide surfaces for cell engineering

Mischa Zelzer, University of Strathclyde, Glasgow, United Kingdom

A2_P32 Thermoresponsive Terpolymers – Effect of Architecture, Composition and Molecular Weight on Thermoresponsive Ability.

Mark Ward, University of Hull, Hull, United Kingdom

A2_P33 Hydrogels for loading therapeutic proteins by electrophoretic method

Chun-Liang Yeh, Queensland University of technology, Brisbane, QLD, Australia

A2_P34 Sol-gel reactions as a novel method of synthesis of hydrogels to release silicone for scar remediation

Babak Radi, Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, QLD, Australia

A2_P35 Synthesis and characterization of different sized microgels with pH and thermo responsive properties

Divya Paloli, Adolphe Merkle Institute, Marly, Fribourg, Switzerland

A2_P36 Low-surface-energy polymer networks with self-replenishing ability: a dual experimental/ simulation approach.

Catarina Esteves, Eindhoven University of Technology, Eindhoven, Netherlands

A2_P37 Hybrid Core-shell Responsive Silica nanoparticles by NCA Ring Opening Polymerization

Tushar Borase, School of Chemical sciences, Dublin City University, Dublin, Ireland

A2_P38 Micropore switching for molecular screening with pH-responsive polymer brushes

G.W. de Groot, University of Twente, Enschede, Netherlands

A2_P39 Towards a double stimuli responsive bottle-brush with a redox responsive poly(ferrocenylsilane) backbone and temperature responsive poly(N-isopropylacrylamide) side chains

Edit Kutnyanszky, University of Twente, Enschede, Netherlands

Hall 5

C8: Click and Efficient Linking Chemistry in Polymer Synthesis

C8_P01 Probing the Reversibility of Ultra-Rapid RAFT-HDA Click Chemistry

Andrew Inglis, Karlsruhe Institute of Technology, Karlsruhe, Germany

C8_P02 A marriage of catalytic chain transfer polymerization (CCTP) and "double click" to glycopolymers

Yanzi Gou, University of Warwick, Coventry, United Kingdom

C8_P03 PMMA/AES blends prepared by *in situ* polymerization of methyl methacrylate

Fabiana Pires de Carvalho, UNICAMP, Campinas - SP, Brazil

C8_P04 Synthesis of PET-*b*-poly(lauryl acrylate)-*b*-PET (PET-*b*-PAL-*b*-PET) triblock copolymers from PET-*b*-PAL derivatives: comparison between click chemistry and other coupling methods

Livie Liénafa, Institut Charles Gerhardt, Montpellier, France

C8_P05 Photoswitchable triazole assisted 2-indolyl fulgimide polymer and its fluorescence lifetime investigation

Kannan Palaninathan, Anna University, Chennai, Tamil Nadu, India

C8_P06 Clicking Pentafluorostyrene Copolymers: Synthesis, Nanoprecipitation and Glycosylation

C. Remzi Becer, Friedrich-Schiller University of Jena, Jena, Germany

C8_P07 Modification and Cross-linking Reaction of Polymer with Unsaturated Linkages Exploiting Stable Nitrile N-Oxides

Yasuhito Koyama, Tokyo Institute of Technology, Tokyo, Japan

C8_P08 Polyurethane Chemistry Revisited.

Jan Devroede, Ghent University, Ghent, Belgium

C8_P09 Functionalisation of poly(di(ethylene glycol) methyl ether methacrylate) macromonomers via the thiol-ene click reaction

Guang-zhao Li, Department of Chemistry - University of Warwick, Coventry, CV47AL, United Kingdom

C8_P10 Semi-crystalline copolymers by thiol-ene coupling

Julie Prévost, Laboratoire Matière Molle et Chimie (ESPCI ParisTech), Paris, France

C8_P11 Contribution of "click chemistry" to the macromolecular engineering of aliphatic polyesters

Raphaël Riva, University of Liège, Liège, Belgium

C8_P12 Poly-Condensation of Benzyl Alcohols in the Presence of Nano-Preyssler Polyoxometalate, $[\text{NaP}_5\text{W}_{30}\text{O}_{110}]^{14-}$, as A Novel and Green Nanocatalyst

Fatemeh F. Bamoharram, Islamic Azad University, Mashhad-Branch, Department of Chemistry, Mashhad, Khorasan Razavi, Iran, Islamic Republic of

C8_P13 Facile Synthesis of a Bis(methylol)propionic Acid based Dendritic Polymer Library using Macrodendrons and Thiol-ene Click Chemistry

Marie V. Walter, Royal Institute of Technology (KTH), Stockholm, Sweden

C8_P14 Synthesis of disubstituted acetylenes based polymers and their post-polymerization modification via "click" chemistry.

Radoslava Sivkova, Charles University in Prague, Prague, Czech Republic

C8_P15 A highly efficient route to bio-active synthetic glycopeptides by combination of NCA polymerization and click reaction

Jin Huang, School of Chemical Sciences, Dublin City University, Dublin, Ireland

C8_P16 2-Methylamino-thioxanthen-9-one (TX-NMA) as a Novel Visible Photoinitiator

Sevnur Keskin Dogruyol, Yildiz Technical University Chemistry Department, Istanbul, Turkey

C8_P17 Well defined thiol end-functionalized polyethylene

Jérôme MAZZOLINI, Laboratory C2P2 - Team LCPP - Université Lyon I, Villeurbanne, France

C8_P18 Palladium Nanoparticles Supported on Modified Crosslinked Polyacrylamide: an Efficient Heterogeneous Catalyst for Stille Cross-Coupling Reaction

Bahman Tamami, Shiraz University, Shiraz, Fars, Iran, Islamic Republic of

C8_P19 Isocyanate Based Monoliths: A Novel, Highly Reactive and Versatile Chromatographic Monolith

Timothy Hughes, CSIRO Molecular and Health Technologies, Melbourne, Victoria, Australia

C8_P20 Microencapsulation of inorganic-phase-change materials for energy storage applications

Daniela Platte, University of Wuerzburg, Lehrstuhl fuer Chemische Technologie der Materialsynthese, Wuerzburg, Germany

C8_P21 Synthesis of a Smart Temperature Responsive Glycopolymer Based on Poly(Ethylene Glycol) via Click Chemistry

Ahmed Eissa, Department of Chemistry, Durham University, Durham, United Kingdom

C8_P22 Biodegradable polymers from renewable resources via thiol-ene addition

Oguz Turunc, University of Applied Sciences Emden/Leer, Emden, Germany

C8_P23 Modified nano-structured polyaniline: synthesis and characterization

Bakhshali Massoumi, payame noor university of Tabriz center, Tabriz, Iran, Islamic Republic of

C8_P24 Synthesis of peroxide-curable butyl rubber via Suzuki-Miyaura coupling reaction of halogenated butyl rubber with 4-vinylphenylboronic acid

Katsuhiko Takenaka, Nagaoka University of Technology, Nagaoka, Niigata, Japan

C8_P25 Synthesis and Characterisation of Well-Defined Oxazolone End-Functional Polymers via RAFT polymerisation and Orthogonal thiol-ene "Click" Chemistry

Martin Levere, Universite du Maine, Le Mans, France

C8_P26 Synthesis and Characterization of Polysulfones via Click Chemistry Polymerization

Mehmet Arif KAYA, Yildiz Technical University, Istanbul, Turkey

C8_P27 NORBORNENYL BASED RAFT AGENTS FOR THE PREPARATION OF FUNCTIONAL POLYMERS VIA THIOL-ENE CLICK CHEMISTRY

Pieter Espeel, Ghent University, Ghent, Belgium

C8_P28 Biodegradable Giant Amphiphiles

Kelly Velonia, University of Crete, Department of Materials Science and Technology, Heraklion - Crete, Greece

Hall 5

C10: Living Radical Polymerisation

C10_P01 Making Well-Defined Macromolecules with Nitron End Groups

Edgar H. H. Wong, Centre for Advanced Macromolecular Design, UNSW, Sydney, NSW, Australia

C10_P03 Lectin recognizable Biomaterials synthesized via Nitroxide Mediated Controlled Free-Radical Polymerization of a Methacryloyl Galactose Monomer

SAVE Maud, IPREM-Equipe de Physique et Chimie des Polymères, CNRS-University of Pau, PAU, France

C10_P04 Investigations on Different Verdazyl Derivatives for a Controlled Living Radical Polymerisation

Georgina Rayner, University of Warwick, Coventry, West Midlands, United Kingdom

C10_P05 Utilization of Nitrones in Polymer Synthesis: Molecular Weight Control, Blockcopolymers and Polymer Conjugation

Thomas Junkers, Universiteit Hasselt, Diepenbeek, Belgium

C10_P06 New Polymer Synthesis by Controlling the Kinetic Process of ATRP of AB* Inimers

Zi-Chen Li, College of Chemistry, Peking University, Beijing, China

C10_P07 Emulsion Polymerization of Methyl Methacrylate using the Reverse Iodine Transfer Polymerization (RITP) Technique

Eunhee Kim, Inha university, Inchoen, Korea, Republic of

C10_P08 Determination of the Rate Coefficients Associated with the RAFT Equilibrium via Time-Resolved EPR Spectroscopy after Laser Pulse Initiation

Wibke Meiser, Institut für Physikalische Chemie, Georg-August-Universität Göttingen, Göttingen, Niedersachsen, Germany

C10_P09 Microwave-Assisted Nitroxide-Mediated Radical Polymerization of Acrylamide in Aqueous Solution

Julien Rigolini, IPREM / EPCP, Université de Pau, Pau, France

C10_P10 Synthesis and Characterization of the (*n*-BA)-*b*-St Copolymers by Photopolymerization of NMP/ATRP Technique using Macroinitiator in the Microemulsion

Xiaoxuan Liu, Guangdong University of Technology, Guangzhou, Guangdong, China

C10_P11 A Low Temperature Alkoxyamine Designed for Use in Nitroxide-Mediated Miniemulsion Polymerization

Bencha Thongnuanchan, The University of Manchester, Manchester, United Kingdom

C10_P12 Quantitative Investigation of The Effect of AIBN on Polymer-end Structure in Organoheteroatom-mediated Living Radical Polymerization

Yasuyuki Nakamura, Kyoto University, Uji, Japan

C10_P13 New Hydrocarbon Surfactants for Dispersion Polymerisation in scCO₂

Nicholas Arrowsmith, University of Nottingham, Nottingham, United Kingdom

C10_P14 Water-Soluble Organo-Silica Hybrid Nanotubes Templated by Cylindrical Polymer Brushes

Markus Müllner, University of Bayreuth, Bayreuth, Germany

C10_P15 New Metal Complexes for Radical Polymerization of Vinyl Monomers

Regina Islamova, Institute of Organic Chemistry of Ufa Scientific Centre of the Russian Academy of Sciences, Ufa, Republic of Bashkortostan, Russian Federation

C10_P16 Design of functionalized PEG-based polymers by nitroxide-mediated polymerization for bioconjugation purposes

Julien Nicolas, Laboratoire de Physico-Chimie, Pharmacotechnie et Biopharmacie, UMR CNRS 8612, Univ. Paris-Sud 11, Châtenay-Malabry, France

C10_P17 Glycopolymer Grafted Microspheres

André Pfaff, University of Bayreuth, Bayreuth, Germany

C10_P18 Smart Hydrogels based on star-shaped diblock copolymers of N,N'-dialkylaminoethyl methacrylates

Alexander Schmalz, University of Bayreuth, Bayreuth, Germany

C10_P19 Chemical Modification of Polyaniline by N-Grafting of Polyethylacrylate Synthesized via ATRP

Bakhshali Massoumi, payame noor university, tabriz-east azarbijan, Iran, Islamic Republic of

C10_P20 Facing the problem of the bis(acetylacetonato)cobalt(II)-mediated radical polymerization of acrylates.

Marie Hurtgen, University of Liège, Liège, Belgium

C10_P21 Modified polydopamine-melanin coatings as initiators for surface-initiated ATRP

Bocheng Zhu, Loughborough University, Loughborough, United Kingdom

C10_P22 Toward Sequence Regulated Polymerization: Selective Radical Reactions with Designed Template Initiators

Shohei Ida, Kyoto university, Kyoto, Japan

C10_P23 Tandem Catalysis for Living Radical Polymerization and Transesterification: Precision Syntheses of Gradient Copolymers

Kazuhiro Nakatani, Kyoto University, Kyoto, Japan

C10_P24 The ESARA Process: A Bridge between Nitroxide-Mediated and RAFT Controlled Radical Polymerization Techniques

Arnaud Favier, UMR 5223 CNRS, Ingénierie des Matériaux Polymères and USR3010 CNRS-ENS Lyon, Laboratoire Joliot-Curie, Lyon, France

C10_P25 Star Polymers via Cross-Linking Linear Poly(amino acid) Macromonomers by (Controlled) Radical Polymerization

Fabrice Audouin, Dublin City University, Dublin, Ireland

C10_P26 Designing new functional and responsive amino polymers via RAFT polymerisation.

Pepa Cotanda, university of warwick, coventry, United Kingdom

C10_P27 Ring-Opening Polymerization of 1,3-Dehydroadamantanes

Sotaro Inomata, Tokyo Institute of Technology, Tokyo, Japan

C10_P28 Synthesis of Photoactive Polymer Matrices for Gold Nanoparticles as Non-Linear Optic Antennae

Ulrike Georgi, Leibniz Institut für Polymerforschung Dresden e.V., Dresden, Germany, Germany

C10_P29 Polymerization of 2-Hydroxyethyl Methacrylate Catalyzed by Cyclometalated Ru^{II} Compounds

Maria-Ortencia Gonzalez, Instituto de Investigaciones en Materiales, Mexico, D.F., Mexico

C10_P30 EVALUATION OF THE CATALYTIC ACTIVITY OF CYCLOMETALATED-RUTHENIUM(II) COMPLEX IN THE POLYMERIZATION OF STYRENE AND METHYL METHACRYLATE

Vanessa Martinez Cornejo, Instituto de Investigaciones en Materiales, Universidad Nacional Autonoma de México, Distrito Federal, Mexico

C10_P31 Synthesis and use of a new alkene-functionalized SG1-based alkoxyamine

Claire BERNHARDT, Université Pierre et Marie Curie (Paris VI), Paris, France

C10_P32 Atom Transfer Radical Polymerization (ATRP) copolymers in combination with gemini surfactants as diesel fuel wax dispersants

Norah Maithufi, Sasol Technology,R&D, Sasolburg, South Africa

C10_P33 Comb-type copolymers prepared via Atom Transfer Radical Polymerization as potential cold flow improvers in GTL diesel fuels

Norah Maithufi, Eindhoven University of Technology, Eindhoven, Netherlands

C10_P34 Surface-Initiated Polymerization and Characterization of Mixed Polymer Brushes of Poly(*N*-isopropylacrylamide) and Poly(methacrylic acid) on Gold

Xiaofeng Sui, Materials Science and Technology of Polymers, MESA+ Institute for Nanotechnology, University of Twente, Enschede, Netherlands

C10_P35 Controlled polymerisation of sulfonate-containing monomers via Atom Transfer Radical Polymerisation

Darren Campbell, Aston University, Birmingham, West Midlands, United Kingdom

C10_P36 Polymeric Membranes for the Treatment and Purification of Water

Catherine Fox, Department of Chemistry, National University of Ireland Maynooth, Maynooth, Co. Kildare, Ireland

C10_P37 A New Phosphine Oxide as Catalyst for Reversible Chain Transfer Catalyzed Polymerization (RTCP)

Arne Wolpers, Institute of Physical Chemistry, Göttingen, Germany

C10_P38 Synthesis and Characterisation of a six-arm star poly(styrene sulfonate) containing alpha-cyclodextrin core

Haruna Musa, Bayero University Kano, Kano, Nigeria

C10_P39 Preparation and Physical Properties of Copolymer based Carbon Nanotube Composites Prepared by 'Double Percolation' By Means of Controlled Radical Polymerisation in a Latex Using Reverse Addition Fragmentation Transfer Polymerisation and Reverse Atom Transfer Radical Polymerisation.

Gavin T H Hill, Free University of Brussels, Brussels, Belgium

Hall 5

C12: Supramolecular Polymers and Self Assembly

C12_P01 Polyoxazoline Thermoresponsive Micelles: Light and X-Ray Scattering Studies

Sergey Filippov, Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic

C12_P02 Polymeric nanoparticles stabilized by surfactants: kinetic studies

Sergey Filippov, Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic

C12_P03 The self-assembly of polyphiles - a novel class of amphiphiles. Static and kinetic studies.

Sergey Filippov, Institute of Macromolecular Chemistry AS CR, v.v.i., Prague, Czech Republic

C12_P04 Ionic Liquids and Ion Beams - Controlling and Quantifying Thin Polymer Film Surfaces

Richard Thompson, Durham University, Durham, United Kingdom

C12_P05 Semi-Crystalline Surface-Active Multi-End-Functional Polymer Blends

Richard Thompson, Durham University, Durham, United Kingdom

C12_P06 A versatile polymeric nucleating agent for isotactic polypropylene

Andrew Phillips, Monash University, Melbourne, Australia

C12_P07 Pickering emulsions stabilized by self-assembled colloidal particles of copolymers of P(St-alt-MAn)-co- P(VM-alt-MAn)

Xiaoya Liu, Jiangnan University, Wuxi, Jiangsu, China

C12_P08 Sportive Removal of Methylene Blue from Water using Polyaniline Nanotubes

Mohamad Ayad, Department of Chemistry, Faculty of Science, University of Tanta, Tanta, Egypt

C12_P09 Self-assembly of novel low molecular weight urethane/urea materials

Andrew Slark, Henkel UK Limited, Slough, United Kingdom

C12_P10 Self-Assembled Healable Materials Through a Combination of pi-pi Stacking and Hydrogen Bonding Interactions

Barnaby Greenland, University of Reading, Reading, Berkshire, United Kingdom

C12_P11 Formation of Block-Selected Polypseudorotaxanes from α -Cyclodextrin and Poly[(R,S)-3-hydroxybutyrate]-based Triblock Copolymers

Kerh Li Liu, Institute of Materials Research and Engineering, A*STAR (Agency for Science, Technology and Research), Singapore, Singapore

C12_P12 SUPRAMOLECULAR MOLECULAR NANOCAPSULES FROM LOW-MOLECULAR WEIGHT UREAS THROUGH INTERFACIAL ADDITION REACTION IN MINIEMULSION

Nathalie SINTES-ZYDOWICZ, Université de Lyon, Université Claude Bernard Lyon 1, VILLEURBANNE, France

C12_P13 AFM-based single molecule force spectroscopy of complementary quadruple hydrogen-bonded systems

Anika Embrechts, University of Twente, Enschede, Netherlands

C12_P14 The effect of cucurbit[n]uril on the morphology, solubility and the photophysical properties of conjugated polymers in an aqueous medium

DÖNÜS TUNCEL, BILKENT UNIVERSITY, ANKARA, Turkey

C12_P15 The Modulation of Photochromism in Polymer Matrices

Francesca Ercole, CRC for Polymers, Notting Hill, VIC, Australia

C12_P16 Hierarchical self-assembly structures of supramolecular monodendritic liquid-crystalline block copolymer

Wei-Tsung Chuang, National Synchrotron Radiation Research Center, Hsinchu, Taiwan

C12_P17 Quantifying polymer–DNA interactions through non-linear modelling of fluorescence data

Jonas Mindemark, Uppsala University, Uppsala, Sweden

C12_P18 Snapshots of Amyloid Aggregation by AFM Single-Molecule Statistical Analysis of b-Lactoglobulin Fibrils

Raffaele Mezzenga, ETH Zurich, Zurich, Switzerland

C12_P19 Design and synthesis of functional polymeric nanostructures utilizing CRP techniques and Metal-ligand interactions

Joseph Patterson, University of Warwick, Coventry, United Kingdom

C12_P20 A Computational Approach to Predicting Gas Diffusion in Organic Cages

Daniel Holden, University of Liverpool, Liverpool, United Kingdom

C12_P21 Porous organic cages for gas storage

Shan Jiang, University of Liverpool, Liverpool, United Kingdom

C12_P22 Metal Lined Nanoparticles - Core hollowing removal studies.

Helen Willcock, University of Warwick, Coventry, United Kingdom

C12_P23 Tailoring surface topology of multicomponent films built-up using Layer by layer self-assembly by adjusting interaction capacities

Daniel Portinha, IMP INSA Lyon Universite de Lyon, Villeurbanne, France

C12_P24 Design of fatty acid based supramolecular polymers and networks for large scale syntheses.

Damien Montarnal, ESPCI, Paris, France

C12_P25 Polyrotaxanes Based on Fluorene Copolymers for Micro/Optoelectronic Applications

Nathalie JARROUX, University of EVRY VAL D'ESSONNE, EVRY,
France

C12_P26 Structure and rheological properties of nano-ordered materials from PSAN-POE-PSAN block copolymers for membranes and solid electrolytes applications.

Emmanuel Beaudoin, Université de Provence, Marseille, France

C12_P27 Structural and Dynamical Properties of Hydrogen-Bonded Supramolecular Polymers

Eric Buhler, University Paris Diderot, Matière et Systèmes Complexes laboratory, Paris, France

C12_P28 Interpolymer polyelectrolyte complexes of macromolecules having different affinity to solvent

Valentina Vasilevskaya, Nesmeyanov Institute of Organoelement Compounds, Moscow 119991, Russian Federation

C12_P29 Evolution of molecular structure of polyaniline nanotubes during oxidation of aniline in acetic acid

Zuzana Rozlívková, Institute of Macromolecular Chemistry, AS CR, v.v.i., Prague, Czech Republic

C12_P30 Self-assembly of biopolymers in mixed solvents

Ilja Voets, University of Fribourg, Adolphe Merkle Institute, Marly, Switzerland

C12_P31 Controlling the Assembly of Nanorod/Block Copolymer Composites

Elina Ploshnik, The Institute of Chemistry and The Center for Nanoscience and Nanotechnology, The Hebrew University of Jerusalem, Jerusalem, Israel

C12_P32 Nanoparticle Organization Into Branched Morphologies Using Thin Films Of A Crystalline Polymer As Dynamic Templates

Mariela Pavan, The Center for Nanoscience and Nanotechnology, The Hebrew University of Jerusalem, Jerusalem, Israel

C12_P33 Temperature Induced Self-Assembly of Triple-Responsive Triblock Copolymers in Dilute Aqueous Solution.

Jan Weiß, University of Potsdam, Potsdam, Germany

C12_P34 Stepwise assembly of the same polyelectrolytes using host-guest interaction to obtain microcapsules with multiresponsive properties

Zhipeng Wang, Max-Planck Institute of Colloids and Interfaces, Potsdam, Brandenburg, Germany

C12_P35 Manipulation of a Helical Conformation of a Cationic Polythiophene through Supramolecular Complexation with a

Modified Polysaccharide

Tomohiro Shiraki, Institute of Systems, Information Technologies and Nanotechnologies (ISIT), Fukuoka, Japan

C12_P36 New Multi-stimuli Responsive Macromolecular Assemblies

Patrice Woisel, Univ Lille Nord de France, Université des Sciences et Technologies de Lille, UMET UMR CNRS 8207, ENSCL, Lille, France

C12_P37 The influence of the polymeric backbone on the folding of supramolecular based single-chain nanoparticles.

Patrick Stals, Eindhoven University of Technology, Eindhoven, Netherlands

C12_P38 To fold or not to fold in discotic based polymer chains: a combined spectroscopic and light scattering approach

Martijn Gillissen, Eindhoven University of Technology, Eindhoven, Netherlands

C12_P39 Parallel versus perpendicular lamellar-*within*-lamellar self-assembly of A-b-(B-b-A)_n-b-C ternary multiblock copolymer melts.

Vladimir Markov, RUG, Groningen, Netherlands

C12_P40 Synthesis and characterization of electrical sensitive smart polymer from *Gum ghatti* and Acrylamide

Balbir Singh Kaith, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India

C12_P41 Porphyrin polymer assisted self-assembly of unmodified fullerene C₆₀ and effect of polymer structure

Xuan Zhang, National Institute for Materials Science, Tsukuba, Japan

C12_P42 Self-organization of amphiphilic macromolecules with helical secondary structure.

Mikhail Glagolev, Moscow State University, Moscow, Russian Federation

C12_P43 Nanoparticles formed by poly(methacrylic acid)-*block*-poly(ethylene oxide)/N-dodecylpyridinium chloride complexes in aqueous solutions

Miroslav Stepanek, Department of Physical and Macromolecular Chemistry, Faculty of Science, Charles University, Prague, Czech Republic

C12_P44 Polymer-water interactions in association processes of Pluronics and their modification

Adriana Sturcova, Institute of Macromolecular Chemistry AS CR, v. v. i., Prague, Czech Republic

C12_P45 Dynamic Covalent Diblock Copolymers

Alexander Jackson, Newcastle University, Newcastle upon Tyne, United Kingdom

C12_P46 Formation of Star Polymers Containing Core Cross-Linked by Reversible Imine Bonds

Alexander Jackson, Newcastle University, Newcastle Upon Tyne, United Kingdom

C12_P47 Hydrogels from Aromatic Sugar Amphiphiles

Alison A. Edwards, Medway School of Pharmacy, Universities of Kent and Greenwich at Medway, Medway, Kent, United Kingdom

C12_P48 Investigating the Potential Of Polymer-Scaffolded Dynamic Combinatorial Libraries

Ben Murray, Newcastle University, Newcastle Upon Tyne, United Kingdom

C12_P49 Synergistic Hofmeister effect on the LCST of poly(2-isopropyl oxazoline)-based double hydrophilic block copolymers tuned by chaotropic salts.

Clara Valverde Serrano, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

C12_P50 VARIOUS AMPHIPHILIC BLOCK-COPOLYMER MORPHOLOGIES THROUGH SIMULTANEOUS CHAIN-GROWTH AND SELF-ASSEMBLING IN WATER

Stéphanie BOISSE, UPMC Univ. Paris 6, PARIS, France

C12_P51 Cubic to hexagonal phase transition induced by electric field

Petr Stepanek, Institute of Macromolecular Chemistry, Prague, Czech Republic

C12_P52 Structure of self-organized diblock copolymer solutions in partially miscible solvents

Petr Stepanek, institute of Macromolecular Chemistry, Prague, Czech Republic

C12_P53 Amyloid-like nanofibrils from self-assembly of peptides and peptide- PEG copolymers

Ge Cheng, School of Chemistry, University of Reading, United Kingdom

C12_P54 Self-assembly of difunctional halogen-bonding molecules: A new family of supramolecular liquid crystalline polymers induced by halogen bond

Jianwei Xu, Institute of Materials Research and Engineering, Singapore, Singapore

C12_P55 All-conjugated bis-terpyridines - building blocks of supramolecular polymers

Jan Svoboda, Charles University in Prague, Hlavova 2030, Prague, Czech Republic

C12_P56 Enzyme-triggered Self-assembled Semiconducting Pyrene- peptide Nanofibers

JunTae Kim, University of Strathclyde, Glasgow, United Kingdom

C12_P57 Biodegradable Cross-linking-De-Crosslinking Polycaprolactone based systems

Nathalie Mignard, Université de Lyon, F-42023, CNRS UMR 5223, Ingénierie des Matériaux Polymères, Université de Saint-Etienne, Saint-Etienne, France

C12_P58 Theoretical study of micelles with ion-containing cores

Elena Kramarenko, Physics Department, Moscow State University, Moscow, Russian Federation

C12_P59 Hollow Spherical Supramolecular Dendrimers

Sami Nummelin, Aalto University School of Science & Technology, Espoo, Finland

C12_P60 Temperature responsive nanospheres with bicontinuous internal structure from a semi-crystalline amphiphilic block copolymer.

Beulah McKenzie, University of Kent, Canterbury, Kent, United Kingdom

C12_P61 Towards control of the size and morphology of bicontinuous nanospheres from block copolymers of poly (ethylene oxide) and octadecyl methacrylate.

Beulah McKenzie, University of Kent, Canterbury, Kent, United Kingdom

Hall 5

D14: Polymer Colloids: from Synthesis to Applications

D14_P01 Synthesis of alkyd resin by incorporation of Colocynth oil in the formulae

Salem Al-Deyab, King Saud University, Riyadh, Saudi Arabia

D14_P02 Oil of citrullus colocynthis in alkyd processing and paint applications

Salem Al-Deyab, Petrochemical Research Chair, Chemistry Department, College of Science, King Saud University, Riyadh, Saudi Arabia

D14_P03 Space Science Applications for Conducting Polymer-based Latex Particles

Steven Armes, University of Sheffield, Sheffield, Yorkshire, United Kingdom

D14_P04 Glycosylated polyoxazolines and microparticles

Helmut Schlaad, Max Planck Institute of Colloids and Interfaces, Potsdam-Golm, Germany

D14_P05 POLYURETHANE NANOCAPSULES OBTAINED BY INTERFACIAL POLYADDITION IN MINIEMULSION CONTROL AND INFLUENCE OF THE SIZE ON THE CHEMICAL MICROSTRUCTURE

NATHALIE SINTES-ZYDOWICZ, Université de Lyon, Université Claude Bernard Lyon 1, VILLEURBANNE, France

D14_P06 Surfactant-free ab initio batch emulsion polymerization in the presence of macromolecular RAFT agents

Jutta Rieger, Laboratoire de Chimie des Polymères, UPMC and CNRS, UMR, Paris, France

D14_P07 Evaluation of emulsifying capability of water soluble sodium phosphorylated chitosan

Suchada Chongprakobkit, Chulalongkorn University, Bangkok, Thailand

D14_P08 Architecture of Polymer Particles Composed of Brush Structure and Construction of Colloidal Crystals

Koji Ishizu, Department of Organic Materials and Macromolecules, Tokyo Institute of Technology, Tokyo, Japan

D14_P09 Functionalised Latexes for the Preparation of Covalently Cross-linked Colloidosomes

Kate L Thompson, University of Sheffield, Sheffield, United Kingdom

D14_P10 High Polymer to Surfactant Ratio Microemulsion Polymerization of Styrene and Methyl Methacrylate

Raul Moraes, Queen's University, Kingston, Ontario, Canada

D14_P11 Evaluation of alternative comonomers for the production of HASE thickeners

Raul Moraes, Queen's University, Kingston, Ontario, Canada

D14_P12 Change of the Magnetic Force and the Thickness of Nickel Shell in the Poly(methyl methacrylate) / Nickel Magnetic Particles According to Change of the Particle Size

Jong Gon Bang, Inha university, Incheon, Korea, Republic of

D14_P13 Atom Transfer Radical Polymerization of Acrylic Acid by Use of Supercritical Carbon Dioxide as medium

Hideto Minami, Kobe University, Kobe, Japan

D14_P14 Emulsifier-Free, Organotellurium-Mediated Living Radical Emulsion Polymerization: Particle Formation

Yukiya Kitayama, Kobe University, Kobe, Japan

D14_P15 NMR study of temperature-induced phase transition in solutions of poly(N-isopropylmethacrylamide-co-acrylamide) copolymers

Jiri Spevacek, Institute of Macromolecular Chemistry AS CR, v.v.i., Prague, Czech Republic

D14_P16 Polystyrene core - polyglycidol shell microspheres (PS/PGL): synthesis, properties, particle assemblies and their suitability for medical diagnostic devices

Stanislaw Slomkowski, Center of Molecular and Macromolecular Studies, Polish Academy of Sciences, Lodz, Poland

D14_P18 Study on electrostatic self-assembly preparation and antimicrobial property of TiO₂/nature rubber nanocomposite

Ding Aiwu, Agricultural Product Processing Research Institute, Chinese Academy of Tropical Agriculture Science, Key Laboratory of Tropical Crop Products Processing of Agriculture Department, Zhanjiang, China

D14_P19 Towards direct synthesis of anisotropically-shaped polymer particles

Nancy Weber, Max-Planck-Institute of Colloids and Interfaces, Potsdam, Germany

D14_P20 Multi-responsive Block Copolymer and Its Consequent Variable Self-assembly Structures

Natthaporn Suchao-in, The Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand

D14_P21 Linear Amphiphilic Multiblock Copolymers and Amphiphilic Multiblock Copolymer Conetworks: Synthesis and Characterisation

Costas Patrickios, University of Cyprus, Nicosia, Cyprus

D14_P22 Utilization of different conductive polymer systems in nanowires dye-sensitized solar cells

Ahmed yousef, national research center, cairo, Egypt

D14_P23 High solids content emulsion copolymerization of styrene and n-butyl acrylate: experiments and modelling.

Reinaldo Giudici, Universidade de Sao Paulo, Sao Paulo, SP, Brazil

D14_P24 Emulsion copolymerization of vinyl acetate and n-butyl acrylate: mathematical model development and experimental validation.

Reinaldo Giudici, Universidade de São Paulo - Escola Politécnica, Sao Paulo, SP, Brazil

D14_P25 Adsorption of hydrophobically modified polymers intended as colloidal dispersants onto surfaces

Alexander Lincoln, University of Leeds, Leeds, United Kingdom

D14_P26 POLYELECTROLYTE COMPLEXES WITH POLYSACCHARIDE DERIVATES : EFFECT OF STOECHEOMETRY ON STRUCTURE AND SOLUBILITY

Didier Le Cerf, University of Rouen, Mont Saint Aignan, France

D14_P27 THERMO ASSOCIATING BEHAVIOR OF CELLULOSIC ETHER POLYMERS, COPOLYMERS AND MIXTURES IN DILUTE AQUEOUS MEDIA

didier le cerf, university of rouen, mont saint aignan, France

D14_P28 Synthesis and Characterization Of Conductive Polyaniline- Graft-Acrylic-Copolymers

Elcin Coskun, Centro de Investigación en Materiales Avanzados, Chihuahua, Chih., Mexico

D14_P29 Ultrasonically catalyzed emulsion polymerization of ethyl acrylate

Mohammed Bahattab, King Abdulaziz City for Science & Technology, Riyadh, Saudi Arabia

D14_P30 One-Pot Synthesis of Biocompatible Shell Cross-Linked Micelles and Nanocages via ATRP in 2-Propanol/Water Mixtures

Shinji Sugihara, Graduate School of Engineering, University of Fukui, Fukui, Japan

D14_P31 Synthesis of Biocompatible Poly(2-(methacryloyloxy)ethyl phosphorylcholine Nanolatexes via ATRP in Alcohol/Water Mixtures

Shinji Sugihara, Graduate School of Engineering, University of Fukui, Fukui, Japan

D14_P32 Characterisation of Poly-2-(methacryloyoxy)ethyl phosphorycholine – 2-(diisopropylamino)ethyl methacrylate Polymersome Formation

Russell Pearson, Department of Biomedical Science, University of Sheffield, Sheffield, South Yorkshire, United Kingdom

D14_P33 "Sweet" Polymersomes

Bahareh Fatemi, University Of sheffield, Sheffield, United Kingdom

D14_P34 Synthesis of Non-spherical Colloidal Particles via Cross-linked PMMA Particles

Bo Peng, Soft Condensed Matter, Debye Institute for Nanomaterials Science, Utrecht University, Utrecht, Netherlands

D14_P35 Accessing quantitative degrees of functionalization on poly(divinyl benzene) microspheres via solid-state NMR spectroscopy

Marianne Gaborieau, University of Western Sydney, Campbelltown, Australia

D14_P36 A study of the homogeneity of methanol/water/monomer mixture as a determining factor between polymerization modes of soap-free emulsion polymerization and dispersion polymerization

Samuel Lim, Inha University, Incheon, Korea, Republic of

D14_P37 Multifunctional Polymeric Micelles for Antiviral Treatment

YongSik Ahn, The Catholic University of Korea, 43-1 Yeokgok 2-dong, Wonmi-gu, Bucheon-si, Gyeonggi-do, Korea, Republic of

D14_P38 A microfluidic strategy towards anisotropic polymer particles produced by phase separation of monodisperse emulsion droplets

Nicholas Ballard, University of Warwick, Coventry, United Kingdom

D14_P39 Microfluidic fabrication of monodisperse anisotropic magnetic microcapsules

Gabit Nurumbetov, The University of Warwick, Coventry, United Kingdom

D14_P40 Quadruple hydrogen-bond reinforced waterborne coatings

Yunhua Chen, The University of Warwick, Coventry, United Kingdom

D14_P41 Synthesis of monodisperse polymer colloids and their mobility through porous media

Andrew Edwards, University of Warwick, Coventry, United Kingdom

D14_P42 Polymer latexes armored with silica nanoparticles made by Pickering emulsion polymerization.

Roberto Teixeira, University of Warwick, Coventry, United Kingdom

D14_P43 Polymer vesicles reinforced with an armor of nanoparticles

Rong Chen, University of Warwick, Coventry, United Kingdom

D14_P44 A New Method for Making Hard, No-VOC Waterborne Coatings

Argyrios Georgiadis, Department of Physics, Faculty of Engineering & Physical Sciences, University of Surrey, Guildford, GU2 7XH, United Kingdom

D14_P45 Mass transfer in miniemulsion (co-)polymerization

T.G.T. Jansen, Eindhoven University of Technology, Eindhoven, Netherlands

D14_P46 Attachment of cellulosic chains to particle surface in emulsion polymerization
Shicheng Li, University of Manchester, Manchester, United Kingdom

D14_P47 Comb-like Non-ionic Polymeric Macro surfactants: Synthesis, Characterisation and Evaluation as Emulsifiers
Theoni Georgiou, University of Hull, Hull, United Kingdom

D14_P48 Thermal energy storage nanocapsules by miniemulsion polymerization
Raquel Rodriguez, INASMET-TECNALIA, Donostia-San Sebastian/Gipuzkoa, Spain

D14_P49 Studies of Alkali-Soluble Resins as Colloid Stabilizers in Emulsion Polymerisation: Dissolution Behaviour
Paul Hunt, University of Manchester, Manchester, Lancashire, United Kingdom

D14_P50 Cryostructuring of Latexes
Irina Portnaya, Technion Israel Institute of Technology, Haifa, Israel

D14_P51 Impact of wetting behaviour of ceramic mould on latex glove dipping
Chee-Cheong HO, University Tunku Abdul Rahman, Petaling Jaya, Selangor, Malaysia

D14_P52 Synthesis and Characterisation of Porous PMMA for use in High Pressure Ceramic Casting
Catherine Amos, University Of Manchester, Manchester, United Kingdom

D14_P53 Fabrication and Analysis of Composite Colloidal Structures by the implementation of the Leidenfrost Phenomenon
Thomas Skelhon, University of Warwick, Coventry, United Kingdom

D14_P54 Shear Ordering in Polymer Photonic Crystals
Yusuke Imai, Cavendish Laboratory, University of Cambridge, Cambridge, United Kingdom

D14_P55 Concentration Dependence on gamma-Ray Polymerization of Aqueous Solutions of Cationic Surfactant Having Double Bond End Group
Yuichi Hirata, Shinshu University, Ueda-City, Nagano, Japan

D14_P56 Aerosol-based gas phase method for preparation of block copolymer hydrogel particles based on polystyrene-*block*-poly(*N*-isopropyl acrylamide)-*block*-polystyrene triblock copolymer: morphology, swelling and release properties

Antti Nykänen, Aalto University, Department of Applied Physics, Espoo, Finland

D14_P57 High solids content, soap-free, film-forming latexes stabilized by Laponite clay platelets

Thiago Rodriguez Guimarães, University of Sao Paulo - Laboratory of Polymers, Lorena (SP), Brazil

D14_P58 Giant Amphiphiles: From Synthesis to Potential Applications

Benjamin Le Droumaguet, UMR 8612, Université Paris Sud XI, Chatenay-Malabry, France

D14_P59 Effect of Surfactants on Shear-Induced Gelation and Gel Morphology of Strawberry-like Particles

Delong Xie, Chemical and Bioengineering, Zurich, Switzerland

D14_P60 Interdiffusion Across Symmetric and Asymmetric Interfaces Between Polymer Nanoparticles with Narrow Chain Size Distribution

S. Piçarra, Instituto Politecnico de Setúbal - Escola Superior de Tecnologia de Setúbal, Setúbal, Portugal

Hall 5

E16: Probing Single Macromolecules

E16_P01 Molecular Elasticity of a Mechanically-Linked Polymer

Perrine Lussis, University of Liege, Liege, Belgium

E16_P02 Investigation of Chain Rigidity of Surface Grafted PMMA by Full Atomistic Molecular Dynamics Simulations

Markus Gerd Fröhlich, University of Vienna, Department of Physical Chemistry, A-1090 Vienna, Austria

E16_P03 Free energy of polymers confined in spherical cavities

Tomas Bleha, Polymer Institute, Slovak Academy of Sciences, Bratislava, Slovakia

E16_P04 Structural modification of cyclic and linear macromolecules induced by chain stiffness

Zuzana Benková, Polymer Institute, Slovak Academy of Sciences, Bratislava, Slovak Republic, Slovakia

E16_P05 Conformation of Single Polymer Chain during the Extension and Relaxation Processes Studied by Scanning Near-Field Optical Microscopy

Toru Ube, Kyoto University, Kyoto, Japan

E16_P06 Network formation by free radical polymerization versus network formation by controlled radical polymerization / by thiol-ene 'click' chemistry: a *single-molecule view*

Karel Goossens, Katholieke Universiteit Leuven, Leuven, Belgium

E16_P07 High Temperature Single Molecule Fluorescence Imaging

Moritz Baier, University of Konstanz, Konstanz, Germany

E16_P08 Nanocomposite Ferrogel Behaviour Under an Applied Magnetic Field: A Single Molecule Diffusion Study.

Ateyyah AL-Baradi, The University of Sheffield, Sheffield, United Kingdom

E16_P09 Synthesis and Investigations of High Glass Transition Polycarbonates: Synthesis of Biphenylated Fluorene Monomers and Their Polycarbonates

David Boyles, South Dakota School of Mines and Technology, Rapid City, South Dakota, United States

Hall 5

G23: Membranes, Nanoporous Polymers and Fuel Cells

G23_P01 Structural and transport studies on polymer (PEO+IL) membranes: Evidence of complexation

Rajendra Singh, Banaras Hindu University, Varanasi 221 005, U.P., India

G23_P02 Surface Modification of Polysulfone Membranes for a Simultaneous LDL- Apheresis and Hemodialysis

Xiao-Jun Huang, Zhejiang University, Hangzhou, China

G23_P03 Effect of SiO₂ nanoparticle size on the permeability of polypropylene and polyamide-6 nanocomposites

Vivianne Dougnac, Universidad de Chile, Santiago, metropolitana, Chile

G23_P04 Preparation and evaluation of epoxidized styrene-butadiene-styrene block copolymer membrane for wound dressing

Jen Ming Yang, Chang Gung University, Tao Yuan, Taiwan

G23_P05 Fluorinated polyvinyl alcohol and polycaprolactone based polyurethane membranes for gas separation

Maryam Esteki, Tarbiat Modares University, Tehran, Iran, Islamic Republic of

G23_P06 Synthesis of nanoporous poly(vinylcatechol-co-divinylbenzene) resins and application to metal retention

Catherine Branger, MAPIEM Laboratory - Université du SUD Toulon
Var, La Valette du Var, France

G23_P07 Transport properties of asymmetric dense PVDF hollow fibre membranes for potential use in gas, vapour and organic liquid separations.

Johannes Carolus Jansen, Institute on Membrane Technology, ITM-CNR, Rende (CS), Italy

G23_P08 Graft Polymerization by γ -Radiation on Fluorinated based Microfiltration Membranes

Etienne FLEURY, Université de Lyon, INSA, IMP/LMM UMR 5223, Villeurbanne, France

G23_P09 Palladium nanoparticle incorporation in conjugated microporous polymers by supercritical fluid processing

Tom Hasell, University of Liverpool, Liverpool, United Kingdom

G23_P10 Co-continuous Morphology in PVDF/PEO Blends

Virgile Daux, Université de Saint-Etienne, Saint-Etienne, France

G23_P11 Effect of synthesis procedure on film-forming properties of PIM-1

Christopher Mason, university of manchester, manchester, United Kingdom

G23_P12 Graft polymerization of Acrylic acid onto Cold Plasma activated Esterification of Cellulose for Improvement of hydrophilic and Moisture Absorption

Ko-Shao Chen, Department of Materials Engineering, Tatung University, Taipei, Taiwan

G23_P14 Cationic pollution effects on properties in perfluorinated sulfonic acid membranes

Lionel Flandin, Université de Savoie, Le bourget du Lac, France

G23_P15 Fluorine Containing Proton Conductive Copolymers

Sebnem Inceoglu, Istanbul Technical University, Istanbul, Turkey

G23_P16 Novel Phosphonated Poly(arylene ether)s as Potential High Temperature Proton conducting Materials

Ebrahim Abouzari-Lotf, Membrane Research Group, Iranian Academic Center For Education , Culture & Research (ACECR), Tarbiat Moalem Branch, Tehran, Iran, Islamic Republic of

G23_P17 Novel Phosphonated-Sulfonated Ionomer as Potential Polymer Electrolyte Membrane Material

Ebrahim Abouzari-Lotf, Young Researchers Club, Islamic Azad University, North Tehran Branch, Tehran, Iran, Islamic Republic of

G23_P18 "Green" crazing of polymers in supercritical carbon dioxide

Elena Trofimchuk, Department of Chemistry, M.V. Lomonosov Moscow State University, Moscow, Russian Federation

G23_P19 The effect of Nano hydroxyl apatite on the permeability and selectivity of CO₂, O₂, N₂ in polyurethane membranes

Ali Poorkhalil, Iran Polymer and Petrochemical Institute, Tehran, Iran, Islamic Republic of

G23_P20 Studies of the thermal behavior of perfluorinated sulfonic acid membranes polluted by Potassium(I), Calcium(II) and Iron(III)

Eddy Moukheiber, LMOPS-UMR 5041, Le bourget du lac, France

G23_P21 In-situ macroscopic characterization tool to detect defects in proton exchange membrane used in Fuel Cells (PEMFC)

Gilles De Moor, CNRS-UMR 5041-LMOPS, Le bourget du lac, France

G23_P22 Intrinsically Microporous Polyimides - Structure-Porosity Relationships Studied by Gas Sorption and X-ray Scattering

Nicola Ritter, Max Planck Institute of Colloids and Interfaces, Department of Colloid Chemistry, Potsdam, Germany

G23_P23 New highly permeable polymers based on silicon-containing norbornenes: synthesis, membrane and mechanical properties

Maxim Bermeshev, A.V. Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russian Federation

G23_P24 Hydrophobic, transparent polyimide hybrid films fabrication via chemical and physical methods

Teng Yuan Lo, National Chiao Tung University, Hsin-chu, Taiwan

G23_P25 Single-ion polymer electrolytes with highly delocalized negative charge for lithium batteries

Rachid MEZIANE, Université de Picardie - Jules Verne, AMIENS, France

G23_P26 Structural Characterization of Polymers of Intrinsic Microporosity Using X-Ray Scattering Methods

Amanda McDermott, Pennsylvania State University, University Park, PA, United States

G23_P27 New Highly Magnetic Microspheres Based on Hypercrosslinked Poly(styrene-co-divinylbenzene)

Petr Šálek, Institute of Macromolecular Chemistry AS CR, Prague, Czech Republic

G23_P28 AROMATIC POLYSULFONE MEMBRANES FOR DIRECT METHANOL FUEL CELL APPLICATIONS

David Chappell, University of Reading, Reading, Berkshire, United Kingdom

G23_P29 Alternative synthetic route to PIM-1

Louise Maynard-Atem, University of Manchester, Manchester, United Kingdom

G23_P30 NANOSTRUCTURAL ANALYSIS OF PROTON CONDUCTING ZIRCONIUM OXIDE-SPEEK HYBRID MEMBRANES FOR DIRECT ALCOHOL FUEL CELLS

Ailton Gomes, Instituto de Macromoléculas Prof. Eloisa Mano (IMA-UFRJ), Rio de Janeiro, RJ, Brazil

G23_P31 Thermal and Conducting Behaviour of Nanostructured composites of Mesoporous Niobium Oxide/Naphthalene Sulfonate Resin

Marcos Dias, Instituto de Macromoléculas Professora Eloisa Mano, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro, Brazil

G23_P32 Composite Membranes of Zeolitic Imidazolate Frameworks (ZIFs) in a Polymer of Intrinsic Microporosity.

Alexandra Bushell, The University of Manchester, Manchester, United Kingdom

G23_P33 Novel thermally rearrangeable polyimide membrane based on a polymer of intrinsic microporosity (PIM)

Hosna Shamsipour, University of Manchester, Manchester, United Kingdom

G23_P34 Pore size distribution (PSD) in Polymers of intrinsic microporosity (PIMs)

Nhamo Chaukura, University of Manchester, Manchester, United Kingdom

G23_P35 Influence of modified silica on nanostructure of composite membrane based on sulfonated PEEK for use in fuel cells

Ailton Gomes, Instituto de Macromoléculas/UFRJ, Rio de Janeiro, Brazil

G23_P36 PVA/PWA/DTPA HYBRID MEMBRANES FOR DIRECT ETHANOL FUEL CELLS (DEFC) APPLICATIONS

Ailton Gomes, Instituto de Macromoléculas, Univ. Fed. Rio de Janeiro, Rio de Janeiro, RJ, Brazil

G23_P37 Control of Microcellular Foaming of bulk Commodity Amorphous Polymers in supercritical CO₂ and Nano-Structuration of CO₂-philic Copolymers

Michel DUMON, LCPO IPB Université Bordeaux 1, PESSAC, France

G23_P38 Perfluoropolymer-based composite membranes: preparation and gas transport properties.

Johannes C. Jansen, Institute on Membrane Technology, ITM-CNR, Arcavacata di Rende (CS), Italy

G23_P39 Structure Directing Effects in Cross-linked Hybrid Carbosilane-siloxane Systems.

Anna Kowalewska, Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Lodz, Poland

G23_P40 Polymers of Intrinsic Microporosity for hydrogen purification.

Mariolino Carta, Cardiff University, Cardiff, United Kingdom

G23_P41 Polymers of intrinsic microporosity (PIMs) derived from hexaphenylbenzene-based monomers

Rhys Short, Cardiff University, Cardiff, United Kingdom

G23_P42 Polymers of intrinsic microporosity (PIMs) derived from bowl-shaped monomers.

James Vile, Cardiff University, Cardiff, United Kingdom

G23_P43 Polymers of intrinsic microporosity (PIMs) derived from novel 1,1-spirobisindanes.

Yulia Rogan, Cardiff University, Cardiff, United Kingdom

G23_P44 Polymers of Intrinsic Microporosity (PIMs) for Carbon Capture

Matthew Croad, Cardiff University, Cardiff, United Kingdom

G23_P45 Organic Molecules of Intrinsic Microporosity

Rupert Taylor, Cardiff University, Cardiff, United Kingdom

G23_P46 Polymers of intrinsic microporosity (PIMs) derived from fluorinated biphenyls

Kadhun Msayib, Cardiff University, Cardiff, United Kingdom

G23_P47 Dendrimers of Intrinsic Microporosity

Jonathan Walker, Cardiff University, Cardiff, United Kingdom

G23_P48 Applications of Block Copolymers: Membranes through Self-Assembly

Adriana Boschetti-de-Fierro, Institute of Polymer Research, GKSS Research Centre Geesthacht GmbH, Geesthacht, Germany

G23_P49 Bi-continuous Nano-scale Morphology of PVDF-HFP Porous Membrane from Dense Film of PVDF-HFP/PMMA Blend

Dar-Jong Lin, Tamkang University, Chemical and Materials Engn. Dept., Tamsui, Taipei County, Taiwan

G23_P50 Controlling porosity in conjugated microporous polymers
Robert Dawson, University of Liverpool, Liverpool, United Kingdom

G23_P51 Preparation of SAPO-34/Polyimide Mixed Matrix Membranes

Giovanni Golemme, Department of Chemical Engineering and Materials of the University of Calabria, and INSTN Consortium, Rende (CS), Italy

G23_P52 Study of CO₂ Transport in ZIF-8/Polysulfone Membranes by Permeation, Sorption and PFG NMR Techniques

Mar López-González, Instituto de Ciencia y Tecnología de Polímeros. CSIC, Madrid, Madrid, Spain

G23_P53 Grand Canonical Monte Carlo Simulations of Adsorption of Carbon Dioxide and Methane in Regular and Carbonyl Substituted PIM-1

Gregory Larsen, The Pennsylvania State University, University Park, PA, United States

WEDNESDAY 14 JULY 2010 - ORAL SESSIONS

Clyde Auditorium

Plenary: Jean Frechet

PLEN_04 **Functional Polymers: from Design to Applications**
Jean M. Frechet, UC Berkeley, Berkeley, United States

Room: Forth

Parallel 1: A2 Polymer Networks and Responsive Polymers in the Life Sciences

Session Chair: Rein Ulijn, University of Strathclyde, UK

09:45 INVITED A2_O10 **Thermosensitive Core-Shell Microgels: Synthesis, Characterization and Applications in Catalysis**
Matthias Ballauff, Helmholtz-Zentrum Berlin, Berlin, Germany

10:15 A2_O11 **Naphthalene-Dipeptides as Low Molecular Weight Hydrogelators**
Dave Adams, University of Liverpool, Liverpool, United Kingdom

10:30 A2_O12 **Synthesis and self-assembly of well-defined block copolypeptides**
Neil Cameron, Durham University, Durham, United Kingdom

10:45 A2_O13 **A Spectroscopic Approach to Understanding the Transport Properties of Small Molecules through Amphiphilic Networks**
Chris Sammon, Sheffield Hallam University, Sheffield, United Kingdom

Room: Dochart 1 & 2

Parallel 2: A4 Polymers in Therapeutics: Polymer Nanomedicines

09:45 INVITED A4_O01 **Nanomedicines with Polymers - from Drug Delivery Morphologies to Stem Cell Differentiation**
Dennis Discher, University of Pennsylvania, Philadelphia, PA, United States

10:15 A4_O02 **Efficient Intracellular delivery of bioactive molecules using pH sensitive polymersomes**
Marzia Massignani, University of Sheffield, Sheffield, United Kingdom

10:30 A4_O03 **RAFT-Synthesized Polymer Therapeutics for Gene Silencing**

Volga Bulmus, The University of New South Wales, Sydney, Australia

10:45 A4_O04 **Poly (gamma-Glutamic Acid): a Biodegradable, Biocompatible and Naturally Produced Polymer as a Promising Candidate for Regenerative Medicine Applications.**

Cristina Gentilini, Imperial College London, London, United Kingdom

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: J. den Doelder, Dow Benelux BV, The Netherlands

09:45 KEYNOTE B6_O14 **Rheology as an Ultra-Sensitive Polymer Characterization Tool**

Ronald Larson, University of Michigan, Ann Arbor, MI, United States

10:30 B6_O15 **Randomly branched polymer melts: from reactions to rheology**

Daniel Read, University of Leeds, Leeds, United Kingdom

10:45 B6_O16 **Hostalen ACP - From optimized process to tailor-made HDPE products**

Iakovos Vittorias, R&D Basell Polyolefine GmbH-LyondellBasell Industries, Frankfurt am Main, Germany

Room: Alsh 1

Parallel 4: C9 Dendrimers and Hyperbranched Polymer Synthesis

Session Chair: Wayne Hayes, University of Reading, UK

09:45 KEYNOTE C9_O01 **Putting the divergent growth concept to the test: The largest synthetic molecule with structure precision**

A. Dieter Schlüter, ETH Zurich, Zurich, Switzerland

10:30 C9_O02 **Commercial branched addition polymers: Their use in viscosity-reducing applications and as dispersants.**

Paul Findlay, Hydra Polymers Ltd, Liverpool, United Kingdom

10:45 C9_O03 **Inorganic/Organic Hybrid Dendrimers: A Concise Synthesis of Cyclotriphosphazene Containing Dendrimers by the**

Convergent Route

Barnaby Greenland, University of Reading, Reading, United Kingdom

Room: Lomond

Parallel 5: C10 Living Radical Polymerisation

09:45 INVITED C10_O23 **Title to be confirmed**

Alan Rowan, Radboud University, Nijmegen, Netherlands

10:15 C10_O24 **Self Healing Polymers Prepared via Living Radical Polymerisation**

Jay Antony Syrett, University of Warwick, Warwickshire, United Kingdom

10:30 C10_O25 **Investigating Polymer Structure by Gel Permeation Chromatography**

Ben MacCreath, Varian, Inc., Church Stretton, United Kingdom

10:45 C10_O26 **System Design toward Sequence Regulated Polymerization**

Makoto Ouchi, Kyoto University, Kyoto, Japan

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals through to Applications

Session Chair: Joao Cabral, Imperial College London, UK

09:45 KEYNOTE D13_O01 **Designing Communicating Colonies of Biomimetic Microcapsules**

Anna C. Balazs, University of Pittsburgh, Chemical Engineering Department, Pittsburgh, PA, United States

10:30 D13_O02 **Temperature and magnetic field induced changes in liquid crystal polymer vesicles**

Annie Brûlet, Laboratoire Léon Brillouin, CEA CNRS UMR12, CEA, Saclay, France

10:45 D13_O03 **Periodic Patterns produced in Magnetically Coupled Phase Separation in Polymer-Solvent-Nanoparticle mixtures.**

Easan Sivaniah, Cambridge University, Cambridge, United Kingdom

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

09:45 INVITED D14_O24 **Thermodynamics of polyelectrolyte complexes and the colloids made of them** Martien A. Cohen Stuart
Martien A. Cohen Stuart, Wageningen University, Wageningen, Netherlands

10:15 D14_O25 **Determination of Interaction Potentials in Colloidal Monolayers using the Inversion of 2D Pair Correlation Functions**
Adam Law, The University of Hull, Kingston Upon Hull, East Yorkshire, United Kingdom

10:30 D14_O26 **Accumulation of Impurity Particles to the Crystal Grain Boundaries of Charged Colloids.**
Koki Yoshizawa, Nagoya City University, Nagoya, Japan

10:45 D14_O27 **Self Segregation in Water Borne Latex Coatings**
Richard Trueman, University of Cambridge, Cambridge, United Kingdom

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: Andrei Zvelindovsky, University of Central Lancashire, UK

09:45 KEYNOTE E17_O15 **Making Polymers Swim.**
Anthony Ryan, The University Of Sheffield, Sheffield, South Yorkshire, United Kingdom

10:30 E17_O16 **Functional Materials in Self-Assembled Block Copolymer "Playground": New Approaches toward Organic Nonvolatile Memory and Optical Sensor**
Takeo Suga, Waseda University, Tokyo, Japan

10:45 E17_O17 **Linear Di-, ABA Tri-, Multi- and Star-block Copolymers of Styrene and Vinyl Pyridine: Synthesis by RAFT Polymerisation and Self-assembly in Solution and in the Bulk**
Mirela Elena Zamfir, University of Cyprus, Nicosia, Cyprus

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

09:45 INVITED F19_O26 **Cross-linked Poly(trimethylene carbonate-co-L-lactide) as a Biodegradable, Elastomeric Scaffold for Vascular Graft Generation**

Andrew Whittaker, University of Queensland, St Lucia, QLD, Australia

10:15 F19_O27 **Analysis of degradation products crucial for testing of degradable polymers**

Ann-Christine Albertsson, Kungliga Tekniska Högskolan, Stockholm, Sweden

10:30 F19_O28 **Effects of Interacting Poly(3-hydroxybutyrate) on Crystalline Morphology of Stereocomplexing Poly(L-Lactic Acid) and Poly(D-Lactic Acid)**

Ling Chang, Department of Chemical Engineering, National Cheng Kung University, Tainan, Taiwan

10:45 F19_O29 **High performance biodegradable (bio)polymers by tailored reactive extrusion**

Philippe Dubois, University of Mons - UMONS, Mons, Belgium

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Natalie Stinglen, Imperial College London, UK

09:45 INVITED G21_O05 **Chemical Design of Functional Oligomers and (Co)polymers for Electronics Applications**

Ullrich Scherf, Bergische Universität Wuppertal, D-42097 Wuppertal, Germany

10:15 G21_O25 **Coarse-grained computer simulations of polymer/fullerene bulkheterojunctions for photovoltaic applications**

Roland Faller, University of California, Davis, Davis, United States

10:30 G21_O26 **New Redox Stable Low Band Gap Conjugated Polymer Based on an EDOT-BODIPY-EDOT and EDTT-BODIPY-EDTT Repeat Unit for Organic Photovoltaic Cells.**

Diego Cortizo, University of Strathclyde, Glasgow, Scotland, United Kingdom

10:45 G21_O27 **Spanning the Spectrum: Enhancing Charge Transfer Emission from Donor-Acceptor Co-Polymers**

Kathryn Moss, Durham University, Durham, United Kingdom

Room: Alsh 2

Parallel 11: G23 Membranes, Nanoporous Polymers and Fuel Cells

Session Chair: Andrew Cooper, University of Liverpool, UK

09:45 INVITED G23_O26 **Synthesis of porous engineering plastics and carbon nitride polymers**

Markus Antonietti, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

10:15 G23_O27 **Co-crystalline and Nanoporous Polymer Phases**

Gaetano Guerra, University of Salerno, Salerno, Italy

10:30 G23_O28 **Nanoporous Polymer Nanoparticles Prepared via a Facile Method for Hydrogen Storage Application**

Bien Tan, Huazhong University of Science & Technology, Wuhan, China

10:45 G23_O29 **Construction of Glycosylated Surfaces for Microporous Polypropylene Membranes: An Overview**

Zhi-Kang Xu, Key Laboratory of Macromolecular Synthesis and Functionalization (Ministry of Education), Department of Polymer Science and Engineering, Hangzhou 310027, China

Room: Forth

Parallel 1: A3 Colloids and Surfaces for Biomaterials Applications

Session Chair: Brian Saunders, University of Manchester, UK

11:30 KEYNOTE A3_O01 **Nanostructured Colloidal Particles of Self-Assembled Amphiphiles as Drug Delivery and Medical Imaging Agents**

Calum Drummond, CSIRO Materials Science and Engineering, Clayton, Victoria, Australia

12:15 A3_O02 **Silk-based gene delivery via cell membrane-destabilizing or tumor-homing peptides**

Keiji Numata, Tufts University, Medford, MA, United States

12:30 A3_O03 **The use of biomimetic 3D hydrogel scaffold as a tool to study cellular migration and as an aid to drug discovery.**

Cheng-Hwa Raymond Kuo, University of Cambridge, Cambridge, United Kingdom

12:45 A3_O04 **Biocompatible polymersome formation using microfluidic platforms**

Luke Brown, The University of Sheffield, Sheffield, Yorkshire, United Kingdom

Room: Dochart 1 & 2

Parallel 2: A4 Polymers in Therapeutics: Polymer Nanomedicines

- 11:30 INVITED A4_O05 **Polymersome-based artificial organelles**
Jan van Hest, Radboud University Nijmegen, Nijmegen, Netherlands
- 12:00 A4_O06 **Exploiting Supercritical Carbon Dioxide To Create Novel Polymeric Drug Delivery Devices**
Steven Howdle, University of Nottingham, Nottingham, United Kingdom
- 12:15 A4_O07 **"One pot" loading of hydrophilic model drugs in polymersomes using co-flow microfluidic chip.**
Jean-François Le Meins, University of Bordeaux, ENSCBP LCPO (UMR CNRS 5629), PESSAC, France
- 12:30 A4_O08 **POLYMERIC NANOREACTORS FOR ENZYME THERAPY IN OXIDATIVE STRESS**
Cornelia G. Palivan, University of Basel, Basel, Switzerland
- 12:45 A4_O09 **Photo-responsive polymer vesicles: bursting and wrinkling**
Min-Hui Li, Institut Curie, CNRS, Université Pierre & Marie Curie, Laboratoire Physico-Chimie Curie, UMR168, Paris, France

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Christophe Boisson, CNRS, France

- 11:30 INVITED B6_O17 **Synthesis of linear and branched polyolefins with controlled microstructures using two single-site catalysts**
Joao Soares, University of Waterloo, Waterloo, Ontario, Canada
- 12:00 B6_O18 **Morphology and mechanical properties of isotactic polypropylene/olefin block copolymer blends: influence of octene content in the soft segment**
Dujin Wang, Beijing National Laboratory for Molecular Sciences, Key Laboratory of Engineering Plastics, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

12:15 B6_O19 **Iron Procatalysts for Ethylene Polymerization and Oligomerization**

Wen-Hua Sun, Chinese Academy of Sciences, Beijing, China

12:30 B6_O20 **Insertion polymerization of polar vinyl monomers**

Stefan Mecking, University of Konstanz, Konstanz, Germany

12:45 B6_O21 **Activation of homo- and copolymerizations of (meth)acrylates and styrene using neutral nickel complexes: the radical pathway**

Vincent MONTEIL, Université de Lyon / CNRS / ESCPE Lyon, Villeurbanne, France

Room: Alsh 1

Parallel 4: C9 Dendrimers and Hyperbranched Polymer Synthesis

Session Chair: Steve Rannard, University of Liverpool, UK

11:30 INVITED C9_O04 **Dendritic molecules as enzyme mimics and protein-protein inhibitors**

Lance Twyman, University of Sheffield, Sheffield, United Kingdom

12:00 C9_O05 **Disassembly of dendrimer based amphiphilic nanocontainers using a protein trigger**

S. Thayumanavan, UMass Amherst, Amherst, MA, United States

12:15 C9_O06 **A facile approach for the bifunctionalization of dendritic structures**

Michael Malkoch, The Royal Institute of Technology, Stockholm, Sweden

12:30 C9_O07 **In Situ Formation of Platinum Nanoparticles by Internally Isopropanol-Modified Poly(amido amine) Dendrimers**

Chih-Chien Chu, Chung Shan Medical Univ., Taichung, Taiwan

12:45 C9_O08 **The largest ever synthesized, structure-defined macromolecule**

Baozhong Zhang, ETH Zürich, Zürich, Switzerland

Room: Lomond

Parallel 5: C11 Polymerisation Kinetics and New Concepts in Polymerisation

- 11:30 KEYNOTE C11_O01 **New Functional Hybrid Nanoparticles via RAFT and ATRP**
Axel H. E. Müller, University of Bayreuth, Bayreuth, Germany
- 12:15 C11_O02 **New strategies for the synthesis of graft copolymers based on RAFT-mediated polymerization.**
Bert Klumperman, Stellenbosch University, Matieland, South Africa
- 12:30 C11_O03 **Stereocontrolled copolymerization of lactides with ϵ -caprolactone and cyclic carbonates devoid of transesterification**
Andrzej Duda, Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Lodz, Poland
- 12:45 C11_O04 **Metal-free activation in the anionic ring-opening polymerization of cyclopropane derivatives**
Sylvie Boileau, East-Paris Institute of Chemistry & Materials Science, CNRS and Université Paris-Est, Thiais, France

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals though to Applications

Session Chair: Joe Keddie, University of Surrey, UK

- 11:30 D13_O04 **Interacting microgels with tuneable softness and charge density**
Priti Mohanty, Adolphe Merkle Institute, Fribourg, Switzerland
- 11:45 D13_O05 **Synthesis of high solids content Laponite-armed polymer latexes by soap-free emulsion polymerization and mechanical properties of the latex films**
Amilton Martins dos Santos, Laboratory of Polymer, LORENA, Brazil
- 12:00 D13_O06 **Self Stratification due to Segregation between Charged and Neutral Particles During Film Formation from Polymer Dispersions**
Diethelm Johannsmann, Clausthal University of Technology, Clausthal-Zellerfeld, Germany
- 12:15 D13_O07 **Armored Nanocomposite Polymer Latexes made via Pickering (Mini)Emulsion Polymerization**
Stefan Bon, University of Warwick, Coventry, United Kingdom
- 12:30 D13_O08 **Can Tg-nanoconfinement be used to produce zero-VOC waterborne coatings? : SANS study**
Yahya Rharbi, laboratoire de Rheologie, UMR 5520, Grenoble, France

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Applications

11:30 D14_O28 **Waterborne ethylene-acrylic dispersions**

José M. Asua, University of the Basque Country, Donostia-San Sebastián, Spain

11:45 D14_O29 **Carbon Dioxide Switchable Surfactants for the Preparation of Stimuli Responsive Polymer Colloids**

Michael Cunningham, Queen's University, Kingston, Ontario, Canada

12:00 D14_O30 **A New Chemistry for Crosslinking of Water-Borne Coatings using Vinyl Sulfone Groups generated in situ during Latex Film Formation**

Peter Lovell, University of Manchester, Manchester, United Kingdom

12:15 D14_O31 **Unique multi-structures in poly-Pickering-HIPEs synthesised using high internal phase emulsions stabilised by functionalised silica and titania nanoparticles**

Ling Ching Wong, Imperial College, London, United Kingdom

12:30 D14_O32 **New Insights in Free Radical Polymerization of Ethylene in the medium pressure range: From Solution process to Emulsion**

Etienne GRAU, Université de LYON / CNRS, Villeurbanne, France

12:45 D14_O33 **Boosting Emulsion Polymerization by Circumventing the Zero-One Paradigm**

Klaus Tauer, MPI Colloids and Interfaces, Golm, Germany

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: G.J. Agur Sevink, Leiden University, The Netherlands

11:30 INVITED E17_O18 **Coarse-Grained Dynamical Models for Self-Assembling Amphiphilic Molecules**

Toshihiro Kawakatsu, Tohoku University, Sendai, Japan

12:00 E17_O19 **Nanostructures from living copolymers: some insights from coarse-grained simulations.**

Kostas Daoulas, Georg-August-University-Goettingen, Goettingen, Germany

12:15 E17_O20 **Coarse-Grained Models of Biological Membranes within the Single Chain Mean Field Theory**

Vladimir Baulin, Universitat Rovira i Virgili, Tarragona, Spain

12:30 E17_O21 **Stochastic Quasi-Newton molecular simulations**

Agur Sevink, Leiden University, Leiden, Netherlands

12:45 E17_O22 **Block copolymers for stabilization of colloidal suspensions: a new approach to an "old" problem**

Igor I. Potemkin, Department of Physics, Moscow State University, Moscow 119991, Russian Federation

Room: Boisdale 2

Parallel 9: F19 Biodegradable and Sustainable Polymers

11:30 F19_O30 **Reactivity of Allyl and Vinyl Derivatives of Glucides in UV-initiated Free Radical Copolymerization with Acceptor Monomers**

Xavier Coqueret, Universite de Reims Champagne Ardenne, ICMR UMR CNRS 6229, Reims, France

11:45 F19_O31 **CONTROLLED SYNTHESIS OF FUNCTIONAL POLYMERS BASED ON NATURALLY-DERIVED MONOMERS**

Eleni Kassi, University of Cyprus, Nicosia, Cyprus

12:00 F19_O32 **Understanding Thermal and UV Degradation on a Molecular Level of Acrylic Polymers via High Resolution Electrospray Ionization Mass Spectrometry (ESI-MS)**

Alexander H Soeriyadi, Centre for Advanced Macromolecular Design, University of New South Wales, Sydney, Australia

12:15 F19_O33 **New biodegradable and biocompatible polymers by free-radical chemistry**

Seema Agarwal, Philipps University marburg, Marburg, Germany

12:30 F19_O34 **Surface Characteristics of Nanowhiskers obtained from Banana fibres by steam explosion**

Laly Pothan, Bishop Moore College, Mavelikkara, India

12:45 F19_O35 **The morphology and mechanical properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) / MWNTs (multi-walled carbon nanotubes) composites**

Guifang Shan, Donghua University, Shanghai, China

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Marie-Beatrice Madec, University of Manchester, UK

11:30 G21_O28 **PEDOT Coated Counter Electrodes for Dye-Sensitized Solar Cells**

Jenny Pringle, Monash University, Melbourne, Australia

11:45 G21_O29 **A new intramolecular donor-acceptor polyfluorene copolymer for bulk heterojunction solar cells**

Jung Feng Lee, Department of Materials Science & Engineering, National Cheng-Kung University, Tainan, Taiwan

12:00 G21_O30 **Three-Dimensional Nanoscale Organization of Bulk Heterojunction Polymer Solar Cells**

Joachim Loos, Eindhoven University of Technology, Eindhoven, Netherlands

12:15 G21_O31 **Understanding dynamic film formation process in P3HT/PCBM photovoltaic blends.**

Tao Wang, Department of Physics and Astronomy, University of Sheffield, Sheffield, United Kingdom

12:30 G21_O32 **Influence of Fullerene Chemical Structure on Microstructure of Polymer:fullerene Binary Blend Films**

Anne Guilbert, Department of Physics, Imperial College London, London SW7 2 AZ, United Kingdom

12:45 G21_O33 **Synthesis and Characterization of Ink Jet Printable Conducting Polyaniline Ink: A Promising Material for Flexible Organic Electronics**

Milind Kulkarni, C-MET, Pune, India

Room: Alsh 2

Parallel 11: G24 Polymers for Sensors

Session Chair: Aleksandar Radu, Dublin City University, Ireland

11:30 KEYNOTE G24_O01 **Chemical sensors based on conjugated polymers**

Johan Bobacka, Åbo Akademi University, Turku-Åbo, Finland

12:15 G24_O02 **Environmentally Friendly Conjugated Materials for Colorimetric and Fluorometric Metal Ion Sensing**

Ivan Ulliel Roche, Université de Montréal, Montreal, QC, Canada

12:30 G24_O03 **Fabrication of polymer micro-devices based on organic sacrificial pastes**

Nathalie Serra, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

12:45 G24_O04 **Electroactive ultrathin fibers of Poly(lactic acid)/Polyaniline prepared by electrospinning: structural, electrical, mechanical and thermal properties**

Paulo Picciani, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil

Room: Forth

Parallel 1: A3 Colloids and Surfaces for Biomaterials Applications

Session Chair: Keith McClean, CSIRO, Australia

14:30 INVITED A3_O05 **Directing and detecting biology using peptide based biomaterials**

Rein Ulijn, University of Strathclyde, Glasgow, United Kingdom

15:00 A3_O06 **Self-Healing Hydrogel Films**

Andrew Lyon, Georgia Institute of Technology, School of Chemistry and Biochemistry, Atlanta, GA, United States

15:15 A3_O07 **Novel and versatile surface modification technique of PLA for biomedical applications**

Benjamin Nottelet, IBMM, Artificial Biopolymers Group, Montpellier, France

15:30 A3_O08 **Size Dependant LCST Transitions of Polymer-Coated Gold Nanoparticles: Co-operative Aggregation and Surface Assembly**

Matthew I Gibson, University of Warwick, Coventry, United Kingdom

15:45 A3_O09 **Controllable Hydrogels for Biomedical Applications via Enzyme Mediated Peptide Self Assembly**

Patrick Hartley, CSIRO Molecular and Health Technologies, Clayton, Victoria, Australia

Room: Dochart 1 & 2

Parallel 2: A4 Polymers in Therapeutics: Polymer Nanomedicines

- 14:30 INVITED A4_O10 **Self-assembled beta-hairpin peptides-responsive gels and templates for hybrid materials**
Darrin Pochan, University of Delaware, Newark, DE, United States
- 15:00 A4_O11 **From Test Tube to In Vivo Protection : Polyelectrolyte Microcapsules as Versatile Antigen Carriers**
Bruno De Geest, Ghent University, Ghent, Belgium
- A4_P17 **Polymersome penetration into human skin**
Carla Pegoraro, Kroto Research Institute, University of Sheffield, Sheffield, South Yorkshire, United Kingdom
- 15:30 A4_O13 **Phosphine-mediated one-pot thiol-ene "click" approach to polymer-protein conjugates**
Mathew Jones, University of Warwick, Coventry, United Kingdom
- 15:45 A4_O14 **Teaching Polymers How to Act Like Proteins: Antimicrobial and Cell Penetrating Activity**
Greg Tew, University of Massachusetts, Amherst, MA, United States

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Lawrence Sita, University of Maryland, USA

- 14:30 INVITED B6_O22 **Molecular architecture and properties of Polypropylene**
Christian Paulik, Borealis, Linz, Austria
- 15:00 B6_O23 **Preparation of new elastomers via cyclocopolymerization of ethylene with butadiene**
Christophe Boisson, CNRS-UMR C2P2, Villeurbanne, France
- 15:15 B6_O24 **Synthesis of Stereoregular Regioblock Polybutadiene with CoCl₂-MAO-Phosphine Catalyst**
Takeshi Shiono, Hiroshima University, Higashi-Hiroshima, Japan
- 15:30 B6_O25 **The Role of Solvent Ligated Metal Complexes Associated With Weakly Coordinating Anions (WCAs) In Isobutylene Polymerization**
Hui Yee Yeong, Leibniz-Institut für Polymerforschung Dresden e.V, Dresden, Germany
- 15:45 B6_O26 **When in Akron...isobutene polymerization co-initiated by chelating diboranes. When in Zaragoza... polymerization of**

PhC≡CH using hemi-labile Rh(I) complexes
Scott Collins, University of Akron, Akron, United States

Room: Alsh 1

Parallel 4: C9 Dendrimers and Hyperbranched Polymer Synthesis

Session Chair: Wayne Hayes, University of Reading, UK

14:30 INVITED C9_O09 **Hyperbranched polyionic liquids with core/shell topology as nanoreactors and nanotransporters**
Rolf Mülhaupt, Freiburg Materials Research Center and Institute for Macromolecular Chemistry, Albert-Ludwigs University, Stefan-Meier-Strasse 31, D-79104 Freiburg, Germany

15:00 C9_O11 **Quantification of Intramolecular Cyclization in Branched Methacrylic Copolymers Using ¹H NMR Spectroscopy**
Steven Armes, University of Sheffield, Sheffield, Yorkshire, United Kingdom

15:15 C9_O12 **Synthesis of hyperbranched polymers via Cobalt-catalysed chain transfer and functionalisation by thiol-ene click chemistry**
Kayleigh McEwan, The University of Warwick, Coventry, West Midlands, United Kingdom

15:30 C9_O13 **Synthesis of telechelic oligomers and branched polymers with well controlled end groups by radical polymerisation in the presence of a silyl enol ether**
Stephen Rimmer, University of Sheffield, Sheffield, United Kingdom

Room: Lomond

Parallel 5: C11 Polymerisation Kinetics and New Concepts in Polymerisation

14:30 C11_O05 **Photochemical and Thermal Covalent Adaptable Networks**
Christopher Bowman, University of Colorado, Boulder, CO, United States

14:45 C11_O06 **Novel materials from nitroxide-mediated polymerization of methacrylic esters**
Julien Nicolas, Laboratoire de Physico-Chimie, Pharmacotechnie et Biopharmacie, UMR CNRS 8612, Univ. Paris-Sud 11, Châtenay-Malabry, France

- 15:00 C11_O07 **Towards Monomer Sequence Control in Anionic Polymerisation**
Lian Hutchings, Durham University, Durham, Co Durham, United Kingdom
- 15:15 C11_O08 **Novel Ring-Opening Polymerization and Its Application to Functional Materials**
Takeshi Endo, Molecular Engineering Institute, Kinki University, Iizuka, Fukuoka, Japan
- 15:30 C11_O09 **Kinetic Analysis on Ring-Opening Polymerization of L,L-Lactide**
Yingchuan Yu, Swiss Federal Institute of Technology, Zurich, Switzerland
- 15:45 C11_O10 **Controlled L-lactide polymerization by new organo-catalytic systems based on N,N-dimethylaminopyridine and its salts**
Frederic PERUCH, LCPO, Bordeaux University, Pessac, France

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals through to Applications

Session Chair: Daniel Read, University of Leeds, UK

- 14:30 INVITED D13_O09 **Mechanical Properties of Soft Viscoelastic Nanocomposites**
Costantino Creton, ESPCI-ParisTech, Paris, France
- 15:00 D13_O10 **Facile access to biomimetic layered composite films and coatings with superior material properties**
Andreas Walther, Molecular Materials, Department of Applied Physics, School of Science and Technology, Aalto University, Helsinki, Finland
- 15:15 D13_O11 **The importance of molecular friction in determining the mechanical properties of a soft polymer-nanotube nanocomposite**
Tao Wang, University of Surrey, Guildford, Surrey, United Kingdom
- 15:30 D13_O12 **Carbon Nanostructures as Fillers for Polymer Nanocomposites**
Horacio Salavagione, Institute of Polymer Science and Technology (ICTP-CSIC), Madrid, Spain
- 15:45 D13_P19 **Strategies to enhance compatibility without affecting oxidative curing on waterborne alkyd/acrylic hybrids**

Monika Goikoetxea, 1Institute for Polymer Materials, University of the Basque Country, Basque Country, Spain

Room: Gala 1 & 2

Parallel 7: D14 Polymer Colloids: from Synthesis to Application

14:30 INVITED D14_O34 **Amphiphilic block copolymer synthesis via living radical polymerization in aqueous dispersed systems: toward non-spherical morphologies using polymerization-induced micellization**

Bernadette Charleux, University Claude Bernard, Lyon 1, Villeurbanne, France

15:00 D14_O35 **Janus Micelles by Direct Dissolution of Triblock Copolymers in Water**

Jianzhong Du, Tongji University, School of Materials Science and Engineering, Shanghai, China

15:15 D14_O36 **Nitroxide-mediated precipitation polymerization in supercritical carbon dioxide: Effects of monomer loading and pressure**

Fawaz Aldabbagh, National University of Ireland, Galway, Ireland

15:30 D14_O37 **Mechanism of core-shell nanoparticle formation via controlled radical polymerization**

Jerome Claverie, UQAM, Montreal, Qc, H3C3P8, Canada

15:45 D14_O38 **Direct Synthesis of Branched Polymer Nanoparticles by One-Pot Living and Controlled Polymerisation**

Steve Rannard, University of Liverpool, Liverpool, United Kingdom

Room: Boisdale 1

Parallel 8: E17 Designing Block Copolymers: Theory, Experiment and Applications

Session Chair: Roy Shenhar, Hebrew University of Jerusalem, Israel

14:30 INVITED E17_O23 **From Block Copolymers and Nanoparticles to Complex, Multifunctional Hybrid Materials**

Ulrich Wiesner, Cornell University, Ithaca, NY, United States

15:00 E17_O24 **Holographic Gratings and Data Storage in Azobenzene-Containing Block Copolymers**

Hans-Werner Schmidt, University of Bayreuth, Bayreuth, Germany

15:15 E17_O25 **Plastic Processing without Heating**

Metin H Acar, Istanbul Technical University, Maslak/Istanbul, Turkey

15:30 E17_O26 **Supramolecular structure and interaction kinetics of fullerene derivative and block copolymer charge transfer complex**

Alok Chaurasia, Nanyang Technological University, Singapore, Singapore

15:45 E17_O27 **An all Conjugated Block Copolymer Bulk Heterojunction Solar Cell**

Andrew J Parnell, University of Sheffield, Department of Physics and Astronomy, Sheffield, United Kingdom

Room: Boisdale 2

Parallel 9: F20 Polysaccharides: Chemistry, Structure, Properties and Technology

Session Chair: Cameron Alexander, University of Nottingham, UK

14:30 INVITED F20_O01 **Some properties of cellulose nanocrystals prepared by acid hydrolysis of natural cellulose fibres**

Derek Gray, McGill University, Montreal, QC, Canada

15:00 F20_O02 **Polysaccharides and (solid-state) NMR: characterizing solutions, local motions and films**

Marianne Gaborieau, University of Western Sydney, Campbelltown, Australia

15:15 F20_O03 **Thermoreversible Gelation of cellulose ethers**

Patrick Fairclough, the university of sheffield, sheffield, United Kingdom

15:30 F20_O04 **Photoluminescent Porous Alginate Hybrid Materials Containing Lanthanide Ions**

Mike Robitzer, Institut Charles Gerhardt-Montpellier, Matériaux Avancés pour la Catalyse et la Santé, Montpellier, France

15:45 F20_O05 **Plasticization of starch by a ionic liquid: melt processing and mechanical properties**

Eric Leroy, Process Engineering for Environment and Food Laboratory (GEPEA) - CNRS, ST NAZAIRE, France

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Steve Yeates, University of Manchester, UK

14:30 INVITED G21_O34 **Controlling Interfaces of Semiconducting Polymers in Transistors and Solar Cells**

Michael Chabinyo, University of California, Santa Barbara, CA, United States

15:00 G21_O35 **Towards rational design of polymer/fullerene composites for efficient organic solar cells**

Pavel Troshin, Institute for Problems of Chemical Physics of Russian Academy of Sciences, Chernogolovka, Moscow region, Russian Federation

15:15 G21_O36 **Mutual intercalation of poly(3-hexylthiophene) crystallites and aggregates of fullerene derivatives in thin films optimized for solar cell application**

U-Ser Jeng, National Synchrotron Radiation Research Center, Hsinchu, Taiwan

15:30 G21_O37 **Investigating the nano-structure of thin polymer films used in polymer based solar cells.**

Alan Dunbar, University of Sheffield, Sheffield, United Kingdom

15:45 G21_O38 **Phenylenevinylene homopolymers and block copolymers through ring-opening metathesis polymerization**

Chin-Yang Yu, The University of Manchester, Manchester, United Kingdom

Room: Alsh 2

Parallel 11: G24 Polymers for Sensors

Session Chair: Aoife Morrin, Dublin City University, Ireland

14:30 INVITED G24_O05 **Nanoscale conducting polymers and their functionalisation with antibodies**

Carol Lynam, School of Biotechnology and Biomedical Diagnostics Institute, National Centre for Sensor Research, Dublin City University, Dublin, Ireland

15:00 G24_O06 **Novel Biosensors Based on Surface Modification of Magnetoelastic Materials using Biologically Active Polymers**

Anthony Granville, The University of New South Wales, Sydney, NSW, Australia

15:15 G24_O07 **The inherent physical, optical and conductivity values of Ionic Liquid - Polymeric membranes; a self - indicated**

simultaneous response upon coordination to transition metal ions.
Andrew Kavanagh, Dublin City University, Dublin, Ireland

15:30 G24_O08 **Methyl Methacrylate-Decyl Methacrylate Copolymer - A Plasticizer-Free Alternative for Ionophore-Based Chemical Sensors**
Shane Peper, Pacific Northwest National Laboratory, Richland, Washington, United States

Room: Alsh 2

Parallel 1: H27 Polymer Education

17:00 INVITED H27_O07 **Teaching Polymers in Europe**
Alex van Herk, Eindhoven University of Technology, Eindhoven, Netherlands

17:30 INVITED H27_O08 **How should we introduce polymerization reactions to undergraduate students?**
Henri Cramail, Université Bordeaux 1, Pessac, France

WEDNESDAY 14 JULY 2010 - POSTER SESSIONS

Hall 5

B6: Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

B6_P01 Rationalization of the Solvent Effect in Free Radical Polymerization of Ethylene in the medium pressure range (up to 250 bar)

Etienne GRAU, Université de LYON / CNRS, Villeurbanne, France

B6_P02 New insights from the "cluster" model of active sites in the Ziegler-Natta polymerization of olefins

Vincent MONTEIL, Université de Lyon / CNRS / ESCPE Lyon, Villeurbanne, France

B6_P03 Effect of Clarifying Agent on Photodegradation of Isotactic Polypropylene

Lenka Chvatalova, Tomas Bata University in Zlín, Faculty of Technology, Zlín, Czech Republic

B6_P04 Effect of Annealing on Mechanical Properties of Nucleated Polypropylene

Lenka Chvatalova, Tomas Bata University in Zlín, Faculty of Technology, Zlín, Czech Republic

B6_P06 Composition Ascription Analysis of Disperse phases for Impact Polypropylene Copolymers by AFM/Nano-TA

Hongsheng Tan, School of Materials Science and Engineering, Shandong University of Technology, Zibo, Shandong province, China

B6_P07 Preparation of Polyethylene Building Blocks

Christophe Boisson, CNRS-UMR C2P2, Villeurbanne, France

B6_P08 Synthesis of Macroreticular Anion-Exchange Resins based on Poly(styrene-co-divinylbenzene): Influence of the Polymerization Conditions on the Degree of Functionalization

Raul Rodrigo, University of Salamanca, Salamanca, Spain

B6_P09 Synthesis and Application of Titanium Complexes Bearing [O⁻NX] Tridentate Ligands in Ethylene Polymerization

Junfang Li, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China

B6_P10 Direct Synthesis of PE-OH and Its Application in the Preparation of Diblock

Xiuli Sun, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China

B6_P11 Titanium Catalysts for the Copolymerization of Ethylene with 5-Norbornene-2-methanol

Yong Tang, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, China

B6_P12 Effect of Oxidized PP Wax in Organoclay Dispersion

Ali Salimi, Iran Polymer & Petrochemical Institute, Tehran, Tehran, Iran, Islamic Republic of

B6_P13 Close Approaches of C-H Bond Hydrogens to Transition Metal Centres: New Types of Interactions with Agostic-like Characteristics.

Alastair Nielson, Massey University at Albany, Auckland, New Zealand

B6_P14 Study on Dicyclopentadiene Polymerization with a New Modified Macroligand-Tungsten Catalyst System

Xiaoping Cai, Jilin Petrochemical Company, PetroChina,Ltd, Jilin City, Jilin Province, China

B6_P15 A study on the use of styrene in controlling the molecular weight and tacticity of polypropylene produced by two metallocene catalysts.

Raul Quijada, Departamento de Ingeniería Química y Biotecnología, Facultad de Ciencias Físicas y Matemáticas and CIMAT, Universidad de Chile, Santiago, Chile

B6_P16 Temperature Rising Elution Fractionation and thermal behaviors of Impact polypropylene copolymers with high melt flowability

Xiaoying Lu, Petrochina Petrochemical Research Institute, Beijing, China

B6_P17 Adsorption on Semi-crystalline Polymers

Sarah Hardman, Durham University, Durham, United Kingdom

B6_P18 Asymmetric Polymerization of *N*-Phenylmaleimide with Rhodium Catalyst in the Presence of Chiral Amine

Tsutomu Oishi, Yamaguchi University, Ube, Yamaguchi, Japan

B6_P19 Influence of TiO₂ and Corona treatment on photodegradation of LLDPE films

Guilhermino J. M. Fechine, Presbyterian University Mackenzie, São Paulo/SP, Brazil

B6_P20 Influence of styrene-butadiene-styrene (SBS) on photodegradation of polypropylene/high impact polystyrene blends

Guilhermino J. M. Fechine, Presbyterian University Mackenzie, São Paulo/SP, Brazil

B6_P21 Effect of Boundary Conditions on Morphological Development during Polymer Crystallization: A Monte Carlo Simulation

Siripon Anantawaraskul, Kasetsart University, Bangkok, Thailand

B6_P22 Application of Artificial Neural Network in Ethylene/1-Butene Copolymerization

Siripon Anantawaraskul, Kasetsart University, Bangkok, Thailand

B6_P23 Catalytic Activity of Group 4 Metal Complexes Containing Fluorinated Amidinate Ligands in α -Olefin Polymerization

Tatyana Elkin, Technion - Israel Institute of Technology, Haifa, Israel

B6_P24 Methacrylates in Insertion Polymerization

Thomas Rünzi, University of Konstanz, Konstanz, Germany

B6_P26 Kinetic Studies on the Polymerisation of Functionalised Norbornenes

Lynn Donlon, Durham University, Durham, United Kingdom

B6_P27 Evaluation of synthetic methodologies aiming the development of HDPE/MCM-41 nanocomposites with enhanced interfacial adhesion

Artur Bento, Instituto de Ciencia e Engenharia de Materiais e Superfícies (ICEMS) & Departamento de Engenharia Química, Instituto Superior Técnico (IST), Technical University of Lisbon, Lisboa, Portugal

B6_P28 Highly efficient Aminopyridinate ligand stabilised hafnium catalysts for the coordinative chain transfer polymerisation

Isabelle Haas, Universität Bayreuth, Bayreuth, Germany

B6_P29 A highly efficient NCN-ligand stabilised organoyttrium catalysed version of the "Aufbaureaktion" leading to terminal functionalised polyethylene.

Tobias Bauer, Universität Bayreuth, Bayreuth, Germany

B6_P30 Morphology and mechanical properties of binary blends of polypropylene with statistical and block ethylene-octene copolymers

Guoming Liu, Beijing National Laboratory for Molecular Sciences, Key Laboratory of Engineering Plastics, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

B6_P31 Investigation on the molecular structure-mechanical properties relations in Polypropylene/poly(ethylene-co-propylene)(PP/EPR) in-reactor alloys

Ying Zhao, Beijing National Laboratory for Molecular Sciences, Key Laboratory of Engineering Plastics, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

B6_P32 The Development of Solvent Ligated Metal Complexes Associated With Weakly Coordinating Counteranions for the Polymerization of Isobutylene at Room Temperature

Hui Yee Yeong, Leibniz-Institut für Polymerforschung Dresden e.V., Dresden, Germany

B6_P33 CATALYTIC COPOLYMERIZATION OF ETHYLENE WITH POLAR COMONOMERS: TOWARD AMPHIPHILIC POLYETHYLENES CHANGER

Jean-Christophe Daigle, Université du Québec à Montréal, NanoQAM, Montreal, Quebec, Canada

B6_P34 VITAMIN E ADDITIVE INFLUENCE ON DIELECTRIC LOSSES OF γ -IRRADIATION RECYCLED POLYETHYLENE COMPOSITES

Ulmas Gafurov, Institute of Nuclear Physics, Tashkent, Ulugbek, Uzbekistan

B6_P35 The Effect of Melt-Annealing of Ultrathin Polymer Film on Crystal Growth

Ken Taguchi, Hiroshima University, Higashi-Hiroshima City, Hiroshima, Japan

Hall 5

C9: Dendrimers and Hyperbranched Polymer Synthesis

C9_P01 Hyperbranched poly(arylene ether)s by an unusual AB_2+A_2 polymerization approach

Anindita Ghosh, Leibniz-Institut für Polymerforschung Dresden e.V., Dresden, Saxony, Germany

C9_P03 Novel Triazine Based Dendrimers for Effective Delivery of Anticancer Agent

Kuldeep K. Bansal, Dr. H. S. Gour University, Sagar (M.P.), India

C9_P04 Online monitoring study of branched methacrylic copolymers synthesised by RAFT

Julien Rosselgong, University of Warwick, Coventry, United Kingdom

C9_P05 GLASS TRANSITION TEMPERATURE AS A DEGREE OF BRANCHING FUNCTION FOR AROMATIC-ALIPHATIC POLYESTERS WITH TAILORED BRANCHING TOPOLOGY

Anna Khalyavina, Leibniz-Institut für Polymerforschung Dresden e.V., Dresden, Germany

C9_P06 Determining the functionality of star polymers by multi detector gel permeation chromatography

James Burns, University of Warwick, Coventry, United Kingdom

C9_P07 New thermosets based on oxazolidone-isocyanurate-ether polymers and hydroxylated hyperbranched polymers modified with vinyl and epoxy end groups

Marjorie Flores, Universitat Rovira i Virgili, Tarragona, Spain

C9_P08 Novel thermosets obtained by cationic polymerization of DGEBA and polyglycidol initiated by ytterbium triflate

Xavier Fernàndez-Francos, Universitat Politècnica de Catalunya (UPC), Laboratori de Termodinàmica ETSEIB, Barcelona, Spain

C9_P09 New chemically reworkable epoxy thermosets by modification of DGEBA with hyperbranched polyesters. Study on the influence of the degree of branching

Angels Serra, Universitat Rovira i Virgili, Tarragona, Spain

C9_P10 Effect of Different Crosslinking Structures Derived from Dendrimer on the Properties of Poly (NIPAAm-co-Acrylic Acid) Hydrogels

Wen-Fu Lee, Department of Chemical Engineering, Tatung University, Taipei, Taiwan

C9_P11 Maleimide Based Thiol Reactive Multiarm Star Polymers via Diels-Alder/retro Diels-Alder Strategy

Ozgul Gok, Bogazici University, Istanbul, Turkey

C9_P12 Dendron-Polymer-Dendron Conjugates via the Diels-Alder 'Click' Reaction

Sezin Yigit, Bogazici University, Istanbul, Turkey

C9_P13 Covalently Functionalizable Polyethylene Glycol Based Hydrogels

Emine Ece Manavoglu, Bogazici University, Istanbul, Turkey

C9_P14 Synthesis of Multiarm Star Polymers Based on Hyperbranched Poly(glycidol) with Poly(methylmethacrylate), Poly(styrene) and Poly(ϵ -caprolactone) Arms

Mireia Morell, Universitat Rovira i Virgili, Tarragona, Spain

C9_P15 Star-shaped polymers via acyclic diene metathesis (ADMET) polymerization

Lucas Montero de Espinosa, University of Potsdam, Potsdam, Brandenburg, Germany

C9_P16 Water Soluble Hyperbranched Polymers for Application in Photodynamic Therapy

suriani shamsudin, university of sheffield, sheffield, england, United Kingdom

C9_P17 New auto-fluorescent PAMAM dendritic wedges.
Alaa El-Betany, Cardiff University, Cardiff, United Kingdom

C9_P18 Synthesis of Branched Polymers by Direct One-Pot Ambient-Temperature 'Living' Anionic Polymerisation.
Tamara Alhilfi, University of Liverpool, Liverpool, United Kingdom

C9_P19 Segment Block Dendrimers and Dendron-Polymer Conjugates via Diels-Alder Cycloaddition
Oyuntuya Munkhbat, Bogazici University, Istanbul, Turkey

C9_P20 Synthesis and Properties of Monodisperse Oligofluorene-Functionalized Truxenes with Different Alkyl Chains
Clara Orofino-Peña, University of Strathclyde, Glasgow, United Kingdom

C9_P21 Commercial branched addition polymers: Their use in viscosity-reducing applications and as dispersants.
Roz Baudry, Hydra Polymers Ltd, Liverpool, United Kingdom

C9_P22 Low-Cross Linked Terpolymers of Glycidyl Methacrylate as Matrices for Synthesis of Polyfunctionalized Supports for Palladium Particles Encapsulation
Wiktor Bukowski, Faculty of Chemistry, Rzeszów University of Technology, Rzeszów, Poland

C9_P23 Dendrytic Poly(amidoamine) Immobilized on Hydrophobic Glycidyl Methacrylate Terpolymers
Agnieszka Bukowska, Faculty of Chemistry, Rzeszów University of Technology, Rzeszów, Poland

Hall 5

D13: Colloidal and Nanoscale Polymer Composites: Fundamentals through to Applications

D13_P01 Performing Different Types Of Interfacial Polymerization Reactions Through The Permeable membrane of Poly(terephthalamide) Microcapsules
Hisham Essawy, National Research Center, Cairo, Egypt

D13_P02 Chiral Micelles by Achiral TPPS and Diblock Copolymer Poly(ethylene glycol)-block-poly(4-vinylpyridine)
Linqi Shi, Institute of Polymer Chemistry, Nankai University, Tianjin, China

**D13_P04 Polymer/Inorganic Composite Particle Materials--
Preparation, Structure and Applications**

Yi Dan, State Key Laboratory of Polymer Materials Engineering of
Chian, Polymer Research Institute of Sichuan University, Chengdu,
Sichuan, China

**D13_P05 Ethylene/Chrysotile nanocomposites in situ
polymerization**

Griselda Barrera Galland, Instituto de Química, Universidade Federal do
Rio Grande do Sul, Porto Alegre, Brazil

**D13_P06 PROPERTIES OF POLYETHYLENE/GRAPHITE
NANOCOMPOSITES OBTAINED BY IN SITU**

Griselda Barrera Galland, Instituto de Química, Universidade Federal do
Rio Grande do Sul, Porto Alegre, Brazil

**D13_P07 Polymer-coated Palladium Nanoparticles: Synthesis,
Characterisation and Investigation of their Non-Linear Optical
Response**

Theodora Krasia-Christoforou, Department of Mechanical and
Manufacturing Engineering, University of Cyprus, Nicosia, Cyprus

**D13_P08 Synthesis and Applications of Polyvinylpyridine-Grafted
Silica Containing Palladium Nanoparticles as a New
Heterogeneous Catalyst for Heck Coupling Reactions**

Bahman Tamami, Shiraz university, Shiraz, Iran, Islamic Republic of

**D13_P09 Phase Transitions in Model Polymer Mixture with C₆₀
fullerenes: Thermodynamics and Kinetics**

Yang Choo Chua, Imperial College London, London, United Kingdom

**D13_P10 Performance of Multi-Walled Carbon Nanotube/High
Density Polyethylene Nanocomposites at High Strain Rates**

Waleed Al-Iafi, Loughborough University, Loughborough, United
Kingdom

**D13_P11 Preparation and characterisation of multiphase polymer
systems with carbon nanotubes**

Milana Lisunova, Freie Universitet of Berlin, Berlin, Germany

**D13_P12 Driving Polymer-Grafted Carbon Nanotubes at Interfaces
in Phase-Separated Polymer Blends**

Fangfang Tao, Université catholique de Louvain, louvain-la-neuve,
Brabant Wallon, Belgium

**D13_P13 Functionalised nanocomposites synthesis by in situ
generation of filler through extrusion process**

Véronique Bounor-Iegaré, Ingénierie des Matériaux Polymères, IMP,
UMR 5223, CNRS, Université Lyon 1, Villeurbanne, France

D13_P14 One-pot, *in situ* synthesis of ZnO-epoxy resin hierarchical and hybrid composites

Katherine Orchard, Imperial College, London, United Kingdom

D13_P15 The Effect of Plasticizer in the Morphology and Thermal Behavior of Cellulose

Acetate/Poly(epichlorohydrin)/Montmorillonite-clay Nanocomposites.

Juliana Aristéia de Lima, Universidade Estadual de Campinas, Campinas/SP, Brazil

D13_P16 Complex Inorganic/Organic Core-Shell and Shape Anisotropic Nanoparticles by an Inverse Emulsion Technique

Christian Geidel, Max Planck Institute for Polymer Research, Mainz, Germany

D13_P17 Light Scattering from Aqueous Solutions of Colloid Metal Nanoparticles Stabilized by Natural Polysaccharide

Arabinogalactan

Ekaterina Gasilova, Institute of Macromolecular Compounds, Russian Academy of Sciences, St.-Petersburg, Russian Federation

D13_P18 Colloidal Polymer/Silica Nanocomposite Particles Prepared by Aqueous Emulsion Polymerisation

Lee Fielding, The University of Sheffield, Sheffield, United Kingdom

D13_P20 Investigation of microstructure and mechanical properties of biaxial stretched polyethylene terephthalate/clay nanocomposites

Yucui Shen, Queen's University Belfast, Belfast, United Kingdom

D13_P21 Ag(PbS)/Poly-p-xylylene Nanocomposites by VDP-Method

Sergei A. Ozerin, Institute of synthetic polymer materials RAS, Moscow, Russian Federation

D13_P22 Kinetics of nanoparticle synthesis by different sugars

Ya-Lin Fang, China Medical University, Taichung, Taiwan

D13_P23 Thermostimulable Au nanoparticles by coating with amphiphilic block copolymers synthesized via the MADIX process.

Mariana Beija, IMRCP - UMR 5623, Toulouse, France

D13_P24 New perspectives in the synthesis of macroporous polymers via emulsion templating

Nadine Graeber, Imperial College London, London, United Kingdom

D13_P25 Encapsulated graphite sheets covered with polystyrene nanoparticles by *in-situ* miniemulsion polymerization

Hussein Etmimi, Department of Chemistry and Polymer Science, University of Stellenbosch, Cape town, South Africa

D13_P26 Rheological & Light Scattering Studies on the Dispersion of Clays in Monomer Solvents

Neil Bradley, University of Strathclyde, Glasgow, United Kingdom

D13_P27 Hyperbranched Core-Multishell Architecture for the Formation and Stabilization of Nanoparticles in Water and their applications.

Marty Jean-Daniel, Université Paul Sabatier, Toulouse, France

D13_P28 PROTECTION OF STEELS BY EPOXY - (ORGANO) CLAYS NANOCOMPOSITE COATINGSD. Merachtsaki¹, P. Spathis^{2*}, K. Triantafullidis³, P. Giannakoudakis²¹Graduate Student, ²Assoc. Professor, ³Assist. Professor, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greecee-mail: spathis@chem.auth.gr

Panagiotis Spathis, Aristotle University of Thessaliniki, Thessaliniki, Greece

D13_P29 Preparation of oligomeric block copolymers via Reverse Iodine Transfer Polymerization (RITP) and their use in clay surface modification for the preparation of polymer-clay nanocomposites in dispersed media

Patrice Hartmann, Mondi Packaging South-Africa R&D, Stellenbosch, South Africa

D13_P30 Preparation and characterization of silver/carbopol polycomposites in colloidal and non colloidal solutions

Nabila HADDADINE, Laboratoire de Synthèse Macromoléculaire et Thio-organique Macromoléculaire. USTHB, ALGIERS, Algeria

D13_P31 Biocompatible Hybrid Janus particles

Thomas Ruhland, University Bayreuth, Bayreuth, Bavaria, Germany

D13_P32 Preparation and characterization of polyaniline-silver composites.

Patrycja Bober, Institute of Macromolecular Chemistry AS CR, Prague, Czech Republic

D13_P33 Carbon Materials Obtained by the Carbonization of a Conducting Polymer, Polyaniline

Jaroslav Stejskal, Institute of Macromolecular Chemistry AS CR, Prague, Czech Republic

D13_P34 Organic-inorganic hybrid materials combining Pd nanoparticles and diblock copolymers, having carbazole and β -ketoester functionalities. Synthesis, characterization and experimental investigation of their nonlinear optical properties.

Maria Demetriou, University of Cyprus, Nicosia, Cyprus

D13_P35 Rubber-based nanocomposites containing new intercalated/exfoliated organo-modified clays

LUCIA CONZATTI, CNR- ISMAC Genova, Genova, Italy

D13_P36 Responsive Fluorescent Quantum Dot-Polymer Nanocomposites Generated by Rapid and Facile Frontal Polymerization

Su Chen, State Key Laboratory of Material-Oriented Chemical Engineering and College of Chemistry and Chemical Engineering, Nanjing University of Technology, Nanjing, Jiangsu Province, China

D13_P37 Synthesis of Monodisperse Zinc Sulfide Nanoparticles Grafted with Concentrated PS Brush by Surface-Initiated Nitroxide Mediated Polymerization

Vincent Ladmiraal, University of Sheffield, Sheffield, United Kingdom

D13_P38 Sparsely Distributed Silica-Modified PMMA Composite Particles Prepared by Static Polymerization in Aqueous Silica Dispersion

Shintaro Kawano, Kumamoto University, Kumamoto, Japan

D13_P39 Water-soluble dual-responsive iron oxide nanoparticles

Alexander Majewski, University of Bayreuth, Bayreuth, Germany

D13_P40 Synthesis of polyhedral oligomeric hydrido silsesquioxane polymer films and their application for cleaning mercury contaminated water

Kseniia Katok, O.O. Chuiko Institute of Surface Chemistry Ukraine, 17 General Naumov Str., Kyiv, Ukraine

D13_P41 Photo-induced vesicles to micelles transition

Jinfeng Dong, Department of Chemistry, Wuhan, China

D13_P42 Nanocomposites based on Fluorescent labelled silica nanoparticles and thermoplastic polymer matrixes. Steady State Fluorescence to Study at Molecular Scale their interphases.

Dania Olmos, Universidad Carlos III de Madrid, Leganes, MADRID, Spain

D13_P43 Influence of the Incorporation of Biomineralized Calcium Carbonate Microparticles on the Mechanical and Thermal Properties of Polypropylene/Clay Nanocomposites

Mehrdad Yazdani-Pedram, University of Chile, Faculty of Chemical and Pharmaceutical Sciences, Department of Physical and Organic Chemistry, S. Livingstone 1007, Independencia, Santiago, Chile

D13_P44 Functionalized Multiwalled Carbon Nanotubes/Polypropylene Nanocomposites

Mehrdad Yazdani-Pedram, University of Chile, Faculty of Chemical and

Pharmaceutical Sciences, Department of Physical and Organic Chemistry, S. Livingstone 1007, Santiago, Chile

D13_P45 Capillarity Force Induced Formation of Luminescent PS/Rare-Earth-Doped Nanoparticles Hybrid Hollow Spheres

Min Chen, Fudan University, Shanghai, China

D13_P46 Incorporation of Single CdSe/ZnS Quantum Dots into Polymer Nanoparticles by Means of Smart Functionalization with Polymerizable Ligands

Carla Negele, University of Konstanz, Konstanz, Germany

D13_P47 Curing mechanism and properties of the Bismaleimide-Triazine/EOVS composites

Dingsheng Yu, The Key Laboratory of Beijing City on Preparation and Processing of Novel Polymer Materials, Beijing University of Chemical Technology, Beijing, China

D13_P48 Polybenzoxazine Resin Cured by Latent Catalyst containing POSS

Riwei Xu, The Key Laboratory of carbon fiber and functional polymers, Ministry of Education, Beijing University of Chemical Technology, Beijing, China

D13_P49 Antibacterial activity and mechanical properties of natural rubber/TiO₂ nanocomposites

Boonchai Seentrakoon, Program in Petrochemistry and Polymer Science, Faculty of Science, Chulalongkorn University, Bangkok, Thailand

D13_P50 SYNTHESIS OF NANOCOMPOSITES OF POLYANILINE NANOFIBERS AND POLYETHYLENE BY *IN SITU* POLYMERIZATION

Nara Basso, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre/Rio Grande do Sul, Brazil

D13_P51 Influence of the compatibilizer type on the rheological properties of HDPE/LLDPE/organoclay nanocomposites

Fabio Roberto Passador, PPGCEM/UFSCar, São Carlos, SP, Brazil

D13_P53 Fire and smoke behaviour of PVC/O-MMT/metallic oxides nanocomposites

Lucia Mei, Universidade Estadual de Campinas, Unicamp, Campinas, SP, Brazil

D13_P56 Effects of vibrations on melt compounding of PP/carbonic nanocomposites

Georgi Kotzev, Central Laboratory of Physico-Chemical Mechanics, BAS, Sofia, Bulgaria

D13_P57 Analysis of the influence of an octaepoxy-POSS in the morphology of an epoxy-amine system.

Carmen Ramírez, Group of Polymers. University of A Coruña. E. U. P., Avda. 19 de Febrero s/n, 15405, Ferrol., Spain

D13_P58 Localization of nanodiamond particles within polypropylene amorphous-crystalline matrix

Georgy Alkhanishvili, Institute of Synthetic Polymeric Materials, Moscow, Russian Federation

D13_P59 Structural investigation of polylactide modified with functionalized silica nanoparticles.

Elena Sudeeva, Enikolopov Institute of Synthetic Polymeric Materials of the Russian Academy of Science, Moscow, Russian Federation

D13_P60 Structural and mechanical analysis of SBR/organoclay nanocomposites

Belén Montero, Group of Polymers. Universidad de A Coruña. E. U. P., Avda. 19 de Febrero s/n, 15405, Ferrol., Spain

D13_P61 Synthesis of cerium oxide-stabilised nanocomposite latexes through polymerisation in aqueous dispersed system

Nancy Zgheib, ESCPE/CNRS/UCBL, Villeurbanne, France

D13_P62 High tensile strength poly(vinyl alcohol) fibers modified with nanodiamonds: morphology, properties, application

Tikhon Kurkin, Institute of Synthetic Polymeric Materials RAS, Moscow, Russian Federation

D13_P63 Solvent Effect in Dynamic Superstructures from Au Nanoparticles and CdTe Nanowires: Experimental Observation and Theoretical Description

Jaebeom Lee, Pusan National University, Miryang, Korea, Republic of

D13_P64 Thermal and Crystallization Behaviors of thin-MWCNT/Polyamide 6 Nanocomposite

Jong-ha Oh, Hyosung Corporation, Anyang-Si, Gyeonggi-Do, Korea, Republic of

D13_P65 Calibration and use of an optical detector to monitor in-line a nanocomposite extrusion

Kelen Cristina dos Reis, Universidade Federal de São Carlos, São Carlos, São Paulo, Brazil

D13_P66 Advances in RAFT Mediated Emulsion Polymerization

Brian Hawkett, The University of Sydney, Sydney, Australia

D13_P67 Poly(zinc methacrylate) as the Precursor for the Low-Temperature Formation of Polymer-ZnO Hybrid Materials and/or

ZnO Nanoparticles

Gabriela Ambrozic, National Institute for Chemistry, Ljubljana, Slovenia

D13_P68 Mechanical and thermal properties of polymer nanocomposites

S.J. Picken, NanoStructured Materials, Department of Chemical Engineering, TU Delft, Delft, Netherlands

D13_P69 The effects of the Packing Structure of Polyhedral Oligomeric Silsesquioxane (POSS) Surfactants on the Degree of Clay Exfoliation in Polyethylene Terephthalate/ POSS-Modified Clay Nanocomposites

Cher Ling Joan Toh, School of Materials Science and Engineering, Nanyang Technological University, Singapore, Singapore

D13_P70 Analysis of Dissolved Hydrogen Molecules in Rubber Materials by Solid-state ^1H NMR

Shin Nishimura, Kyushu University, Fukuoka, Japan

D13_P71 Investigation on the radiation induced vulcanization of silica-elastomer blends: physical properties and filler-elastomer reaction mechanisms

Daniele Dondi, University of Pavia, Department of General Chemistry, Pavia, Italy

D13_P72 Polyester-based nanocomposites prepared by *in situ* entropically-driven ring-opening polymerization of macrocyclic oligomers

Paola Stagnaro, CNR, Istituto per lo Studio delle Macromolecole ISMAC, Genova, Italy

D13_P73 Dispersion of individual MWNTs in epoxy resin composites by noncovalent functionalization with surfactants

Celina-Maria Damian, Politehnica University of Bucharest, Department of Polymer Science and Engineering, Bucharest, Romania

D13_P74 Poly(Methyl Methacrylate)/ZnO Nanocomposites Based on Polyol Mediated Organophilic Nano ZnO

Alojz Anžlovar*, National Institute of Chemistry, Ljubljana, Slovenia

D13_P75 Transparent and high refractive index nanocomposites based on main-chain aromatic copolymers

Yusuke Imai, National Institute of Advanced Industrial Science and Technology (AIST), Nagoya, Japan

D13_P76 Study of the mechanical properties of methacrylic polymers reinforced by functionalized oxozirconium nanoclusters

Alexandre Gatti, Institute of Chemistry of Araraquara, Araraquara - SP, Brazil

D13_P77 Covalent Attachment of Polymersomes to Surfaces
Mustafa Volkan Filiz, Institut of Physical Chemistry, Hamburg, Germany

D13_P78 Physical aging of polymer nanocomposites: development of the diffusion model
Daniele Cangialosi, CSIC, San Sebastian, Spain

D13_P79 New nanocomposites based on unsaturated polyester resin and modified halloysite
SORINA GAREA, University POLITEHNICA of Bucharest, Bucharest, Romania

D13_P80 New hybrid materials based on polybenzoxazine matrix and epoxy polyhedral oligomeric silsesquioxane
SORINA GAREA, University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania

D13_P81 Investigating Silica Shell Growth on Polymer Colloids through the Starve-Fed Addition of TEOS; Routes to Hollow Inorganic Particles
Adam Morgan, The University of Warwick, Coventry, Warwickshire, United Kingdom

D13_P82 Rheological study of the isothermal flow-induced crystallization kinetics of HDPE nanocomposites using particles with different geometries.
Cesar Augusto Gonçalves Beatrice, UFSCar / PPG-CEM, São Carlos / SP, Brazil

D13_P83 Effect of nanoparticle shape on the rheological behavior of PA6 nanocomposites
Juliano Marini, UFSCar / PPG-CEM, São Carlos, SP, Brazil

D13_P84 Rheological and Mechanical Characterization of Blown Films of PBAT Nanocomposites
Bruna Turino Rego, UFSCar/PPGCEM, São Carlos, SP, Brazil

D13_P85 Release of cupric ions from polypropylene/ cooper nanoparticles composites with antimicrobial properties.
Katherine Delgado, Departamento de Ingeniería Química y Biotecnología, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Santiago, Chile

D13_P86 Influence of Silane Coupling Agents on the Curing Characteristics of Nano Silicon Carbide Filled Butadiene Rubber Compounds
Amirpasha Kharazi, Amirkabir University of Technology, Tehran, Iran, Islamic Republic of

D13_P87 Influence of Silane Coupling Agents on the Curing Characteristics of Nano Silicon Carbide Filled Butadiene Rubber Compounds

Azam Jalali Arani, Amirkabir University of Technology, Tehran, Iran, Islamic Republic of

D13_P88 Influence of nano layered silicate on curing behaviour of NR/BR nanocomposites in presence of different amounts of MBTS/Sulphur

Azam Jalali Arani, Amirkabir University of Technology, Tehran, Iran, Islamic Republic of

D13_P89 Small angle neutron scattering from polystyrene-fullerene solutions

Lila Bouzina, Institut Charles Sadron (CNRS-ULP), Strasbourg, France

Hall 5

E17: Designing Block Copolymers: Theory, Experiment and Applications

E17_P01 Selective swelling induced mesoporous structures in block copolymers

Yong Wang, Nanjing University of Technology, Nanjing, China

E17_P03 Computational Studies on Understanding the Mechanism of Microphase Separation in Silicone-Urea Segmented Copolymers

Mine Yurtsever, Istanbul Technical University, Istanbul, Turkey

E17_P04 Design and synthesis of block copolymer supramolecular hybrid colloids for material applications

Xiaosong Wang, Leeds University, Leeds, United Kingdom

E17_P05 Block copolymer structures in nano-pores

Marco Pinna, University of Central Lancashire, Preston, United Kingdom

E17_P07 Phenylboronic acid as a sugar- and pH-responsive trigger to tune the multiple micellization of thermo-responsive block copolymer

Jin Qiao, Department of Polymer Science, Zhejiang University, Hangzhou, China

E17_P08 Thermoplastic Elastomers with Saturated Soft Segments

Yixian Wu, Beijing University of Chemical Technology, Beijing, China

E17_P09 Hybrid block copolymer precursors carrying reactive triethoxy silyl side groups : Synthesis, micellar behaviour and hydrolysis-condensation

EMMANUEL BEYOU, Ingénierie des Matériaux Polymères

UMRCNRS5223 : Laboratoire des Matériaux Polymères et Biomatériaux, Université Lyon1, VILLEURBANNE, France

E17_P10 Spatio-temporal correlations in a minimal model for block copolymer microdomain ordering

Christian Riesch, Institut für Physik, TU Chemnitz, D-09107 Chemnitz, Germany

E17_P11 UCST controlled block copolymer self-assembly

Aydin Can, Eindhoven University of Technology, Eindhoven, Netherlands

E17_P12 Temperature-responsive nanospheres with bicontinuous internal structures from semi-crystalline amphiphilic diblock copolymers.

Simon J. Holder, University of Kent, Canterbury, Kent, United Kingdom

E17_P13 Self-assembly in aqueous solution of amphiphilic diblock copolymers : from frozen aggregates to dynamic micelles.

Elise Lejeune, Université du Maine - UMR 6120 Polymères, Colloïdes et Interfaces, Le Mans, Sarthe, France

E17_P14 Thermoresponsive self-assembly of rod-coil copolymers based on poly[oligo(ethylene glycol) methacrylate] and poly(ϵ -caprolactone).

Mario Luzón, Instituto de Ciencia y Tecnología de Polímeros, Madrid, Spain

E17_P15 HIGH MOLECULAR WEIGHT LINEAR BLOCK COPOLYMERS OF POLY(L-LACTIDE) AND POLY(2-DIMETHYLAMINOETHYL METHACRYLATE): SYNTHESIS AND NANOPATTERNING

Maksym Kryuchkov, University of Montreal, Montreal, Quebec, Canada

E17_P16 Tunable Photonic Crystals made from Shear Ordered Diblock Copolymers

Andrew J Parnell, University of Sheffield, Sheffield, United Kingdom

E17_P17 Poly(trialkylsilyl (meth)acrylate) diblock copolymers : Self-assembly of hydrolytically labile polymers

Nadia Canilho, Université du sud Toulon - Var, La Garde, France

E17_P18 Designing controlled (meth)acrylic-based diblock copolymers/ZnO nanoparticles via the RAFT polymerization

Christine Bressy, Université du Sud Toulon-Var, La Valette du Var, France

E17_P19 Study on antiblocking masterbatches for LDPE plant

Shengxian Cao, Daqing petrochemical research center, Daqing, China

E17_P20 Well-Defined Semifluorinated Brush-Like Amphiphilic Block Copolymers: Synthesis, Self-Assembly, and Anti-biofouling Applications

Hazrat Hussain, Institute of Materials Research and Engineering, Singapore, Singapore

E17_P21 A Novel Janus Particle Topology From a New Versatile Block Terpolymer

Andrea Wolf, University of Bayreuth, Bayreuth, Germany

E17_P22 Stimuli-Responsive Multicompartment Micelles

Eva Betthausen, University of Bayreuth, Bayreuth, Germany

E17_P23 Controlled release of volatile molecules from block copolymer micelles in ethanol-water mixtures

Damien Berthier, Firmenich SA, R&D Division, Geneva, Switzerland

E17_P24 Polymeric Optical Fibers Produced with Different Acrylates via Atom Transfer Radical Polymerization Reactions

Selin Celebi, Middle East Technical University, Ankara, Turkey

E17_P25 Tailored surface properties of semifluorinated block copolymers by electrospinning

Sami Hietala, Laboratory of Polymer Chemistry, Department of Chemistry, University of Helsinki, Helsinki, Finland

E17_P26 Dissipative Particle Dynamics Study of Linear Diblock and Heteroarm Star Copolymers

Michael Matthias Nardai, University of Vienna, Department of Physical Chemistry, A-1090 Vienna, Austria

E17_P27 Introduction of metal nanoparticles into polymer particles with phase separation structures

Kazutaka Koike, Graduate school of Eng., Tohoku Univ., Sendai, Japan

E17_P28 Nanostructured Langmuir-Blodgett Films: From Nanodots to Nanostrand Network Patterns

Iryna Perepichka, University of Montreal, Montreal, Quebec, Canada

E17_P29 Alternating Diene Metathesis Polycondensation (ALTMET) - Optimizing Catalyst Loading.

Mudassar Abbas, Institute of Chemistry and Technology of Materials, Graz University of Technology, Graz, Austria

E17_P30 Study on the Lamellae-Fddd Transition of Block Copolymer

Kuniaki Matsuda, Department of polymer chemistry, Graduate School of Engineering, Kyoto University, Kyoto, Kyoto, Japan

E17_P31 Controled arrangement of ferritin molecules on a self-assembled nano pattern of diblock copolymer

Go Sakaguchi, Department of Polymer Chemistry, Kyoto University Graduate School of Engineering, Kyoto, Japan

E17_P32 Synthesis of Novel Polysulfone-Polydimethylsiloxane Block Copolymers

Mehmet Arif KAYA, Yildiz Technical University, Istanbul, Turkey

E17_P33 Phase diagram of diblock copolymer melt obtained by dissipative particle dynamics simulation

Elena Patyukova, M.V. Lomonosov Moscow State University, Physics department, Moscow, Russian Federation

E17_P34 Block copolymers from renewable macrolactones by combination of enzymatic polymerization and ATRP

Zeliha Ates, School of Chemical Sciences, Dublin City University, Dublin, Ireland

E17_P35 Synthesis and characterization of amphiphilic elastomeric segmented polyurethanes based on polycaprolactone diol and poly(propylene glycol)-*block*-poly(ethylene glycol)-*block*-poly(propylene glycol)

Jonathan Bergamaschi, State University of Campinas, Campinas, São Paulo, Brazil

E17_P36 Crystalline conformation of poly(ethylene/trimethylene terephthalate) copolyester

Tien-Wei Shyr, Institute of Textile Engineering, Feng Chia University, Taichung, Taiwan

E17_P37 Theoretical Studies on Phase Behaviors of Diblock Copolymers in Selective Solvents

Dadong Yan, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

E17_P38 Single Chain Mean Field Technique for Simulation of Complex Molecular Systems

Sergey Pogodin, Universitat Rovira i Virgili, Tarragona, Spain

E17_P39 Formation of Hierarchy Structure in Liquid Crystalline Block Copolymers

Tomoo Shiomi, Nagaoka University of Technology, Nagaoka, Niigata, Japan

E17_P40 Poly(Ethylene Oxide) Crystal Orientation Change under 1D Nanoscale Confinement using Polystyrene-*block*- Poly(Ethylene Oxide) Copolymers: Confined Dimension and Reduced Tethering

Density Effects

Ming-Siao Hsiao, The University of Akron, Akron, Ohio, United States

E17_P41 ABC triblock copolymer thin films doped with lithium salts

Seung Hyun Kim, Inha University, Incheon, Korea, Republic of

E17_P42 Curing and postcuring of UDMA/BisGMA copolymers

Nicoleta Sulca, University POLITEHNICA of Bucharest, Bucharest, Romania

E17_P43 Pattern formation of binary fluids and copolymers in quenching with variable temperature

Giuseppe Gonnella, University of Bari - Department of Physics, Bari, Italy

E17_P44 Molecular Weight Distribution of Multiblock Polymers Prepared via RAFT Polymerization

Bastian Ebeling, Georg-August-Universität Göttingen, Göttingen, Germany

E17_P46 Block Copolymer Synthesis in Supercritical Carbon Dioxide- A Route to Nanostructured Spherical Microparticles

James Jennings, University of Nottingham, Nottingham, United Kingdom

E17_P47 Double or triple hydrophilic block copolymer based on uncharged, strong polyelectrolyte and stimuli-responsive sequences

Céline Baguenard, Ingénierie des Matériaux Polymères, CNRS, UMR 5223, Villeurbanne, France

E17_P48 Epoxy Resin Modified with Polyetherimide-Siloxane Block Copolymers

Wenjun Gan, Shanghai University of Engineering Science, Shanghai, China

Hall 5

F19: Biodegradable and Sustainable Polymers

F19_P01 A new method for the synthesis of photocurable oligochitosan

Laleh Solhi, Iran polymer and Petrochemical institute, Tehran, Iran, Islamic Republic of

F19_P02 Rice bran filled with PLA bio-packaging: production and properties

Rapeephun Dangtungee, Department of Industrial Chemistry, Faculty of

Applied Science, King Mongkut's University of Technology North
Bangkok, Bangkok, Thailand

F19_P04 The study on photosensitizing effect of Galbanic acid and its ferric salt on polyethylene film

homa asempour, Amirkabir University, Tehran, Iran, Islamic Republic of

F19_P06 Synthesis, Characterization and Photo-Polymerization of Vinyl Ether and Acrylate Functionalized-PCL

Marc J.M. Abadie, School of Materials Science & Engineering, Nanyang Technological University, Singapore, Singapore

F19_P07 Mechanical properties and degradation of polylactic acid blended with cassava starch and natural rubber

Varaporn Tanrattanakul, Prince of Songkla University, Hatyai, Songkla, Thailand

F19_P08 Novel Fucose-containing EPS: Production and Characterization

Rodolfo Marques, Requimte/CQFB, Chemistry Department, FCT/Universidade Nova de Lisboa, Caparica, Portugal

F19_P09 Unexpected Mechanical Properties of Salt Modified Starch

Andrew Ballantyne, University of Leicester, Leicester, United Kingdom

F19_P10 Electron beam cured resins and composites based on acrylated linseed oil

Marco R. Rettig, Brandenburg University of Technology Cottbus, Chair of Polymeric Materials, Teltow, Germany

F19_P11 Particle Processing and Optimization

Marie Warren, The University of Nottingham, Nottingham, United Kingdom

F19_P12 Novel Thermo-Responsive Micelles Based on Water-Soluble Amphiphilic Comb-like Graft Copolymer with Well-Defined Molecular Structure

Gang Wu, Center for Degradable and Flame-Retardant Polymeric Materials, College of Chemistry, Sichuan University, Chengdu 610064, China

F19_P13 Preparation and Evaluation of Novel Interpenetrating Polymer Network-Based on Newspaper Pulp for Copper Ions Chelation

Ahmed Haroun, National Research Centre, Chemical Industries Research Division, Cairo, Dokki, Egypt

F19_P14 Direct Polycondensation of Aromatic Hydroxy Acid Simulating Lignosulphonate Fragments

Ana Marques, University of Aveiro, Aveiro, Portugal

F19_P15 Natural Wood Fibers Modification via Surface-Initiated MADIX/RAFT Polymerization: Grafting Amphiphilic Cationic Polystyrene Based Copolymers.

DAMIEN TASTET, IPREM-Equipe de Physique et Chimie des Polymères, CNRS-University of Pau, PAU, France

F19_P16 LACTIC ACID BASED THERMOSET PLASTICS FROM CELLULOSIC WASTE

Shweta soam, CHAUDHARY CHARAN SINGH UNIVERSITY, MEERUT, U.P, India

F19_P17 Some Studies on Organosolv Lignin - PVC Blends.

Nesrine Farid Kassem, National Research Center, Guiza, Egypt

F19_P18 Biodegradation of photodegraded polyethylene films by bacteria. effect of calcium and iron stearates as pro-oxidants additives.

Jesús Luis Pablos, Departamento de Fotoquímica, Instituto de Ciencia y Tecnología de Polímeros, CSIC, Madrid, Spain

F19_P19 Fluoropolymer dispersions: new environment-friendly products and technology

Stefana Musio, Solvay Solexis S.p.A., P.le Donegani, 5/6 - 15047 Spinetta Marengo, (AL), Italy

F19_P20 Synthesis and ring-opening polymerisation of a new functional lactone, α -iodo- ϵ -caprolactone: a novel route to functionalized aliphatic polyesters

Vincent Darcos, IBMM, Artificial Biopolymers group, Montpellier, France

F19_P21 The influence of morphology on the biodegradability of PP/PHB blends

Guilhermino J. M. Fechine, Presbyterian University Mackenzie, São Paulo/SP, Brazil

F19_P22 Catalytic Copolymerization of Propylene Oxide and Carbon Dioxide

Doreen Alisch, Institute for Technical and Macromolecular Chemistry, University of Hamburg, Hamburg, Germany

F19_P23 Co-catalytic behaviour of titanium dioxides and carbonyl compounds in photo-oxidative degradation of polyethylene film

Thara Manangan, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand

F19_P24 PHB and PLA coating on paper for food packaging

Sarinya Shawaphun, Department of Industrial Chemistry, Faculty of Applied Science, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand

F19_P25 Synthesis of polyesters from anhydrides and oxiranes and their diol derivatives.

Elham Hosseini Nejad, Technical University of Eindhoven, Eindhoven, Netherlands

F19_P26 Properties of All-Cellulose Composites Reinforced by cellulose nanofibrils Prepared with an Ionic Liquid

Jun ZHANG, Institute of Chemistry, Chinese Academy of Sciences (CAS), Beijing, China

F19_P27 The study on photosensitizing effect of Galbanic acid and its ferric salt on polyethylene film Summary

Homa Asempour, Department of Polymer Engineering, Amirkabir University of Technology, Tehran, Iran, Islamic Republic of

F19_P28 Characterization and Preparation of Kenaf bast pulp as renewable agricultural products by Electron beam irradiation

Phil Hyun Kang, Korea Atomic Energy Research Institute Radiation Research Division for Industry and Environment, Daejeon, Korea, Republic of

F19_P29 Catalytic Modification of Cellulose in Ionic Liquids

Anna Osichow, University of Konstanz, Konstanz, Germany

F19_P30 Aggregation numbers of chitosan clusters in dilute aqueous solutions

Evgeniya Korchagina, M.V. Lomonosov Moscow State University, Physical Department, Moscow, Russian Federation

F19_P31 Vegetable oil-based biodegradable photo-crosslinked polymer networks

Beom Soo Kim, Chungbuk National University, Cheongju, Korea, Republic of

F19_P32 Photochemical and thermal stability of naturally cross-linked collagen materials

Alina Sionkowska, Nicolaus Copernicus University, Torun, Poland

F19_P33 Chitosan/Poly(L-lactic acid)/Polycaprolactone blend for control delivery of antibiotic drug

Wasinee Boonkong, Program in Petrochemistry Faculty of Science Chulalongkorn University, Bangkok, Thailand

F19_P34 Microwave enhanced synthesis of graft co-polymers of binary vinyl monomer mixtures onto acetylated *saccharum spontaneum* L and characterization

Balbir Singh Kaith, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India

F19_P35 Synthesis and characterization of corn starch based green composites reinforced with Saccharum spontaneum L graft copolymers prepared under micro-wave

Balbir Singh Kaith, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India

F19_P36 Networks and copolymers of an unsaturated aliphatic polyester for use in biomedical applications

Sofia Målberg, Department of Fiber and Polymer Technology, School of Chemical Science and Engineering, Royal Institute of Technology, SE-10044 Stockholm, Sweden

F19_P37 Polyurethanes and Polyanhydrides from Thiol-ene Functionalized Castor Oil Derivatives

Marina Galià, Rovira i Virgili University, Tarragona, Spain

F19_P38 Structural, mechanical, thermal and degradability study of thermoset polymers synthesized from a renewable resource: Rubber Seed Oil

Jonathan Bergamaschi, State University of Campinas, Campinas, São Paulo, Brazil

F19_P39 PLA-Synthetic Mica Nanocomposites: Preparation by Melt Blending

Marcos Dias, Instituto de Macromoléculas Professora Eloisa Mano, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro, Brazil

F19_P40 Green composites: effect of wood flour addition in the biodegradation behaviour of the polymeric matrix Ecobras[®]

Marília Vieira, UFSCar, São Carlos - SP, Brazil

F19_P41 Active packaging of fresh fruits: casting *versus* extrusion

Patrícia Ponce, Instituto de Pesquisas Energéticas e Nucleares - IPEN, São Paulo, São Paulo, Brazil

F19_P42 High Molecular Weight Aliphatic Polycarbonates by Melt Polycondensation of Aliphatic Diols with Dimethyl Carbonate: Synthesis and Characterization

Chuncheng Li, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China

F19_P43 Synthesis of aliphatic polyester by radical polymerization of ketene acetals

Jenny Undin, Fibre and polymer technology, Stockholm, Sweden

F19_P44 Polymorphic Crystallization of PLLA-PEG-PLLA Triblock Copolymer

Wen-Bin Liao, National Taiwan University, Taipei, Taiwan

F19_P45 Amphiphilic, Biodegradable Graft-Copolymers
Christian Hahn, RWTH Aachen University, Institute for Technical and Macromolecular Chemistry, Aachen, Germany

F19_P46 Preparation of polyesteramide nanofibers
Jiri Brozek, Department of Polymers, Institute of Chemical Technology, Prague, Czech Republic

F19_P47 Towards more environmentally-friendly materials : incorporating PLA in common plastics.
Cécile BOUTIN, Laboratoire MMC, Paris, France

F19_P48 Syntheses Polymers from sustainable sources by olefin metathesis
Patrick Lamprecht, University of Hamburg, Hamburg, Germany

F19_P49 Processability and characterization of biodegradable polymers based on poly lactic acid
Ana Isabel Ares, Group of Polymers. Universidad de A Coruña. E. U. P., Avda. 19 de Febrero s/n, 15405, Ferrol., Spain

F19_P50 Hydroxy telechelic polycarbonates for the synthesis of block copolymers
Marion Helou, Sciences Chimiques de Rennes, Rennes, France

F19_P51 Synthesis and functionalization of stereoregular, architecturally diverse poly(lactide)s with thiol-ene click chemistry
Robin Pflughaupt, University of Warwick, Coventry, United Kingdom

F19_P52 Crystallizable-crystallizable block copolymer containing poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and poly(ϵ -caprolatone): synthesis, crystallization competition and thermal stability
Gui-Fang Shan, Donghua University, Shanghai, China

F19_P53 Evaluation of Mechanical Properties and Morphological in Biocomposite PHB/V with Different Natural Fibers and Nanofillers.
Marcio Kobayashi, PPG/CEM-UFSCar, São Carlos, São Paulo, Brazil

F19_P54 Benzoxazine Thermosets from Diphenolic Acid as Renewable Resource.
Virginia Cádiz, Rovira i Virgili University, Tarragona, Spain

F19_P55 Polyethers from epoxidised vegetable oil
Seng Soi Hoong, The University of Warwick, Coventry, United Kingdom

F19_P56 MECHANICAL PROPERTIES AND BIODEGRADABILITY OF MATER-BI®/WOOD FLOUR ECOCOMPOSITES
Giada Lo Re, University of Palermo, Dipartimento di Ingegneria Chimica dei Processi e dei Materiali , Viale delle Scienze, ed. 6, Palermo, Italy

F19_P57 Clicking renewable resources: Fatty acid derived monomers and related polymers via thiol-ene additions

Oguz Turunc, University of Applied Sciences Emden/Leer, Emden, Germany

F19_P58 Synthesis and Functionalisation of Allyl-functional Aliphatic Poly(Carbonate)s

Sarah Tempelaar, University of Warwick, Coventry, United Kingdom

F19_P59 Synthesis of functional poly(ester)s derived from malic acid

Mike Bennison, University of Warwick, Coventry, United Kingdom

F19_P60 Biodegradability of chitosan films coated paper packaging

Arlete Reis, UFVJM - Universidade Federal dos Vales do Jequitinhonha e Mucuri; ICT – Science and Technology Institute, Diamantina, Minas Gerais, Brazil

F19_P61 In-situ measurement of dielectric properties for polycondensation of lactic acid

Takashi Nakamura, National Institute of Advanced Industrial Science and Technology, Tsukuba, Ibaraki, Japan

F19_P62 Renewable dendrimers through thiol-ene additions

Lucas Montero de Espinosa, University of Potsdam, Potsdam, Brandenburg, Germany

F19_P63 Unsaturated PA X,20 from Renewable Resources via Metathesis and Catalytic Amidation

Hatice Mutlu, Fachhochschule Emden-Leer, Emden, Germany

F19_P64 Ring Opening Metathesis Polymerization of Fatty Acid Derived Monomers

Hatice Mutlu, Fachhochschule Emden-Leer, Emden, Germany

F19_P65 Long-Term Aging and Life-Prediction Studies of Fluoropolymer Materials used in Photovoltaic Modules.

Prasad Shankarappa, Underwriter's Laboratories Inc., Northbrook, IL, United States

F19_P66 NNO-tridentate ketiminate zinc and magnesium complexes as active catalysts for ring-opening polymerization of L-lactide

Hui-Ju Chuang, Department of Chemistry, National Chung-Hsing University, Taichung 402, Taiwan

F19_P67 Synthesis of Novel Biodegradable Polymers

Lauren Cowie, Durham University, Durham, United Kingdom

F19_P68 Bismuth(III) Alkoxide Catalysts for Ring-Opening Polymerization of Lactides and ϵ -Caprolactone

Sirpa Vuorinen, Laboratory of Inorganic Chemistry, Department of Chemistry, University of Helsinki, Helsinki, Finland

F19_P69 Synthesis of polyester-based copolymers as biodegradable impact modifiers for polylactide.

Emmanuel Duquesne, University of Mons, Mons, Belgium

F19_P70 Highly stereoselective polymerization of (D,L)-lactide by O,N,N,O-tetradentate aluminium alkoxide complexes

Hsiao-Li Chen, Department of chemistry, National Chung Hsing University, Taichung 402, Taiwan

F19_P71 Highly stereoselective polymerization of (D,L)-lactide by O,N,N,O-tetradentate aluminium alkoxide complexes

Hsiao-Li Chen, Department of Chemistry, National Chung Hsing University, Taichung 402, Taiwan

F19_P72 Functional Materials from Hemicelluloses-rich Biomass

Yingzhi Zhu Ryberg, Royal Institute of Technology, Stockholm, Sweden

F19_P73 Redox polymerization of N-isopropylacrylamide initiated by hydroxylated soya oil polymer in the presence of Ce(IV) to obtain a graft copolymer.

Timur SANAL, Yalova University, Yalova, Turkey

F19_P74 Copolymers with Orthogonally Reactive Side Chains: Combination of an Azido Monomer with a Novel Carbonate Monomer

Nergiz Cengiz, Bogazici University, Istanbul, Turkey

F19_P75 BIO-BASED FUNCTIONAL POLYETHERS : APPLICATION TO POLYURETHANES AND EPOXY RESINS MATERIALS

Anne-Laure BROCAS, LCPO, Bordeaux, France

F19_P76 Alginate Hydrogel Beads; A Biodegradable Slow Release Delivery System for Agrochemicals

Louise Gallagher, NUIM, Maynooth, Ireland

F19_P77 Efficient transformations for the functionalization of aliphatic poly(ester)s

Richard Todd, University of Warwick, Coventry, United Kingdom

F19_P78 Synthesis and Characterization of Some New Brush Type Amphiphilic Hybride Graft Copolymers.

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F19_P79 Preparation of starch-based bioplastics and gelatin with different techniques

Farayde M. Fakhouri, UNICAMP State University of Campinas, Campinas, São Paulo, Brazil

F19_P80 Flexible bioplastics composites based on lipophilic corn starch and gelatin plasticized with glycerol

Lúcia H. Innocentini-Mei, UNICAMP State University of Campinas, Campinas, São Paulo, Brazil

F19_P81 Development of flexible bioplastic from cassava starch and glycerol using thermoplastic extrusion

Lúcia H. Innocentini-Mei, UNICAMP State University of Campinas, Campinas, São Paulo, Brazil

F19_P82 Thermal analysis and mechanical properties of cassava starch edible films added of barbados cherry

Farayde M. Fakhouri, UNICAMP, Campinas, SP, Brazil

F19_P83 Preparation and Characterization of Films Based on Cellulose Acetate Nanocomposites

Francisco Rodríguez, Universidad de Santiago de Chile, Santiago, Chile

F19_P84 ISOLATION AND CHARACTERIZATION OF CELLULOSE WHISKERS FROM RICE HUSKS

Sônia Marli B. Nachtigall, UFRGS, Porto Alegre, RS, Brazil

F19_P85 Chemical migration analysis of thermoformed virgin/post-consumer polyethylene terephthalate clamshell packaging into food simulants

Greg Curtzwiler, California Polytechnic State University, San Luis Obispo, CA, United States

F19_P86 Preparation and characterization of PHB/cellulose whiskers bionanocomposites modified by PEG

Patrícia Patrício, Unifei, Itabira, MG, Brazil

F19_P87 Antimicrobial ability of Acetate cellulose/MMT-Cu²⁺ nanocomposite

Julio Bruna, Universidad de Santiago, Santiago, Region Metropolitana, Chile

F19_P88 Ternary blends of chitosan/poly(vinyl alcohol)/ poly(lactic acid)

Rafael Grande, Universidade Federal de São Carlos, São Carlos, Brazil

F19_P89 Biodegradable Polyesters Based on Isosorbide and Isomannide Obtained from Enzymatic Catalysis: Synthesis and Surface Properties

Alliny Naves, Universidade de São Paulo, São Paulo, Brazil

F19_P90 Ageing of polylactide fibres in an Accelerated Weathering Chamber

Lucila Araceli Montero, Textile Research Institute of Terrassa
(Universitat Politècnica de Catalunya), Terrassa, Spain

F19_P91 Variation of properties of polylactide fibres during thermal fixation

Diana Cayuela, Textile Research Institute of Terrassa, Universitat
Politècnica de Catalunya, Terrassa, Spain

F19_P92 Synthesis, chemical and physical characterization of biodegradable flexible polyurethanes derived from saccharides to be applied as biomaterial in wound dressing.

Susete Fernandes, Institute for Biotechnology and Bioengineering,
Centre for Biological and Chemical Engineering, Instituto Superior
Técnico, Technical University of Lisbon, Lisbon, Portugal

F19_P93 Thermoplastic starch modified by reactive extrusion using isocyanates and organic acids

Antonio J. F. Carvalho, Universidade de São Paulo - EESC/SMM, São
Carlos, Brazil

F19_P94 Structure and thermal characterization of biodegradable polymer/organomontmorillonite composites based on poly(butylene terephthalate) and poly(butylene succinate)

Malgorzata Gazinska, Wroclaw University of Technology, Polymer
Engineering and Technology Division, Wroclaw, Poland

F19_P95 *Combining chain-extension reaction and stereocomplexation to improve poly(lactide) properties*

Valérie Lison, Umons, Mons, Belgium

F19_P96 Bioproduction of poly(3-hydroxybutyrate) and its copolymers from waste edible oils

Stanislav Obruca, Brno University of Technology, Brno, Czech Republic

F19_P97 Comparison of molecular properties and stability of collagen type I derived from chicken skin and other animal tissues

Ivana Márová, Brno University of Technology, Brno, Czech Republic

Hall 5

G24 Polymers for Sensors

G24_P01 Aggregation-nonaggregation-aggregation transformation in a conjugated polymer system and the optimization for sensing

application

Li-Juan Fan, Soochow University, Suzhou, China

G24_P03 Transport properties of nanoporous 1,2-Polybutadiene membranes for biosensor applications

LI LI, Danish Polymer Center, Technical University of Denmark, Copenhagen, Denmark

G24_P04 Label free detection and estimation of biologically important cations and anions using new water-soluble fluorescent polymer

Parameswar K. Iyer, Indian Institute of Technology, Guwahati, Assam, India

G24_P05 Adsorption Study of Metal Ions on Electrochemically Synthesized Poly-(ortho-phenylenediamine)

Abdunnaser Etorki, Department of chemistry , University of Alfateh, Tripoli, Libyan Arab Jamahiriya

G24_P06 High sensitivity optical biosensing based on polycyanurate nanorods

Antonis Gitsas, Austrian Institute of Technology, Vienna, Austria

G24_P07 *p*-PHENYLENEDIAMINE EPOXY RESIN FILM FOR REDOX ENZYME DETECTION

Kenichi Kanno, Department of Biological and Environmental Chemistry, Kinki University, Fukuoka, Japan

G24_P08 Chemical sensing behavior of electrically conductive polymer blends

Roza Tchoudakov, Technion, Haifa, Israel

G24_P09 Effect of polymer Particle Size in CdSe Polystyrene Nanocomposites Fluorescence Emission

Elcin Coskun, Centro de Investigación en Materiales Avanzados, Chihuahua, Mexico

G24_P10 DNA-branched polyacrylamide brushes grown via SI-ATRP onto gold surfaces and their application in optical and electrochemical DNA sensing

Olivier Henry, Universitat Rovira I Virgili, Tarragona, Spain

G24_P11 Preparation of Template-Assisted Conducting Polymer Nanowires and Their Applications for Sensor

Sang Hyun LEE, Yeung nam, Gyeongsan, Korea, Republic of

G24_P12 Nano size patterning of biomolecules on a polymer surface via Dip-pen nanolithography

HAECHUL BAE, yeung nam univ, kyeung san, Korea, Republic of

G24_P13 Synthesis of novel polymers for the production of polymeric optical fibers

Evren Aslan Gürel, Empa - Swiss Federal Laboratories for Materials Testing and Research, St.Gallen, Switzerland

G24_P14 Ternary complex of three-dimensional polymer chains

Elena Makhaeva, Moscow State University Physics Department, Moscow, Russian Federation

G24_P15 Synthesis of light-responsive spiropyran polymers

Claudia Ventura, School of Chemical Sciences, Dublin City University, Dublin, Ireland

G24_P16 Thermal Induced Helical Structure Control Accompanying Formation of π -Stack Conjugation of Stereoregular Poly(phenylacetylene)s

Yasuteru MAWATARI, Muroran Institute of Technology, Muroran, Hokkaido, Japan

G24_P17 A Novel Organic-inorganic Composite: Poly(3-ethynyl-N-2-ethylhexylcarbazole)/Delafossite CuAlO_2 with an Extremely Long Life Time Constant of Photoelectric Conversion

Yasuteru MAWATARI, Muroran Institute of Technology, Muroran, Hokkaido, Japan

G24_P18 Fluorescent nanogel thermometer for intracellular thermometry

Seiichi Uchiyama, The University of Tokyo, Tokyo, Japan

G24_P19 Polymerization of phenylsilane catalyzed by titanium complexes

Jan Merna, Institute of Chemical Technology, Prague, Department of Polymers, Prague, Czech Republic

G24_P20 A NEW ROUTE TO OBTAIN PANI-EAA FLEXIBLE FILMS

Giada Lo Re, University of Palermo, Dipartimento di Ingegneria Chimica dei Processi e dei Materiali , Viale delle Scienze, ed. 6, Palermo, Italy

G24_P21 Fluorophore labelled smart polymers

Saima Jabeen, University of Greenwich, Kent, United Kingdom

G24_P22 Helical Structure Control of Poly(pentyl propiolate)s Bearing a Branched Alkyl Chain Prepared with a Rh Complex Catalyst

Asahi MOTOSIGE, Muroran Institute of Technology, Muroran, Hokkaido, Japan

G24_P23 Conformational Change of Poly(alkyl propiolate)s Bearing a Normal or Branched Alkyl Chain

Yoshiaki Yoshida, Muroran Institute of Technology, Muroran, Hokkaido, Japan

G24_P24 Poly(phenylacetylene) metal complex: Helicity control in dynamic helical polymers

Felix Freire, University of Santiago de Compostela, Santiago de Compostela, Spain

G24_P25 Electrochromic properties of spiropyran-terthiophene adaptative polymers

Michele Zanoni, Dublin City University, Dublin, Italy

G24_P26 Functionalized conjugated organic molecules for metal ions detection.

Jitapa Sumranjit, National Nanotechnology Center, Klongluang, Pathumthani, Thailand

Hall 5

H26: Young Polymer Scientists

H26_P01 Synthesis and characterization of novel poly(thiazole imide)s derived from 5,5'-methylenebis(2-aminothiazole) with some of dianhydride monomers

Ali Javadi, Faculty of Chemistry, Tarbiat Moallem University, Mofatteh Ave. No.49, Tehran, Iran, Islamic Republic of

H26_P02 Synthesis and properties of thermally stable and organosoluble novel polyesters bearing sulfur linkages

Ali Javadi, Young Researchers Club, Islamic Azad University, South Tehran Branch, Tehran, Iran, Islamic Republic of

H26_P03 Synthesis and characterization of novel organosoluble fluorinated polyamide-imides bearing ether and sulfur linkages

Ali Javadi, Iranian Academic Center for Education, Culture and Research, Tarbiat Moallem Branch, Tehran, Iran, Islamic Republic of

H26_P04 Synthesis of polyethylenes with specified properties using $(C_5H_5)_4Zr$ based catalytic systems

Igor Sedov, Institute of problems of chemical physics RAS, Chernogolovka, Moscow reg., Russian Federation

H26_P05 Designing and characterization of PVA nanoparticles for Controlled Release of Ciprofloxacin hydrochloride (Cfx). An In - Vitro Study.

Rajesh Kumar Saini, Government Autonomous Science College,, Jabalpur, M.P., India

H26_P06 Tailored α -azide- ω -alkyne monomers: versatile precursors to polymer materials ranging from high molar mass polytriazoles to molecularly defined cyclic oligomers
Eric Drockenmuller, Ingénierie des Matériaux Polymères, Lyon, France

H26_P07 NEW POLYMERIC SULFIDE-BORANE COMPLEXES AS CONVENIENT HYDROBORATING AND REDUCING AGENTS
Asim A. Balakit, Cardiff University, Cardiff, United Kingdom

H26_P09 Ionic liquid soluble side chain cyclic carbonate polymers for transparent, flexible and highly conductive ion gels
Satyasankar Jana, Institute of Chemical and Engineering Sciences, Singapore, Singapore

H26_P10 Charge Induced Phase Separation in Binary Charged Colloids.
Koki Yoshizawa, Nagoya City University, Nagoya, Japan

H26_P12 Vacuum Pyrolysis of Ground Tire Rubber (GTR), and Reclaimed Rubber (RR)
Abbas Kebritchi, Isfahan University of Technology, Isfahan, Iran, Islamic Republic of

H26_P13 Applications of Novel Organic Polymer Composites in Suzuki and Heck Cross-coupling Reactions
Mian Wang, Institute of chemical and engineering science, singapore, Singapore

H26_P15 IMPROVEMENT OF NATURAL RUBBER BY ULTRACENTRIFUGATION
Danillo Godinho Rodrigues, UFG - Universidade Federal de Goiás, Goiânia, Goiás, Brazil

H26_P16 Cyclic Esters Polymerization Reactions with Cyclam-Based Zr Catalysts
Luis Alves, Instituto Superior Técnico, Lisboa, Portugal

H26_P17 Synthesis and crystallization of rigid-flexible aromatic polyetherketones with controlled rigid segment lengths
Jean-Michel Benoit, Université Laval, Québec, Canada

H26_P18 Preparation, Characterisation and Diffusion Studies of Polypyrrole, poly(1,6-di(N-pyrrolyl)hexane) and poly(N-dodecylpyrrole)
Danesh Roudini, Kingston University, London, Kingston upon Thames, United Kingdom

H26_P19 Polycondensation of 12-hydroxydodecanoic acid in Brønsted Acidic Ionic Liquids
Shaodong Zhang, Université P. et M. Curie, Paris, France

H26_P20 IDENTIFICATION OF SUBSTANCES FORMED IN A MODEL OF POLYOLEFIN CONTAINING ANTIOXIDANTS EXPOSED TO CHLORINATED WATER MEDIA

Wenbin Yu, Royal Institute of Technology, Stockholm, Sweden

H26_P21 Effect of natural rubber and epoxidized natural rubber on physical properties of poly(butylenes adipate-co-terephthalate)

Nuda Pisutthian, Prince of Songkla University, Hatyai Songkla, Thailand

H26_P22 Oligomeric isosorbide esters as renewable resource plasticizers for PVC

Bo Yin, Royal Institute of Technology (KTH), Stockholm, Sweden

H26_P23 Determination of the Macromolecular Dimensions of Hydrophobically Modified Polymers by Micellar Size Exclusion Chromatography Coupled With Multiangle Light Scattering

Guillaume Dupuis, Institut Français du Pétrole, IFP, Rueil-Malmaison, France

H26_P24 Molecular Dynamics of Regioregular Poly(3-alkylthiophene) Investigated by NMR Relaxation and an Interpretation of Temperature Dependent Optical Absorption

Koji Yazawa, Tokyo Institute of Technology, Yokohama, Japan

H26_P25 Electrochemical copolymerization of anisidine and o-aminophenol

Bakhshali Massoumi, Payame Noor University, Tabriz, Azarbayjane sharghi, Iran, Islamic Republic of

H26_P26 New coarse-grained DNA model for analysis of mechanical properties

Irina Kikot, Semenov Institute of Chemical Physics, RAS, Moscow, Russian Federation

H26_P28 Synthesis and Characterization of Polyacrolein and Its Oxime and Phenylhydrazone Derivatives

Dilek Kars Mete, Abant Izzet Baysal University, Bolu, Turkey

H26_P29 The significant effect of polypropylene material on the migration of antioxidants from food container to food simulants

Jonas Alin, Fibre- and polymer technology, Stockholm, Sweden

H26_P30 Preparation and characterization of organosoluble fluorinated polyamides bearing ether and sulfur linkages in ionic liquids

Masoumeh Zakeri, Department of chemistry, School of sciences, Alzahra University, Tehran, Iran, Islamic Republic of

H26_P31 Novel Aromatic Polyoxadiazoles bearing 1,1'-thiobis(2-naphthoxy) groups

Masoumeh Zakeri, Young Researchers Club, Islamic Azad University, North Tehran Branch, Tehran, Iran, Islamic Republic of

H26_P32 Ring-substituted polyphenylacetylenes: preparation, characterization, study of molecular weight and configurational stability.

Olga Trhlikova, Charles University in Prague, Prague, Czech Republic

H26_P33 Study of molecular weight stability of MEH-PPV in solution

Dmitrij Bondarev, Charles University in Prague, Prague, Czech Republic

H26_P34 Bio-mimetic characterisation of *Mimosa pudica* fiber using *in-situ* laser diffraction technique

Rajaram Satapathy, Spintronic Technology and Advance Research, Bhubaneswar 752050, Orissa, India

H26_P35 Hydroxyalkyl methacrylate based gels as supports for chiral salenMn(III) and Co(III) complexes and their application in asymmetric olefin epoxidation and hydration epoxides

Katarzyna Matkiewicz, Faculty of Chemistry, Rzeszów University of Technology, Rzeszów, Poland

H26_P36 Conical deposits from drying poly(ethylene oxide) solutions

Kyle Baldwin, Nottingham Trent University, Nottingham, United Kingdom

THURSDAY 15 JULY 2010 - ORAL SESSIONS

Clyde Auditorium

Plenary: Ludwik Leibler

PLEN_05 Supramolecular networks and nanocomposites: search of the missing link

Ludwik Leibler, École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris, Paris, France

Room: Forth

Parallel 1: A3 Colloids and Surfaces for Biomaterials Applications

Session Chair: Jonathan Aylott, University of Nottingham, UK

09:45 INVITED **A3_O10 Nanostructured Polymer Capsules for Biomedical Applications**

Frank Caruso, Centre for Nanoscience and Nanotechnology, Department of Chemical and Biomolecular Engineering, The University of Melbourne, Melbourne, Victoria, Australia

10:15 **A3_P07 DEVELOPMENT OF AN IMPLANTABLE CONTACT LENS AND RELATED ADHESIVE**

Timothy Hughes, CSIRO Molecular and Health Technologies, Melbourne, Victoria, Australia

10:30 **A3_O12 Controlling cell-materials interactions using surface initiated polymerisation - a platform approach.**

Laurence Meagher, CSIRO Molecular and Health Technologies, Clayton South, VIC, Australia

10:45 **A3_O13 Thermally-responsive surfaces comprising grafted poly(N-isopropylacrylamide) Chains: The preparation and reversible capture of dispersed polymer particles.**

Ruixue Liu, The University of Manchester, manchester, United Kingdom

Room: Gala 1 & 2

Parallel 2: B5 Polymers in the Home, Personal Care and Agriculture

Session Chair: Ezat Khoshdel, Unilever, UK

09:45 KEYNOTE B5_O01 **Future Direction for Polymers in Home and Personal Care Products**

Adam Limer, Unilever, Port Sunlight, United Kingdom

10:30 B5_O02 **Influence of the Backbone Structure on the Release of Bioactive Volatiles from Maleic acid Based Polymer Conjugates**

Damien Berthier, Firmenich SA, Geneva, Switzerland

10:45 B5_O03 **Fabrication of Titanium Dioxide Nanoparticle Armored UV-Protective Microcapsules**

Stefan Bon, University of Warwick, Coventry, United Kingdom

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Daniel Read, University of Leeds, UK

09:45 INVITED B6_O27 **Disentangled Linear Ultra High Molecular Weight Polyethylene; from fundamental to technological development**

Sanjay Rastogi, Loughborough University, Loughborough, United Kingdom

10:15 B6_O28 **The Trapped Disentangled Melt State: Theoretical and Structural Analysis**

Tom McLeish, Durham University, Durham, United Kingdom

10:30 B6_O29 **Macromolecular Topology and Branch Content of Polyolefins using Small-Angle Neutron Scattering**

Gregory Beaucage, University of Cincinnati, Cincinnati, Ohio, United States

10:45 B6_O30 **The Effect of Analysis and Sample Preparation Temperatures on the Chromatography of Polyolefins by High Temperature GPC**

Greg Saunders, Varian, Inc., Church Stretton, Shropshire, United Kingdom

Room: Alsh 1

Parallel 4: B7 Polymers in Adhesives

Session Chair: Andrew Slark, Henkel, UK

09:45 KEYNOTE B7_O01 **Curing of Polymers on Metals: Adhesion - Interphases - Properties - Ageing**
Wulff Possart, Saarland University, Saarbruecken, Germany

10:45 B7_O03 **Surface enrichment layers in pressure sensitive adhesive films**
Peter Müller-Buschbaum, TU München, Physik Department LS E13, Garching, Germany

Room: Lomond

Parallel 5: C11 Polymerisation Kinetics and New Concepts in Polymerisation

09:45 INVITED C11_O11 **Radical Spin Traps as Versatile Macromolecular Control Agents: Molecular Weight Control, Block Copolymers and Modular Design**
Christopher Barner-Kowollik, Karlsruhe Institute of Technology, Karlsruhe, Germany

10:15 C11_O12 **The Design and Synthesis of Anti-Fouling, Non-cytotoxic Magnetic Nanoparticles for Simultaneous Imaging and Efficacious siRNA Delivery**
Tom Davis, UNSW, Sydney, NSW, Australia

10:30 C11_O13 **GRIM Chain-Growth Polymerization for Conjugated Polymers**
Yanhou Geng, State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China

10:45 C11_O14 **Addition-fragmentation Chain Transfer in Chemical Networks**
Christopher Kloxin, Department of Chemical and Biological Engineering, University of Colorado at Boulder, Boulder, CO, United States

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals through to Applications

Session Chair: Joao Cabral, Imperial College London, UK

09:45 INVITED D13_O14 **Indirect reinforcement of nanocomposites**
Michael Mackay, University of Delaware, Newark, DE, United States

10:15 D13_O15 **Polymer Diffusion Exhibits a Minimum with Increasing Carbon Nanotube Concentration in Nanocomposites**
Nigel Clarke, Durham University, Durham, United Kingdom

10:30 D13_O16 **Self organized growth of magnetic cobalt nanoparticles on polymer template: Real time GISAXS study**
Ezzeldin Metwalli, TU München, Physikdepartment E13, 85747, Garching, Germany

10:45 D13_O17 **Fullerene association in model polymer matrices: bulk and thin film confinement**
Him Cheng Wong, Imperial College London, London, United Kingdom

Room: Dochart 1 & 2

Parallel 7: E15 Mechanical Properties of Polymer Materials and Fibres

Session Chair: Costantino Creton, ESPCI Paris-Tech, France

09:45 KEYNOTE E15_O01 **DIRECT MEASUREMENT OF ENHANCED MOLECULAR MOBILITY DURING THE ACTIVE DEFORMATION OF POLYMER GLASSES.**
Mark Ediger, University of Wisconsin-Madison, Madison, WI, United States

10:30 E15_O02 **Nanomechanics of a single polystyrene nanoparticles in nanoblends.**
Yahya Rharbi, Laboratoire de Rheologie UMR 5520, Grenoble, France

10:45 E15_O03 **Direct imaging of nanoscale deformation processes in elastomeric polypropylene**
Robert Magerle, Technische Universität Chemnitz, Chemnitz, Germany

Room: Boisdale 1

Parallel 8: E18 Rheology and Dynamics of Polymer Solutions and Gels

Session Chair: Peter Williams, Glyndwr University, UK

09:45 KEYNOTE E18_O01 **Thermogelation of PEO-PPO-PEO type copolymers in relation with molecular architecture and solution composition**
Madeleine Djabourov, ESPCI-ParisTech, Paris, France

10:30 E18_O02 **Hydrophobically Modified Water Soluble Polymers: How Solution Properties Correlate with Flow Behaviour in Porous**

Media?

Guillaume Dupuis, Institut Français du Pétrole, IFP, Rueil-Malmaison, France

- 10:45 E18_O03 **Slow mode in the dynamics of polymer solutions**
Yaroslav Kudryavtsev, Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russian Federation

Room: Boisdale 2

Parallel 9: F20 Polysaccharides: Chemistry, Structure, Properties and Technology

Session Chair: Wim Thielemans, University of Nottingham, UK

- 09:45 KEYNOTE F20_O06 **Engineering Cell-Material Interactions with Polysaccharide-Derivatized Materials**
Kristi Kiick, University of Delaware, Newark, DE, United States
- 10:30 F20_O07 **Chitosan and its derivatives: from physicochemical properties to biomedical applications**
Vitaliy Khutoryanskiy, University of Reading, Reading, United Kingdom
- 10:45 F20_O08 **pH-sensitive EC-g-PDEAEMA micelles and drug release from micelles**
Yong Huang, Technical Institute of Physics & Chemistry, Chinese Academy of Sciences, Beijing, China

Room: Morar & Ness

Parallel 10: G21 Polymer Electronics

Session Chair: Steve Yeates, University of Manchester, UK

- 09:45 INVITED G21_O39 **Exploiting Dual Fluorescence in Fluorene Copolymers for PLED Applications Including White Light Emission**
Martin R Bryce, Durham University, Durham, United Kingdom
- 10:15 G21_O40 **Phosphorescent Dendrimers for Solution Processible PLED**
Lixiang Wang, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, Jilin Province, China
- 10:30 G21_O41 **Fluorescent Conjugated Polymer Nanoparticles**
Moritz Baier, University of Konstanz, Konstanz, Germany

10:45 G21_O42 **Reactive Polypyrroles: Synthesis, Conductivity, and their Use as Reactive Modifier in Blends**

Jürgen Pionteck, Leibniz Institute of Polymer Research Dresden, Dresden, Germany

Room: Alsh 2

Parallel 11: G24 Polymers for Sensors

Session Chair: Shane Peper, Pacific Northwest National Laboratory, USA

09:45 INVITED G24_O10 **Chemomechanical Polymers as Sensors**

Hans-Jörg Schneider, FR Organische Chemie der Universität des Saarlandes, Saarbruecken, Germany

10:15 G24_O11 **Functional polyurethaneimide copolymers with evolutive structure for SO₂ gas microsensors**

Anne Jonquieres, University of Nancy, Nancy, France

10:30 G24_O12 **Spectroelectrochemical Detection of Pertechnetate using Technetium Complex Excited States within Polymer Films**

Samuel Bryan, Pacific Northwest National Laboratory, Richland, Washington, United States

10:45 G24_O13 **Poly(triarylamine) (PTAA) Thick Films for Real-time Direct X-ray Detection**

Akarin Intaniwet, Department of Physics, University of Surrey, Guildford, Surrey, United Kingdom

Room: Forth

Parallel 1: A4 Polymers in Therapeutics: Polymer Nanomedicines

11:30 A4_O15 **Complex polymer architectures with pending ligands prepared via click chemistry or isocyanate chemistry for the delivery of platinum anti-cancer drugs**

Martina Stenzel, University of New South Wales, Sydney, Australia

11:45 A4_O16 **Use of SANS and EPR to study the interaction of an endosomolytic polyamidoamine ISA23 with vesicles mimicking intracellular membranes**

Peter Griffiths, Cardiff University, Cardiff, United Kingdom

12:00 A4_O17 **Template-Polymerised, Bio-Reducible, Branched Polyamine Vectors for siRNA Delivery**

James Serginson, Imperial College London, London, United Kingdom

12:15 A4_O18 **Amphiphiles containing rigid hydrogen-bonding moieties: Syntheses, characterization, evaluation of self-assembly behaviors and drug delivery applications**

Shrinivas Venkataraman, Institute of Bioengineering and Nanotechnology, Singapore, Singapore

12:30 A4_O19 **Development of highly branched modified poly(N-isopropyl acrylamide) polymers responsive to bacteria and their use in the reduction of bacterial burden of infected wounds.**

Joanna Shepherd, University of Sheffield, Sheffield, United Kingdom

12:45 A4_O20 **Physicochemical Characterisation of Novel DES-Polyacetal Block Copolymers for the Treatment of Hormone-Dependent Cancer.**

Vanessa Giménez-Navarro, Centro de Investigación Príncipe Felipe, Valencia, Spain

Room: Gala 1 & 2

Parallel 2: B5 Polymers in the Home, Personal Care and Agriculture

Session Chair: Sebastian Kolzenburg, BASF, Germany

11:30 INVITED B5_O04 **Recent Developments in Silicone Technology for Life Science Applications**

Michael Starch, Dow Corning Corporation, Midland, Michigan, United States

12:00 B5_O05 **Structure Property Relationships: The Key to Successful Development of Polymers for Hair-care**

David Graham, BASF-SE, Ludwigshafen, Germany

12:15 B5_O06 **Polymer surfactant Interaction: pseudo-phase equilibria in coacervate formation**

Robert Lochhead, The University of Southern Mississippi, Hattiesburg, MS, United States

12:30 B5_O07 **Copolymerization of vinyl lactams for application in personal care formulations**

Linda Foltis, International Specialty Products, Wayne, NJ, United States

12:45 B5_O08 **Mechanical strength and release properties of silica microcapsules produced via a surfactant-free emulsion synthesis**

Rachael Allen, University of Birmingham, Birmingham, West Midlands, United Kingdom

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Dujin Wang, Institute of Chemistry, Chinese Academy of Sciences, China

11:30 INVITED B6_O31 **All polyethylene nanocomposites prepared with nanostructured supported single and multiple single-site catalysts**

Rolf Mülhaupt, Freiburg Materials Research Center and Institute for Macromolecular Chemistry, Albert-Ludwigs University, Stefan-Meier-Strasse 31, D-79104 Freiburg, Germany

12:00 B6_O32 **Tuneable and Self-Reinforced Polyethylene/MCM-41 Nanocomposites by In Situ Polymerisation: From Synthesis to Structure Characterisation and Properties**

Maria do Rosario Ribeiro, Instituto de Ciência e Engenharia de Materiais e Superfícies (ICEMS) & Departamento de Engenharia Química e Biológica, Instituto Superior Técnico (IST), Lisboa, Portugal

12:15 B6_O33 **Unusual Methods for Morphology Control in Polyolefin Synthesis**

Markus Klapper, Max-Planck-Institute for Polymer Research, Mainz, Germany

12:30 B6_O34 **Effect of matrix topology and carbon nanotube content on the melt flow instabilities of polyethylene nanocomposites**

Humberto Palza, Departamento de Ingeniería Química y Biotecnología, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Santiago, Chile

Room: Alsh 1

Parallel 4: B7 Polymers in Adhesives

Session Chair: Andrew Slark, Henkel, UK

11:30 INVITED B7_O04 **Probing the Chemistry of Polymer/Metal and Polymer/Polymer Interfaces**

John Watts, University of Surrey, Guildford, United Kingdom

12:00 B7_O05 **Synergistic Effects between Clay and a Soft Polymer in a Supracolloidal Structure Leading to Increased Tack Energy in Pressure-Sensitive Adhesives**

Joseph Keddie, University of Surrey, Guildford, Surrey, United Kingdom

12:15 B7_O06 **Radiation Curable Pressure Sensitive Adhesives**
Peter Palasz, Henkel UK, Slough/Berks, United Kingdom

12:30 B7_O07 **Synthesis of novel hydrolysis stable adhesive monomers and their dental application**
Joachim E. Klee, DENTSPLY, Konstanz, Germany

12:45 B7_O08 **Experimental characterization of marine glues: a prerequisite for the development of bio-inspired adhesives**
Elise Hennebert, University of Mons, Mons, Belgium

Room: Lomond

Parallel 5: C11 Polymerisation Kinetics and New Concepts in Polymerisation

11:30 INVITED C11_O15 **Compartmentalization in Heterogeneous Living/Controlled Radical Polymerizations**
Michael Cunningham, Queen's University, Kingston, Ontario, Canada

12:00 C11_O16 **Chain-Length-Dependent Termination in Radical Polymerization: Subtle Revolution in Tackling a Long-Standing Challenge**
Gregory Russell, University of Canterbury, Christchurch, New Zealand

12:15 C11_O17 **A Novel Approach for Investigation of Chain Transfer Events by Pulsed Laser Polymerization.**
Anatoly N Nikitin, Institute on Laser and Information Technologies, Shatura, Moscow Region, Russian Federation

12:30 C11_O18 **New insights into the influence of monomer structure and reaction medium on polymerization kinetics derived from studies into fluorinated and PEGylated methacrylates**
Sabine Beuermann, University of Potsdam, Potsdam, Germany

12:45 C11_O19 **Propagation kinetics of ionized monomers in aqueous solutions studied by PLP-SEC**
Igor Lacik, Polymer Institute of the Slovak Academy of Sciences, Bratislava, Slovakia

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals through to Design

Session Chair: Nigel Clarke, Durham University, UK

11:30 D13_O18 **Dynamics of polymer grafted nano-silica particles by neutron scattering**

Valeria Arrighi, Heriot-Watt University, Edinburgh, United Kingdom

11:45 D13_O19 **The free volume holes diffusion model as an explanation for the accelerated physical aging in polymer nanocomposites**

Virginie M. Boucher, Donostia International Physics Center, San Sebastian, Spain

12:00 D13_O20 **Polymer dynamics in nanocomposite-confinement: influence of the filler content on the cooperative characteristic length.**

Allisson Saiter, Institute for Materials Research - Laboratoire LECAP, Saint Etienne du Rouvray, France

12:15 D13_O21 **Atomistic molecular dynamics simulations of polybutadiene at graphite: Slowing down of correlations decay in confinement vs. bulk system**

Leonid Yelash, Institute of Physics, Johannes-Gutenberg-University Mainz, 55099 Mainz, Germany

12:30 D13_O22 **Abrupt Change in Surface Wetting and Hierarchical Pore Formation in PVDF/Graphite Nano-sheet Composite Films**

Xiao Hu, Nanyang Technological University, Singapore, Singapore

12:45 D13_O23 **THERMODYNAMICS AND KINETICS GOVERNING THE DISTRIBUTION OF SOLID NANOPARTICLES IN IMMISCIBLE POLYMER BLENDS**

Françoise Fenouillot, Université de Lyon, INSA-Lyon, UMR CNRS 5223, Villeurbanne, France

Room: Dochart 1 & 2

Parallel 7: E15 Mechanical Properties of Polymer Materials and Fibres

Session Chair: Mark Ediger, University of Wisconsin-Madison, USA

11:30 INVITED E15_O04 **Play with the Tough Double Network Hydrogels**

Jian Ping Gong, Hokkaido University, Sapporo, Japan

12:00 E15_O05 **Self-healing of supramolecular rubbers**

Florine Maes, MINES ParisTech, MAT- Centre des matériaux, Evry, France

12:15 E15_O06 **Novel routes for 3D nanopatterning using soft matter: wave frontal growth and multi-axial surface instabilities.**

Joao Cabral, Department of Chemical Engineering, Imperial College London, London, United Kingdom

12:30 E15_O07 **Electrospun Polycation Fibers with Stable Morphology and Antibacterial Activity**

Zhi-Kang Xu, Key Laboratory of Macromolecular Synthesis and Functionalization (Ministry of Education), Department of Polymer Science and Engineering, Hangzhou 310027, China

12:45 E15_O08 **Peculiar mechanical properties and microstructure of polyamide-chlorobutyl rubber blends by dynamic vulcanization**

Daniel Ramrus, Polymer Engineering Company, Burnaby, BC, Canada

Room: Boisdale 1

Parallel 8: E18 Rheology and Dynamics of Polymer Solutions and Gels

Session Chair: Peter Williams, Glyndwr University, UK

11:30 INVITED E18_O04 **Synthesis and Rheological Characterization of Hydrogels**

Werner-Michael Kulicke, University of Hamburg, Hamburg, Germany

12:00 E18_O05 **Extreme Rheometry of Entangled and Network Forming Polymers-An Optical Microrheology and LAOS Study**

Samiul Amin, Malvern Instruments Limited, Malvern, Worcestershire, United Kingdom

12:15 E18_O06 **Multi-scale simulations for entangled polymers utilizing primitive chain network simulations**

Yuichi Masubuchi, Kyoto University, Kyoto, Japan

12:30 E18_O07 **Reversible Planar Elongation of Soft Polymeric Networks**

Anne Ladegaard Skov, DTU Chemical Engineering, Kgs Lyngby, Denmark

12:45 E18_O08 **Cross-Linked DNA Gels: Disruption and Release Properties**

Diana Costa, Department of Chemistry, Coimbra University, Coimbra, Portugal

Room: Boisdale 2

Parallel 9: F20 Polysaccharides: Chemistry, Structure, Properties and Technology

Session Chair: Wim Thielemans, University of Nottingham, UK

11:30 INVITED F20_O09 **Bio-inspired stimuli-responsive polymer nanocomposites**

Stuart Rowan, Case Western Reserve University, Cleveland, Ohio, United States

12:00 F20_O10 **Solvent-free modification of cellulose microfibrils and nanocrystals for nanocomposite materials**

Laurent Heux, CERMAV-CNRS, Grenoble, France

12:15 F20_O11 **Hydrogels and aerogels through self-assembly of cellulose nanoparticles**

Wim Thielemans, University of Nottingham, Nottingham, United Kingdom

12:30 F20_O12 **Novel thermosensitive biohybrid hydrogels based on functionalized galactomannan: Synthesis and Characterization in aqueous medium.**

Aurelia Charlot, Ingénierie des Matériaux Polymères, Villeurbanne, France

12:45 F20_O13 **Direct versus Indirect routes for the ATRP synthesis of amphiphilic poly(methyl methacrylate)-grafted Dextran (Dex-g-PMMA): advantages and drawbacks for macromolecular engineering.**

Cécile Nouvel, Laboratoire de Chimie Physique Macromoléculaire, UMR 7568 CNRS-Nancy-University, Nancy, France

Room: Morar & Ness

Parallel 10: G22 Molecularly Imprinted Polymers

11:30 KEYNOTE G22_O01 **Plastic Antibodies Recent Advances in Synthetic Receptors for Biological Macromolecules**

Kenneth Shea, University of California, Irvine, CA, United States

12:15 G22_O02 **The use of electrostatic interactions for protein imprinting in hydrogels: hit or miss?**

Cornelus van Nostrum, Utrecht University, Utrecht, Netherlands

12:30 G22_O03 **Imprinted catalytic nanomaterial for the determination of trichlorophenol**

María Carmen Blanco López, Universidad de Oviedo, Oviedo, Spain

12:45 G22_O04 **Insight into molecular imprinting in precipitation polymerization systems using solution NMR and dynamic light scattering**

Lei Ye, Lund University, Lund, Sweden

Room: Alsh 2

Parallel 11: G25 Polymers in Liquid Crystalline Materials

Session Chair: Ingo Dierking, University of Manchester, UK

11:30 KEYNOTE G25_O01 **The new mechanics of polymers distorted by liquid crystals**

Mark Warner, University of Cambridge, Cambridge, United Kingdom

12:15 G25_O02 **Stable Holographic Gratings Based on Small-Molecular, Liquid-Crystalline Trisazobenzene Derivatives**

Pascal Wolfer, ETH Zurich, Zurich, Switzerland

12:30 G25_P08 **Molecular Dynamics and Biaxiality of Nematic Liquid Crystalline Polymers and Elastomers**

Felicitas Brömmel, Institut für Makromolekulare Chemie, Albert-Ludwigs Universität Freiburg i. Br., Freiburg i. Br., Germany

12:45 G25_O04 **Photomechanical outputs of glassy azobenzene liquid crystal polymer networks**

Timothy White, Airforce Research Laboratory, Ohio, United States

Room: Forth

Parallel 1: A4 Polymers in Therapeutics: Polymer Nanomedicines

14:30 KEYNOTE A4_O21 **Smart micelles and vesicles from PEG-polypeptide block copolymers as nanocarriers for gene and drug delivery**

Kazunori Kataoka, The University of Tokyo, Tokyo, Japan

15:15 A4_O22 **Advanced Poly(alkyl cyanoacrylate) Nanoparticles As Promising Therapeutic Agents for Alzheimer's Disease And Intracellular Trafficking**

Julien Nicolas, Laboratoire de Physico-Chimie, Pharmacotechnie et Biopharmacie, UMR CNRS 8612, Univ. Paris-Sud 11, Châtenay-Malabry, France

15:30 A4_O23 **Hyperbranched Polymers in Theranostics.**
Kristofer J Thurecht, The University of Queensland, St Lucia, QLD,
Australia

15:45 A4_O24 **Development of Implantable Polymer Rods for Minimum
Invasive Cancer Chemotherapy**
Norased Nasongkla, Department of Biomedical Engineering, Faculty of
Engineering, Mahidol University, Nakorn Pathom, Thailand

Room: Gala 1 & 2

Parallel 2: B5 Polymers in the Home, Personal Care and Agriculture

Session Chair: Ian Shirley, Syngenta, UK

14:30 INVITED B5_O09 **Agrochemical Applications - Multiple uses
and unique advantages through polymers**
Matthias Bratz, BASF SE, Crop Protection, 67117 Limburgerhof,
Germany

15:00 B5_O10 **Reactive Poly(ethylene glycol) containing Polymers for
Covalent Conjugation to Biological Surfaces**
Stacy Slavin, University of Warwick, Coventry, United Kingdom

15:15 B5_O11 **Particle encapsulation by ATRP initiated from surface
adsorbed polymers**
Alex Heming, Syngenta, Jealott's Hill, United Kingdom

15:30 B5_O12 **Polymers on snow: Towards skiing faster**
Jan L. Giesbrecht, ETH Zurich, Zurich, Switzerland

15:45 B5_O13 **HYBRID ORGANOFUOROSILICONE MATERIALS FOR
OPTICAL APPLICATIONS**
Lech Wilczek, DuPont, CR&D, Wilmington, DE, United States

Room: Leven

Parallel 3: B6 Advances in Polyolefins: from Catalyst Design to Smart Molecular Processing

Session Chair: Tom McLeish, Durham University, UK

14:30 B6_O36 **Boundary conditions for the onset of oriented
morphology in flow-induced crystallization of polyolefins: visual
observations.**
Oleksandr Mykhaylyk, University of Sheffield, Sheffield, United Kingdom

- 14:45 B6_O37 **Detailed Analysis for Shish-kebab Structure during Drawing Process of Polyethylene**
Go Matsuba, Yamagata University, Yonezawa, Yamagata, Japan
- 15:00 B6_O38 **Novel morphology of "nano-oriented crystals (NOC)" of iPP by elongational crystallization and its ultra high performances**
Masamichi HIKOSAKA, Hiroshima University, Japan Science and Technology agency (JST), Higashi-Hiroshima, Japan
- 15:15 B6_O39 **X-ray evidence and formation mechanism of "nano-oriented crystals" of iPP on elongational crystallization**
Kiyoka Okada, Hiroshima University, Higashi-hiroshima, Japan
- 15:30 B6_O40 **Monte Carlo Simulation of Morphological Development during Polymer Crystallization in a Temperature Gradient: A Case Study of Syndiotactic Polypropylene**
Siripon Anantawaraskul, Department of Chemical Engineering, Kasetsart University, Bangkok, Thailand
- 15:45 B6_O41 **On the Behaviour of Trigonal Polymorph in Random Co- and Terpolymers of Isotactic Polypropylene under Tensile and Pressure Deformation**
Paola Stagnaro, Istituto per lo Studio delle Macromolecole ISMAC-CNR UOS Genova, Genova, Italy

Room: Alsh 1

Parallel 4: B7 Polymers in Adhesives

Session Chair: Andrew Slark, Henkel, UK

- 14:30 INVITED B7_O09 **Biointerfacial Aspects of Mussel Adhesive Proteins and their Biomimetic Analogs**
Phillip Messersmith, Northwestern University, Evanston, United States
- 15:00 B7_O10 **Bioinspired reversible adhesives for dry and wet conditions**
Aránzazu del Campo, Max-Planck-Institut für Polymerforschung, Mainz, Germany
- 15:15 B7_O11 **Development of anti-biofouling materials for marine applications**
Nick Aldred, Newcastle University, Newcastle upon Tyne, United Kingdom

15:30 B7_O12 **Synthetic Polymers of Mussel derived Peptides**
Klaus Rischka, Fraunhofer-Institute for Manufacturing Technology and Applied Materials Research, Bremen, Germany

15:45 B7_O13 **Bio-inspired Design of Hierarchically Structured Polymer Adhesives**
Edward Peter Arul, Indian Institute of Technology Kanpur, Kanpur, Uttar Pradesh, India

Room: Lomond

Parallel 5: C11 Polymerisation Kinetics and New Concepts in Polymerisation

14:30 C11_O20 **Investigation into the Mechanism of Microwave Induced Rate Enhancements in Chain Growth Polymerisation**
Derek Irvine, University of Nottingham, Nottingham, United Kingdom

14:45 C11_O21 **Single laser pulse initiation combined with time-resolved EPR spectroscopy for detailed investigations into radical polymerization**
Johannes Barth, Georg August Universität Göttingen, Göttingen, Niedersachsen, Germany

15:00 C11_O22 **Kinetics and Dynamics of Initiation Processes in Radical Polymerizations of (Meth)acrylates using Time-Resolved Electron Spin Resonance Spectroscopy**
Atsushi Kajiwara, Nara University of Education, Nara, Japan

15:15 C11_O23 **Recent Achievements in Radical Polymerization of Vinyl Monomers Initiated with Ionic Liquids**
Shuichi Kanno, Tohoku Seikatsu Bunka Junior College, Sendai, Miyagi, Japan

15:30 C11_O24 **Preparation of functional hairy particles using amphiphilic block copolymers in emulsion polymerization**
Alexandra Munoz Bonilla, Eindhoven University of Technology, Eindhoven, Netherlands

Room: Carron 1 & 2

Parallel 6: D13 Colloidal and Nanoscale Polymer Composites: Fundamentals though to Applications

Session Chair: Anthony Ryan, University of Sheffield, UK

- 14:30 INVITED D13_O24 **Single Component Polymer Nanocomposites: Assembles of Polymer-Nanoparticle Hybrids**
Richard Vaia, Air Force Research Laboratory, WPAFB, OH, United States
- 15:00 D13_O25 **Enhanced light absorption and plasmonic interactions in composites of silver nanoparticles and ferroelectric polymers**
Tonino Greco, Fraunhofer Institute for Applied Polymer Research, Potsdam, Germany
- 15:15 D13_P03 **Cellulose-based Thermal Sensitive Microgels with stable and reversible photoluminescence**
Hongjing Dou, Shanghai Jiao Tong University, Shanghai, China
- 15:30 D13_O27 **Preparation of high performance conductive polymer fibre through morphological control of networks formed by nanofillers**
Ton Peijs, Sichuan University, Chengdu, China
- 15:45 D13_O28 **Magnetic Liquid Crystal Polymers**
Lacramioara Zadoina, Laboratoire des Interactions Moléculaires et Réactivité Chimique et Photochimique, Université de Toulouse; UPS/CNRS;, Toulouse, France

Room: Dochart 1 & 2

Parallel 7: E15 Mechanical Properties of Polymer Materials and Fibres

Session Chair: Joao Cabral, Imperial College London, UK

- 14:30 INVITED E15_O09 **Evidence for Magnetomechanical Coupling in Particle-Crosslinked Ferrohydrogels**
Annette Schmidt, Institute für Physikalische Chemie, Universität zu Köln, Köln, Germany
- 15:00 E15_O10 **Mechanical deformation of electroconductive composites**
Ivan Chodak, Polymer Institute of the Slovak Acad Sci, Bratislava, Slovakia
- 15:15 E15_O11 **Aromatic heterocyclic polymer(AHC)/PMMA blends: precursors of porous conductive carbon films**
Ming Liu, Nanyang Technological University, Singapore, Singapore
- 15:30 E15_O12 **Polymer nanocomposite ionogels: how to combine mechanical strength, thermal stability and high ion conduction in electrolyte membranes.**

Florence Gayet, Department of Chemistry, University of Warwick,
Coventry, CV4 7AL, United Kingdom

15:45 E15_O13 **Photo-responsive ionogels as functional materials in microfluidic systems**

Robert Byrne, Clarity: Centre for Sensor Web Technologies, National Centre for Sensor Research, Dublin City University, Dublin, Ireland

Room: Boisdale 1

Parallel 8: E18 Rheology and Dynamics of Polymer Solutions and Gels

Session Chair: Katsuyoshi Nishinari, Osaka University, Japan

14:30 INVITED E18_O09 **Physically cross-linked hydrogels from native and carboxymethylated curdlan**

Hongbin Zhang, Shanghai Jiao Tong University, Shanghai, China

15:00 E18_O10 **Tunable interactions between a polymer brush and a hydrogel**

Guillaume SUDRE, PPMD - ESPCI, Paris, France

15:15 E18_O11 **Influence of Water and Supercritical Carbon Dioxide on the Rheological Behaviour of Polycondensate Melts.**

Vincent GIRARD, ENSIC-GEMICO, Nancy, France

15:30 E18_O12 **Small-angle neutron scattering studies of electrospun fibres of polystyrene**

Saaed Mohan, The University of Reading, Reading, United Kingdom

15:45 E18_O13 **Phase Competition in Melt Crystallization of Syndiotactic Polystyrene as Illustrated via in Situ Small- and Wide-angle X-ray Scattering**

Chiu-Hun Su, National Synchrotron Radiation Research Center, Hsinchu, Taiwan

Room: Boisdale 2

Parallel 9: F20 Polysaccharides: Chemistry, Structure, Properties and Technology

Session Chair: Laurent Heux, CERMAV-CNRS, France

14:30 INVITED F20_O14 **Elucidation of Structure-Property-Function Relationships of Starch by Comprehensive Size-Exclusion**

Chromatography (SEC)

Peter Kilz, PSS Polymer Standards Service GmbH, Mainz, Germany

- 15:00 F20_O15 **Size and molecular weight distributions of starch: mathematical limitations on evolution**
Robert Gilbert, University of Queensland, Brisbane, Qld, Australia
- 15:15 F20_O16 **New chitosan based catalysts for azide-alkyne Huisgen's [1,3-dipolar] cycloaddition reaction**
Francoise Quignard, Institut Charles Gerhard - Matériaux Avancés pour la Catalyse et la Santé, Montpellier, France
- 15:30 F20_O17 **AMPHIPHILIC COPOLYMERS FROM POLYSACCHARIDES AND (METH)ACRYLACRYLATES BY "CLICK" REACTION PROMOTED COUPLING**
Monica Bertoldo, PolyLab-INFM-CNR, Pisa, Italy
- 15:45 F20_O18 **Controlled release of antitumor drug from folate modified biocompatible polysaccharide multilayer nanocapsules based on chitosan (CS) and carboxymethyl cellulose(CMC)**
Wang Huiqing, Beijing Institute of Technology, Beijing, China

Room: Morar & Ness

Parallel 10: G22 Molecularly Imprinted Polymers

- 14:30 INVITED G22_O05 **Application of Molecular Imprinting to Analytical Separations of Drug Compounds**
Lars I. Andersson, AstraZeneca R&D Södertälje, Department of Neuroscience, S-151 85 Södertälje, Sweden
- 15:00 G22_O06 **Computer simulation of adsorption and molecular recognition phenomena in imprinted porous materials**
Lev Sarkisov, University of Edinburgh, Edinburgh, United Kingdom
- 15:15 G22_O07 **MIP based biomimetic sensor platforms for the detection of small molecules in aqueous media**
Frederik Horemans, Hasselt University, Institute for Materials Research (IMO), Diepenbeek, Belgium
- 15:30 G22_O08 **Highly Selective Bisphenol A-Imprinted Polymers Prepared by Atom Transfer Radical Polymerization**
Toshifumi Takeuchi, Graduate School of Engineering, Kobe University, Kobe, Japan
- 15:45 G22_O09 **Dendritic multi-iniferters for localised polymerisation of nanostructured molecularly imprinted polymers**

Karsten Haupt, Compiègne University of Technology, Compiègne,
France

Room: Alsh 2

Parallel 11: G25 Polymers in Liquid Crystalline Materials

Session Chair: Ingo Dierking, University of Manchester, UK

14:30 INVITED G25_O05 **Liquid-crystalline dendrimers: Combining
molecular complexity and order**
Daniel GUILLON, IPCMS, Strasbourg, France

15:00 INVITED G25_O06 **Photopolymerization of liquid crystal
networks as a tool for micro- and nano-structuring of functional
polymer materials**
Dirk J. Broer, Eindhoven University of Technology, Eindhoven,
Netherlands

15:45 G25_O08 **Deformation of cholesteric elastomers, taking into
account of the Frank-Oseen elasticity**
Werner Stille, University of Freiburg, Freiburg, Germany

THURSDAY 15 JULY 2010 - POSTER SESSIONS

Hall 5

A3: Colloids and Surfaces for Biomaterials Applications

A3_P01 Highly Adhesive Fibre Reinforced Patches for Fixation of Bone Fractures

Michael Malkoch, The Royal Institute of Technology, Stockholm, Sweden

A3_P02 Fabrication of colloidosomes at low temperature for encapsulation of bacteria

Toshiyuki Nomura, University of Cambridge, Cambridge, United Kingdom

A3_P03 Stimuli-Responsive Switchable Layer-by-Layer Polyelectrolytes Self-Assembled Multilayer Thin-Films

Nasir Mahmood Ahmad, National University of Sciences and Technology, School of Chemical and Materials Engineering, Islamabad, Pakistan

A3_P04 Phosphatidylserine-containing Phytantriol Cubic-Phase Particles: Influence of Lyotropic Liquid Crystalline Phase Behaviour on Cellular Response

Keith McLean, CSIRO, Clayton, Victoria, Australia

A3_P05 Novel Degradable Nanoparticles and Their Application in Drug Delivery

Yingchuan Yu, Swiss Federal Institute of Technology, Zurich, Switzerland

A3_P06 A Substrate-Independent Approach for Preparing Cell-Attaching / Low Protein-Fouling Biomaterials using Polymer Brushes Grafted by Atom Transfer Radical Polymerisation.

Bryan Coad, CSIRO Molecular and Health Technologies, Clayton South, Victoria, Australia

A3_P08 Photo Induced Surface Graft Polymerization of Acrylic Monomers onto Atmospheric Plasma Treated Polymers for Improving the Hydrophilicity

Ko-Shao Chen, Department of Materials Engineering, Tatung University, Taipei, Taiwan

A3_P09 Structure of magnetite/poly(lactic acid) microcapsules and their acoustical behavior

Kang Sun, State Key Lab of Metal Matrix Composites, Shanghai Jiao Tong University, Shanghai, China

A3_P10 Biocidal self-polishing coatings based on tailored block copolymers

Eva Berndt, Universität Duisburg-Essen, Essen, Germany

A3_P11 Synthesis and Characterization of Novel Glycosurfaces by ATRP

Maria Vamvakaki, University of Crete, Department of Materials Science and Technology, Heraklion, Crete, Greece

A3_P13 Polymeric excipients in fluorinated liquids: the use of NMR techniques to elucidate solubility and phase separation mechanisms

Alison Paul, Cardiff University, Cardiff, United Kingdom

A3_P14 Ultra-low Fouling Surfaces for Biomedical Applications: From the Role of Monomer and Architecture to Nanoparticle's Applications

Cesar Rodriguez-Emmenegger, Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, v.v.i., Prague, Czech Republic

A3_P15 Nanostructured Stimuli-Responsive Polymer Surfaces prepared by Interfacial Diffusion of Amphiphilic Block Copolymers

Juan Rodriguez Hernandez, Instituto de Ciencia y Tecnologia de Polimeros (ICTP-CSIC), Madrid, Spain

A3_P16 Metallation of Solochrome Cyanine R Using Metallated Agents to Form Compounds Having Antimicrobial Activities

Emtithal El-Sawi, faculty of girls for art science and education, ain shams university, cairo, masr elgadedda, Egypt

A3_P17 Biocompatible Polymer Brushes Grown from Model Quartz Fibres: Synthesis, Characterisation and in situ Determination of Frictional Coefficient

Andrew Morse, University of Sheffield, Sheffield, United Kingdom

A3_P18 Gold nano particles and benzophenone group added polymerization and application as ophthalmological material

A-Young Sung, Daebul university, Jeonnam, Korea, Republic of

A3_P19 Synthesis of polymer containing silver/gold nano particles and physical characterization

A-Young Sung, Daebul university, Jeonnam, Korea, Republic of

A3_P20 PEGylation of silica particles for toxicological studies

Kishore Natte, Federal institute for materials research and testing-BAM, berlin, Germany

A3_P21 Interaction between cow beta-casein and synthetic triblock copolymer Lutrol F-127. Mixed micellization.

Irina Portnaya, Technion - Israel Institute of Technology, Haifa, Israel

A3_P22 The control of cell adhesion and detachment on dual-responsive silicon surfaces modified with poly (N-isopropylacrylamide)-block-polystyrene copolymer

Qian Yu, College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Soochow, China

A3_P23 Covalent Enzyme Immobilization onto Emulsion-Templated Porous Polymers

Scott Kimmins, Durham University, Durham, United Kingdom

A3_P24 Antibacterial coatings on poly(fluoroethylenepropylene) films via grafting of 3-hexadecyl-1-vinylimidazolium bromide

Letizia Cruciani, a Dipartimento di Chimica Applicata e Scienza dei Materiali, Università di Bologna, Bologna, Italy, Italy

A3_P25 Enrichment of Phosphopeptides Using Polyethyleneimine-modified Magnetic Nanoparticles

Chen Cheng-Tung, National Dong Hwa University, Hualien, Taiwan

A3_P28 CHARACTERISATION OF POLYMER CONTAINING SYSTEMS USING QUARTZ CRYSTAL MICROBALANCE WITH DISSIPATION MONITORING

Malin Edvardsson, Biolin Scientific AB, Vastra Frolunda, Sweden

A3_P29 Surface treatment of xanthan by non-equilibrium atmospheric pressure plasma to improve the bonding in chitosan/xanthan biohydrogels

Luis Emilio Cruz-Barba, University of Guadalajara, Guadalajara, Jalisco, Mexico

A3_P30 Formulation of polypeptide-based polymersomes and their interaction with model plasmatic proteins

Anitha Cheruvamkala Kumar, LCPO,ENSCBP-University of Bordeaux 1, Pessac, France

A3_P31 Fabrication and characterization of microchannels produced in poly(methyl methacrylate) by femtosecond laser ablation

Raffaella Suriano, Department of Chemistry, Materials and Chemical Engineering "Giulio Natta", Politecnico di Milano, Milan, Italy

A3_P32 Bio-labeling Hematopoietic Cells Using Near-Infrared Fluorescent Gold Nanoclusters

Bien Tan, Huazhong University of Science and Technology, Wuhan, Hubei, China

Hall 5

A4: Polymers in Therapeutics: Polymer Nanomedicines

A4_P01 Preparation and In Vitro Evaluation of Gelatin Graft Copolymers/Hydroxyapatite Bionanocomposites

Ahmed Haroun, National Research Centre, Cairo, Egypt

A4_P02 Development of polyelectrolyte complex microparticles of natural polymers for drug delivery

Nirmala Devi, Tezpur University, Tezpur, Assam, India

A4_P03 "Smart" Functional Hybrid Polymer/Gold Nanoparticles

Cyrille Boyer, CAMD, UNSW, Sydney, NSW, Australia, Australia

A4_P04 Unbreakable Codes in Electrospun Fibers to Stop Medicine Counterfeiting

Chaobo Huang, Department of Pharmaceutics, Gent university, Belgium

A4_P05 The multiple morphologies of pH-responsive di- and triblock copolymers: from asymmetric vesicles to octopi and hexagonal vesicles to highly branched wormlike micelles

Adam Blanazs, University of Sheffield, Sheffield, S. Yorks, United Kingdom

A4_P06 Polymer-Peptide Hydrogels: Towards Smart Drug Delivery Scaffolds

Paul Topham, Aston University, Birmingham, United Kingdom

A4_P07 Thermoresponsive Biocompatible Block Copolymers with Antimicrobial Activity

Jeppe Madsen, University of Sheffield, Department of Chemistry, Sheffield, United Kingdom

A4_P08 Imaging amphiphilic block copolymer interactions with lipid bilayers

Millicent Firestone, Argonne National Laboratory, Argonne, IL, United States

A4_P09 Thermo-responsive and biocompatible Poly(N-vinylcaprolactam) coated magnetic nanoparticles for biomedical applications: Synthesis and characterization.

Simone Medeiros, Engineering School of Lorena – University of São Paulo – USP, Lorena, São Paulo, Brazil

A4_P10 Hydrophilic Cationic Core Cross-linked Star Polymers siRNA Nanocarriers: Synthesis, Characterization and Evaluation

Kyriaki Pafiti, University of Cyprus, Nicosia, Cyprus

A4_P11 Selective Fluorescent Labelling of an Amphiphilic Biocompatible Block Copolymer

Nicholas Warren, University of Sheffield, Sheffield, United Kingdom

A4_P12 Time-Resolved Small-Angle Neutron Scattering as a Tool for Studying Controlled Release from Liposomes using Polymer-Enzyme Conjugates

Peter Griffiths, Cardiff University, Cardiff, United Kingdom

A4_P13 The interaction of model polymer therapeutics with mucous

Peter Griffiths, Cardiff University, Cardiff, United Kingdom

A4_P14 Chitosan-based Nanogel Delivery Systems: Characterization and Toxicological Evaluation

Catherine A. Schütz, Laboratory for Regenerative Medicine and Pharmacobiology, EPFL-SV-IBI-LMRP, CH-1015 Lausanne, Switzerland

A4_P15 Resorbable Calibrated Microspheres for Therapeutic Embolization

Laurence Moine, CNRS, Châtenay-Malabry, France

A4_P16 Investigation of functional structure relationship between different PDMAEMA-based architectures and cellular uptake

Anja Schallon, Process Biotechnology, University of Bayreuth, Bayreuth, Germany

A4_P18 Novel electrospun micro- and nanofibrous materials possessing antimicrobial properties for wound dressing applications

Milena Ignatova, Laboratory of Bioactive Polymers, Institute of Polymers, Bulgarian Academy of Sciences, Sofia, Bulgaria

A4_P19 Bio-responsive Small Molecule Polyamines as Non-Cytotoxic Alternative to Polyethylenimine

Joachim Steinke, Imperial College London, London, United Kingdom

A4_P20 Solution Conformation of Polymer-Drug Conjugates: contrast-variation small-angle neutron scattering (SANS) as a tool to elucidate the microstructure of uni-molecular aggregates.

Alison Paul, Cardiff University, Cardiff, United Kingdom

A4_P21 Crosslinked polymeric micelles: the new golden standard for tumour targeted drug delivery?

Cornelus van Nostrum, Utrecht University, Utrecht, Netherlands

A4_P22 Investigation of Croscarmellose sodium as an excipient for Fast releasing tablets of Olanzapine

VENKATESKUMAR KRISHNAMOORTHY, KMCH College of Pharmacy, Coimbatore, Tamilnadu, India

A4_P23 Injectable Biodegradable Polymers For The Delivery Of Camptothecin Anti-Cancer Drugs

Olcay Mert, Middle East Technical University Department of Chemistry, Ankara, Turkey

A4_P24 Glycerolipidic Prodrug of Didanosine Encapsulated Into PEGylated Nanoparticles: An Approach To Treat HIV-1 Associated Dementia

Julien Nicolas, Laboratoire de Physico-Chimie, Pharmacotechnie et Biopharmacie, UMR CNRS 8612, Univ. Paris-Sud 11, Châtenay-Malabry, France

A4_P25 Thermosensitive Amphiphilic Polymer as in-Situ Gelation Biomaterials for Injectable Vitreous Substitute

Masahiko Annaka, Kyushu University, Fukuoka, Japan

A4_P26 Tailor-made Polycations for Gene-Delivery Applications

Christopher V. Synatschke, Macromolecular Chemistry II, University of Bayreuth, Bayreuth, Bavaria, Germany

A4_P28 pH-Sensitive and Cross-linkable Polymersomes for Applications in Synthetic Biology as part of biomedical Applications

Jens Gaitzsch, Leibniz Institute of Polymer Research, Dresden, Germany

A4_P29 An on-line combine analysis system for polymersome purification and characterisation

Linge Wang, The Department of Biomedical Science, The University of Sheffield, Sheffield, United Kingdom

A4_P30 Polymersome mediated siRNA delivery

Nisa Patikarnmonthon, The University of Sheffield, Sheffield, United Kingdom

A4_P31 pH-responsive diblock copolymers based on HEGMA and DEAEMA functionalities: Investigation of their ability to act as drug delivery systems and *in-vitro* cytotoxicity studies

Petri Papaphilippou, University of Cyprus, Nicosia, Cyprus

A4_P32 Versatile Surface Functionalization of Polymer Vesicles

Stefan Egli, Universität Basel, Department of Chemistry, Basel, Switzerland

A4_P33 Oligopeptide-grafted polycyclooctene for gene therapy

Delphine Chan-Seng, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA, United States

A4_P34 Dextran coated gold nanorods for targeted photothermal ablation of inflammatory macrophages.

Choi Rayun, Yosei university, Seoul, Seodaemun-gu, Korea, Republic of

A4_P35 A self-organized pH-responsive glycol chitosan nanogel for tumor targeting.

Oh Nam Muk, The Catholic University of Korea, 43-1 Yeokgok 2-dong, Wonmi-gu, Bucheon-si, Gyeonggi-do, Korea, Republic of

A4_P36 A pH-sensitive multifunctional bio-polymeric nanocarrier for protein delivery.

Lee Bo Reum, The Catholic University of Korea, Bucheon-si, Gyeonggi-do, Korea, Republic of

A4_P37 Synthesis of hydrophilic bioconjugate polymers by nitroxide mediated polymerization.

Nadège Handké, Université de Provence - Laboratoire Chimie Provence, Marseille, France

A4_P38 Polyelectrolyte complexes for improved drug delivery of therapeutic proteins

Marina Inés Giannotti, Centro de Investigación Biomédica en Red de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona, Spain

A4_P39 Injectability of Polymer Microparticles Prepared Using Supercritical Carbon Dioxide

Andrew Naylor, Critical Pharmaceuticals Ltd, Nottingham, United Kingdom

A4_P40 Randomly Methylated-Beta-Cyclodextrin (RAMEB) Alters the Photostability of Midazolam in Aqueous Solution.

Beverley Glass, James Cook University, Townsville, QLD, Australia

A4_P41 EFFECTIVE ENCAPSULATION AND PROTEASE PROTECTION OF PROTEINS USING POLYMERSOME

Denis Cecchin, The University of Sheffield, Sheffield, United Kingdom

A4_P42 A three-component cancer treatment using an alkylated DNA based drug delivered with PMPC-PDPA based polymersomes followed by alkylation chemotherapy.

Christopher Millington, University of Sheffield, Sheffield, United Kingdom

A4_P43 Specific optical imaging of glioblastoma with integrin-targeting gold nanorods

Choi Jihye, Yonsei university, Seoul, Seodaemoon-gu, Korea, Republic of

A4_P44 Polymer Stabilised Emulsions for the Treatment of HIV/AIDS

Rebecca Slater, University of Liverpool, Liverpool, United Kingdom

A4_P45 Tuning the crystallinity of poly(3-hydroxybutyrate) in order to match its application as drug carrier

Lilian Lacerda de Almeida, Universidade de Sao Paulo, Sao Paulo, Brazil

A4_P46 The synthesis of novel microgel particles based on 2-hydroxyethylmethacrylate and 2-hydroxyethylacrylate

Joseph Cook, University of Reading, Reading, United Kingdom

A4_P47 Carbopol®-based *in situ* gelling systems for the improved delivery of ocular therapeutics

Richard Cave, University of Reading, Reading, United Kingdom

A4_P48 Development of a Vascular Graft Using Electrospun Polyurethane

Andrew Whitton, University of Strathclyde, Glasgow, United Kingdom

Hall 5

B5: Polymers in the Home, Personal Care and Agriculture

B5_P01 The Effect of Fire Retardants on the Thermal Degradation Chemistry of Flexible Polyurethane Foam

Deborah Todd, University of Strathclyde, Glasgow, United Kingdom

B5_P02 N-Heterocyclic carbenes (NHCs) as organocatalysts in polymerization of siloxanes

Sébastien Marrot, Bluestar Silicones, Saint-Fons, France

B5_P03 SYNTHESIS AND CHARACTERIZATION OF MODEL POLYMERIC ESTERS TO REVEAL THE STRUCTURAL COMPLEXITY OF COMMERCIALY AVAILABLE POLSORBATE SURFACTANTS

SHAZIA ABRAR, INSTITUTE OF CHEMISTRY, GRAZ, Austria

B5_P04 Waste Management in Qatar

Nabil Madi, University of Qatar, MTU, Doha, Qatar

B5_P05 Surface migration of fluorinated acrylic block copolymers on vinyl chloride polymer films

Xiaogang Yang, Institute of Chemical and Engineering Sciences, Singapore, Singapore

B5_P06 Structural analysis of high-molecular-weight brominated flame retardants using the MALDI-Spiral TOFMS

Akihiko Kusai, JEOL(EUROPE)SAS, Croissy-sur-Seine, France

B5_P07 POLYMERS AND SOIL-ZEOLITE AGGREGATES - RECENT DEVELOPMENTS AND FUTURE PROSPECTS FOR WASTES STOCKS RECUPERATION

Margarita Natova, Central Laboratory of Physico-Chemical Mechanics of BAS, Sofia, Bulgaria

B5_P08 Ultra-fine PLA fibres obtained by melt-blown technology - structure, applications and properties.

Jaroslav Janicki, University of Bielsko-Biala, Institute of Textile Engineering and Polymer Materials, Bielsko-Biala, Poland

B5_P09 Influence of Residual Catalysts and Comonomer Content on the Thermal Degradation of PET Containing PEG Sequences

Annika Alke, University of Strathclyde, Glasgow, United Kingdom

B5_P10 Synthesis of functionalised hyperbranched polymers via combination of Catalytic Chain Transfer Polymerisation of dimethacrylates and thiol-ene Click Chemistry

Jasmin Menzel, University of Warwick, Coventry, United Kingdom

B5_P11 The effect of granulometry, glycerol concentration and presence of fat in the properties of films from feathers and bovine hair.

Pilar Gonçalves, Faculdade de Engenharia da Universidade do Porto, Porto, Porto, Portugal

Hall 5

B7: Polymers in Adhesives

B7_P01 New components for dental adhesives

Norbert Moszner, Ivoclar Vivadent AG, Schaan, Liechtenstein

B7_P02 Structure of high density polymer brushes: An integrated experimental and multiscale simulation study

Roland Faller, University of California, Davis, Davis, United States

B7_P03 Polyaniline/Epoxy Resin Composites: Dielectric and Thermomechanical Behaviours

Belkacem Belaabed, EMP, Bordj El Bahri, Algeria

B7_P04 New concept for polymer-metal interfaces

Renate Mix, BAM, Berlin, Germany

B7_P05 A Quinoxaline Derivative as a Long Wavelength Photosensitizer for Diaryliodonium Salts

Umut Bulut, Middle East Technical University NCC, Guzelyurt, Mersin 10, Turkey

B7_P06 Characterization of acrylic acid polymers and copolymers with styrene

Renate Mix, Federal Institute of Materials Research and Testing, Berlin, Germany

B7_P07 Responsive Polymers for Bacterial Attachment and Ligand Sequestration

Francisco Fernandez-Trillo, University of Nottingham, Nottingham, United Kingdom

B7_P08 Thermal Stability and Volatile Out-gassing Studies on Ethylene Vinyl Acetate Copolymer

Mogon Patel, AWE, Aldermaston, Reading, United Kingdom

B7_P09 Probing for adhesion mechanism in oxidized PP wax/pp blends

Mojtaba Mirabedini, Iran Polymer & Petrochemical Institute, Tehran, Tehran, Iran, Islamic Republic of

B7_P10 Polymer Film Morphology of Pressure Sensitive Adhesives

Matthias Gerst, BASF SE, Ludwigshafen, Germany

B7_P11 Adhesion Strength of Norbornene-based Self-healing Agents to an Amine-cured Epoxy

Guangchun Huang, Performance Materials Team, R&D Center, Kolon Industries, Inc., Incheon, Korea, Republic of

B7_P12 Study on novel latent curing agents for epoxy resins based on dihydrazides

Adrian Marius Tomuta, Universitat Rovira i Virgili, Tarragona, Spain

B7_P13 Mucoadhesive Properties of Methacrylic Acid Copolymer Microspheres of Pravastatin Sodium on Gastrointestinal Mucosa: An *In Vitro* and *Ex Vivo* Evaluation

Yogesh Garg, Rajiv Academy for pharmacy, Mathura, India

B7_P14 Biological adhesives: from biology to biomimetics (COST Action TD0906)

Elise Hennebert, Université de Mons-UMONS, Mons, Belgium

B7_P15 Effect of Hard Particles on the Adhesion and Bulk Mechanical Properties of Waterborne Pressure-Sensitive Adhesives (PSAs)

Robert Gurney, University of Surrey, Guildford, Surrey, United Kingdom

B7_P16 Degradation kinetics and mechanism of polyurethane adhesive based on TDI and polyester polyol

Fachun Zhong, Institute of Chemical Materials, Chinese Academy of Engineering and Physics, MianYang, Sichuan Province, China

B7_P17 Study of the poly-(2-dimethylamino) ethyl methacrylate conformation's influence on polymer adhesive behaviour

Thomas Bras, University of Mons Hainaut, Mons, Belgium

B7_P18 Polymer conservation treatments for stained glass in the Burrell Collection, Glasgow: an assessment of 25 years of natural aging.

Norman Tennent, University of Amsterdam, Amsterdam, Netherlands

B7_P19 ADHESION PROPERTIES OF ROOM TEMPERATURE SELF-CURABLE WATERBORNE POLYURETHANE HYBRIDS FUNCTIONALIZED WITH (3-AMINOPROPYL)TRIETHOXYSILANE

HARITZ SARDON, University of Basque Country (UPV/EHU), Donostia, Gipuzkoa, Spain

Hall 5

C11: Polymerisation Kinetics and New Concepts in Polymerisation

C11_P01 SYNTHESIS OF POLYESTER IN BRONSTED ACIDIC IONIC LIQUIDS

Hervé Lefebvre, Pierre & Marie Curie University, UMR 7610 Chimie des Polymères, PARIS, France

C11_P02 Kinetics of Polymerisation of a Carborane-Siloxane Copolymer using Lewis Acid Catalysts

Alistair Apeidaile, University of Strathclyde, Glasgow, United Kingdom

C11_P03 Entry in Emulsion Copolymerization

Pooja Daswani, Eindhoven University of Technology, Eindhoven, Netherlands

C11_P04 Controlled syntheses of hydrophilic and hydrophobic polyethers by monomer activation and their direct α -azido functionalization

Stephane Carlotti, Universite de Bordeaux, Bordeaux, France

C11_P05 Controlled Cationic Copolymerization of Benzaldehyde Derivatives with Vinyl Ethers: Evolutionary Chemical Cycle of Precision Synthesis and Complete Degradation to Another Aldehyde Monomer

Shokyoku Kanaoka, Osaka University, Toyonaka, Japan

C11_P06 Investigations on oxazoline polymerization initiated by iodine

Brieuc Guillerm, Institut Charles Gerhardt, Montpellier, France

C11_P07 Droplet-based Microfluidics as a New Miniaturized Tool to Investigate Polymerization Reactions

Emmanuel Mignard, CNRS-Rhodia-University of Bordeaux 1 - UMR5258 Laboratory of the Future, Pessac, France

C11_P08 Coordinative Chain Transfer Polymerization : A new concept to tune the composition of a statistical copolymer

Philippe Zinck, UCCS - Université Lille Nord de France - ENSCL, Villeneuve d'Ascq, France

C11_P09 Step-growth polymerization of terephthalaldehyde catalysed by N-Heterocyclic Carbenes.

Julien Pinaud, LCPO, Pessac, France

C11_P10 Linear polyN-isopropylacrylamide (NIPAM) nanoparticles via emulsion polymerisation

yan chen, King's College London, London, United Kingdom

C11_P11 Synthesis and Functionalization of Main-Chain Degradable Polyperoxides by Radical Alternating Copolymerization

Eriko Sato, Osaka City University, Osaka, Japan

C11_P12 Investigation of Acrylate Solution Polymerisation up to High Conversions

Anatoly N Nikitin, Institute on Laser and Information Technologies, Shatura, Moscow Region, Russian Federation

C11_P13 Penultimate model of acrylate polymerization

Anatoly N Nikitin, Institute on Laser and Information Technologies, Shatura, Moscow Region, Russian Federation

C11_P14 Transfer to polymer and branching in the radical polymerization of acrylates

Patrice Castignolles, University of Western Sydney, Sydney, NSW, Australia

C11_P15 New routes to end-functional ROMP polymers

Andreas Kilbinger, University of Mainz, Mainz, Germany

C11_P16 Unique Step-Growth Semi-Fluorinated Polymers from Fluorinated Olefins

Dennis Smith, Clemson University, Clemson, SC, United States

C11_P17 Stability and charge density of redox initiated polyvinyl Acetate

Abou El Fettouh AbdElHakim, National Research Center, Cairo, Dokki, Egypt

C11_P18 Synthesis of PP-g-PS Copolymer and its Application in Polypropylene/polystyrene Blends as Compatilizer

Jianjun Yi, Petrochemical Research Institute, PetroChina Company Limited, Beijing, China

C11_P19 FUZZY LOGIC APPROACH TO INVESTIGATE CONCENTRATION AND CHAIN LENGTH EFFECTS ON CHAIN SHUTTLING POLYMERIZATION BLOCK FORMATION

Mamdouh Al-Harhi, KFUPM, DHAHRAN, Saudi Arabia

C11_P20 Styrene-isoprene copolymerization by some zirconocene-MAO initiator systems

Franco M. Rabagliati, Grupo Polímeros, Facultad Química y Biología, Universidad de Santiago de Chile, Santiago, Chile

C11_P21 SYNTHESIS AND CHARACTERIZATION OF DIFFERENT POLYMERS OBTAINED AT HYDROTHERMAL CONDITIONS

Miriam M. Unterlass, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

C11_P22 Conformation Controlled Radical Polymerization of s-Cis Locked Methylene Dioxolanones

Hitoshi Tanaka, University of Tokushima, Tokushima, Japan

C11_P23 Modification of polycyclooctene with ester-functionalised cyclooctene and norbornene derivatives.

Joseba Alonso-Villanueva, Universidad del País Vasco (UPV/EHU), Leioa, Spain

C11_P24 Synthesis of various pH-responsive polymers having naphthalene rings and acid pendants by living cationic polymerization.

Yu Shinke, Osaka University, Toyonaka, Osaka, Japan

C11_P25 BIO-INSPIRED CATIONIC POLYMERIZATION OF ISOPRENE INITIATED BY ALLYLIC ALCOHOLS/B(C₆F₅)₃

ouardad samira, LCPO, bordeaux, French Southern Territories

C11_P26 Synthesis of Ring Polymers by Ring Expansion Polymerization of a Cyclic Thioester Compound with Thiiranes

Jan-Hendrik Schütz, Georg-August-Universität, Göttingen, Germany

C11_P27 CCT-derived Macromonomers as Initiators for Anionic Polymerisation

G.C. Sanders, Technische Universiteit Eindhoven, Eindhoven, Netherlands

C11_P28 Poly(vinylsulfonic acid): Emerging Sulfonic Acid Polymer and its Functional Application

Teruyuki Okayasu, Waseda University, Tokyo, Japan

C11_P29 RAFT Copolymerization of PEO Macromonomers Yielding Charge-Containing Comb Copolymers

Ricardas Makuska, Vilnius University, Vilnius, Lithuania

C11_P30 AMPHIPHILIC GLYCOPOLYMERS BASED ON 2-HYDROXYETHYL ACRYLATE: COPOLYMERIZATION, PHYSICO-CHEMICAL AND BIOLOGICAL PROPERTIES

Marta Fernández-García, Institute of Polymer Science and Technology (CSIC), Madrid, Spain

C11_P31 Amphiphilic block copolymer synthesis via Nitroxide-Mediated Polymerization in aqueous dispersed systems, using various hydrophilic SG1-based macroalkoxyamines

Ségolène Brusseau, UPMC Univ. Paris 6, CNRS, UMR 7610, Laboratoire de Chimie des Polymères, Paris, France

C11_P32 Solution Polymerization of *N*-vinylcaprolactam in Different Solvents. Kinetic Dependence on Temperature, Monomer and Initiator Concentrations.

Simone F. Medeiros, Engineering School of Lorena – University of São Paulo, Lorena, SP, Brazil

C11_P33 Sequential RAFT and CCT Polymerization to create unsaturated functionalized polymers with unprecedented control.

Alexander H Soeriyadi, UNSW, NSW, Australia

C11_P34 Synthesis, characterization and ion-complexing properties of polymers displaying densely packed arrays of crown-ether lateral substituents

Ming Liu, East-Paris Institute of Chemistry & Materials Science, Thiais/Paris, France

C11_P35 Kinetics of copolymers thermal degradation based on UDMA and BisGMA

Adriana Lungu, University POLITEHNICA of Bucharest, Bucharest, Romania

C11_P36 Surface-Initiated PLP-SEC from Silica Nanoparticles

Robert Rotzoll, Institute of Physical Chemistry, Goettingen, Germany

C11_P37 Polymerization of ethynylpyridene derivatives using quarternization polymerization of Blumstein type and Grubbs-Hoveyda carbene catalyst 2nd generation

Jiri Zednik, Charles University in Prague, Prague 2, Czech Republic

C11_P38 Universality gel fraction exponent during photoinitiated gelation at different temperatures; a photo-DSC study.

Zekeriya Dogruyol, Yildiz Technical University, Department of Physics, Istanbul, Turkey

C11_P39 Synthesis of a novel polymer using as catalyst two superacids

Lazo-Jiménez Rosa Estela, Universidad Nacional Autónoma de México, Mexico City, Mexico

Hall 5

E15: Mechanical Properties of Polymer Materials and Fibres

E15_P01 Overall investigation of unreinforced and reinforced blends based on pp/pp-g-mah/(sgfr)pa 66.

Zitouni SAFIDINE, EMP, UER of Applied Chemistry, Bordj EL Bahri City, Algeria

E15_P02 UV Curing of Structural Epoxy Resins for Fibre Reinforced Composites

Vanda Yu. Voytekunas-Abadie, Singapore Institute of Manufacturing Technology, SIMTech,, Singapore, Singapore

E15_P03 Materials based on biopolymers of maize: stoichiometric interpretation of starch-glycerol-water interaction.

Farouk Ayadi, INRA-UMR 614 FARE, Reims, France

E15_P04 Phase change materials based on polyethylene, paraffin wax and wood flour

Riaan Luyt, University of the Free State (Qwaqwa Campus), Phuthaditjhaba, Free State, South Africa

E15_P05 Polymer Opals as Novel Electro-active Photonic Materials

Chris Finlayson, Cavendish Laboratory, Cambridge, United Kingdom

E15_P06 Surface Physical and Chemical Analysis of Plasma-treated Cotton Fabric Subjected to Wrinkle-resistant Finishing

Yin Ling Lam, The Hong Kong Polytechnic University, Hong Kong, Hong Kong

E15_P07 A study of grey cotton fabric using laser technology

Yim-ling Chow, The Hong Kong Polytechnic University, Kowloon, Hong Kong, Hong Kong

E15_P09 Wheat flour thermoplastic matrix reinforced by natural fibres

Larisa Dobircou, University of Rouen, LECAP, Saint Etienne du Rouvray, 76801, France

E15_P10 Formulation and optimization of an oxidative vulcanization system for polysulfide sealants using a D-optimal designing

Payam Zahedi, University of Tehran, Tehran, Iran, Islamic Republic of

E15_P11 Influence of Allyl Ether and Dicyclopentadiene on Properties of Unsaturated Polyester Resins

Zbigniew Boncza-Tomaszewski, Industrial Chemistry Research Institute, Warszawa, Poland

E15_P12 Patterning the mechanical properties of hydrogen silsesquioxane (HSQ) films using electron beam irradiation for application in mechano cell guidance

Mathieu Lanniel, University of Nottingham, Nottingham, United Kingdom

E15_P13 MONITORING THE EXTRUSION COMPOUNDING PROCESS OF PA-12 AND TREATED MONTMORILLONITE CLAY FOR OPTIMISED NANOCOMPOSITE BARRIER FILMS

Mathew Leung, Polymer Engineering Company Ltd., Burnaby, BC, Canada

E15_P14 Synthesis of polystyrene-b-polybutadiene-b-poly (methyl methacrylate), (SBM) triblock terpolymers consisting of 1,2- and 1,4-polybutadiene microstructures and investigations of their mechanical properties and their morphology.

Rakibul Kabir, Institute of Polymer Research, GKSS Research Centre, Geesthacht, Germany

E15_P15 Stretchable 2-D Honeycomb Assemblies of Carbon Nanotubes Templated by Latex Crystals

Patnarin Worajittiphon, University of Surrey, Guildford, Surrey, United Kingdom

E15_P16 Hybrid filler networks in rubber composites: from morphology to properties

Lucia Conzatti, CNR - ISMAC Genova, Genova, Italy

E15_P18 Supercritical CO₂-solvent System for Stereocomplex Formation of High-Molecular-Weight Polylactide

Purba Purnama, Korea Institute of Science and Technology, Seoul, Korea, Republic of

E15_P19 Preparation of high performance polybenzoxazine resin using hyperbranched polyborate

Peijun Xu, Department of Chemical Engineering, School of Energy and Power Engineering, Xi'an Jiaotong University, Xi'an, China

E15_P20 Preparation and properties of polyimide foams derived from aromatic dianhydrides and isocyanates

Liancai Wang, radiation center of research and application, Beijing, China

E15_P21 MECHANISMS OF SURFACE MODIFICATIONS OF POLYPROPYLENE BY HELIUM AND ARGON ION BOMBARDMENT

Nabil Madi, Qatar University, Doha, Qatar

E15_P23 Elastomer Particles Arising from Tyres out of Use as Toughness modifiers of epoxy based Thermosetting Polymers.

Javier González-Benito, Universidad Carlos III de Madrid, Leganes, MADRID, Spain

E15_P24 Influence of additives on polyolefins' degradation studied by infrared spectroscopy

Ivana Sedenkova, Institute of Macromolecular Chemistry, Prague, Czech Republic

E15_P25 Epoxidized Natural Rubber/Dicarboxylic Acids Self-Vulcanized Blends

Myriam Pire, Matière Molle et Chimie, ESPCI ParisTech - CNRS, UMR-7167, Paris, France

E15_P26 The mechanisms of ozonolysis for polybutadiene rubber

Yuichi Aoyagi, NOK corporation, Fujisawa-shi, Kanagawa-ken/tshujido-shinmachi, Japan

E15_P27 Control of Molecular Weight using the Reverse Iodine Transfer Polymerization (RITP) Technique - Emulsion Polymerization with Changes of Initiator Concentration and Scale up of Reactor

Yeoju Kim, Inha University, Incheon, Korea, Republic of

E15_P28 Effect of electron beam irradiation on rheological properties of PP/EPDM composites

Phil Hyun Kang, Korea Atomic Energy Research Institute, Radiation Research Division for Industry and Environment, Daejeon, Korea, Republic of

E15_P29 PHYSICAL AGEING STUDIES OF POLY(ETHYLENE ISOPHTHALATE)

Louise Turnbull, University of Strathclyde, Glasgow, United Kingdom

E15_P30 Effect of dynamic vulcanization in the thermal and mechanical properties of NR/PP blends

Fabio Roberto Passador, PPG-CEM/UFSCar, São Carlos, SP, Brazil

E15_P31 The effect of the structure of newly synthesized silicon modifiers and POSS units on the thermomechanical properties of epoxy polymer networks

Piotr Murias, Rzeszow University of Technology, Faculty of Chemistry, Department of Industrial and Materials Chemistry, Rzeszow, Poland

E15_P32 Properties of Natural Rubber Modified with Starch Nanocrystals

Jasper Azuatalam, University of Agriculture, Abeokuta, Ogun state, Nigeria

E15_P33 New silanes for silica modification in reinforcement of SBR compounds

Maila Castellano, University, Genova, Italy

E15_P34 High-performance electrolyte membranes with excellent mechanical properties / ionic conductivities compromise

Florence Gayet, Department of Chemistry, University of Warwick, Coventry CV4 7AL, United Kingdom

E15_P35 Tensile Properties of NBR with different types of Nanofillers

Fabiula Sousa, Universidade Federal do ABC - UFABC, Santo André, SP, Brazil

E15_P36 Bioinspired pressure responsive reversible adhesive system

Dadhichi Paretkar, INM - Leibniz Institute for New Materials, Saarbrücken, Germany

E15_P37 Thermal and mechanical properties of dispersed silica nanoparticles in Poly(methyl methacrylate) (PMMA)

Moussa Khelifa, Heriot-Watt University, Edinburgh/Scotland, United Kingdom

E15_P38 Effect of Molecular Weight and Solvent on the Nanotribological Properties of Poly(2-(methacryloyloxy)ethyl phosphorylcholine) Brushes

Zhenyu Zhang, Department of Chemistry, University of Sheffield, Brook Hill, Sheffield, United Kingdom

E15_P39 Development and Characterization of Itaconic-Based Derivatives as Biomass Materials for Thermoplastic Elastomer.

ChungCheng Lin, Industrial Technology Research Institute, Hsinchu, Taiwan

E15_P40 Effects of the number of methyl groups on the mechanical properties of styrene-acrylate random ionomers

Kwang-Hwan Ko, Chosun University, Gwangju, Korea, Republic of

E15_P41 Glass transition temperatures of poly(styrene-co-3-sulfopropyl methacrylate) ionomers
Kwang-Hwan Ko, Chosun University, Gwangju, Korea, Republic of

E15_P42 Preparation and Application of Modified Novolacs in Halogen-Free Epoxy Composites.
Wei-Ta Yang, Industrial Technology Research Institute Hsinchu, Chutung, Hsinchu, Taiwan

E15_P43 Synthesis and Optical Property of Poly(arylene thioether)s Consisting of “Cardo” Moieties in the Main Chain
Hitoshi Okuda, Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan

E15_P44 Nanoscopic mechanical characterization of inhomogeneous polymer networks.
Miriam V. Flores-Merino, Department of Engineering Materials. The Kroto Research Institute. University of Sheffield, Sheffield, South of Yorkshire., United Kingdom

E15_P45 Magnetic field controlled elastomers based on hard magnetic filler
Elena Kramarenko, Physics Department, Moscow State University, Moscow, Russian Federation

E15_P47 Effect of block copolymers as compatibilizers in ps/epdm blends
Sônia Marlí Bohrz Nachtigall, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil

E15_P48 FOAMING AGENTS IN NATURAL FIBER/PLASTIC COMPOSITES
Sônia Marlí Bohrz Nachtigall, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil

E15_P49 GELATION PROCESS ANALYSIS BY ULTRASOUND METHOD OF A RIGID PVC COMPOUND
Henrique Finocchio, Federal University of São Carlos, São Carlos, São Paulo, Brazil

E15_P50 Development of polyurethane formulations for long term sustainability with reduced toxicity.
Annette Glauser, AWE, Reading, Berkshire, United Kingdom

E15_P51 The effect of polymer binder on the compressive and tensile properties of polymer bonded explosives.
Peter Bolton, AWE, Aldermaston, Reading, Berkshire, United Kingdom

E15_P52 Characterisation of co-solvent effects in poly(vinyl alcohol) films by tensile analysis and swelling studies.
Emma Wright, Queen's University Belfast, Belfast, United Kingdom

E15_P53 Title: Modeling of Plastic Deformation Molecular Mechanics of an Oriented Linear Crystalline Polymer

Ulmas Gafurov, Institute of Nuclear Physics, Tashkent, Ulugbek, Uzbekistan

E15_P54 Influence of gel matrix preparation method in the mechanical properties of UHMWPE fibers/EVA ballistic laminates

Cristina M. A. Lopes, Institute of Aeronautics and Space, São José dos Campos, SP, Brazil

Hall 5

E18: Rheology and Dynamics of Polymer Solutions and Gels

E18_P01 The rheological behaviour of epoxy molding compound for packaging of large-scale integrated circuits

Mingshan Yang, Beijing Institute of Petrochemical Technology, Beijing, China

E18_P02 Effect of surfactants on the rheological properties of hydrophobically modified hydroxyethyl cellulose

Peter A. Williams, Glyndwr University, Wrexham, United Kingdom

E18_P03 Rheology and atomisation of aqueous ceramic slips

Saumil Vadodaria, Glyndwr University, Wrexham, Wales, United Kingdom

E18_P04 Effects of irradiation on some molecular behavior of different species of gum tragacanth

Samira Alijani, Beheshti University, Department of Food science, Tehran, Iran, Islamic Republic of

E18_P05 Rheological characterization of *Leucaena leucocephala* seed polysaccharide

Louis Nwokocha, University of Ibadan, Ibadan, Nigeria

E18_P06 Sol-gel transition of methyl cellulose

Katsuyoshi Nishinari, Osaka City University, Osaka, Japan

E18_P07 Relation between rheological properties of polysaccharide solutions and aspiration

Katsuyoshi Nishinari, Osaka City University, Osaka, Japan

E18_P08 Polymer Chain Relaxation Mechanisms in Siloxane-carbosilane Systems.

Anna Kowalewska, Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Lodz, Poland

E18_P10 Engineering The Next Generation of Nanostructured Complex Fluids Through Expert System Rheometry
Samiul Amin, Malvern Instruments Limited, Malvern, Worcestershire, United Kingdom

E18_P11 Diffusional changes during radical bulk polymerization - Fluorescence Correlation Spectroscopy and Single Molecule Fluorescence Tracking as new methods for analysis and visualization
Dominik Wöll, Zukunftskolleg, Universität Konstanz, Konstanz, Germany

E18_P12 GLYCOPOLYMERS CONTAINING MALTOTRIONOLACTONE PENDANT GROUPS BY CHEMICAL MODIFICATION OF ETHYLENE-VINYL ALCOHOL COPOLYMERS. SPECIFIC LECTIN INTERACTIONS AND TEMPERATURE-INDUCED REVERSIBLE GELS
Manuel Sánchez-Chaves, Institute of Polymer Science and Technology (CSIC), Madrid, Spain

E18_P13 Physical Ageing of Poly(ethylene Oxide) (PEO)/Poly(vinylphenol) (PVPPh)Blends
Abdelsallam Youssef, Heriot-Watt University, Edinburgh/Scotland, United Kingdom

E18_P14 Dynamics of non-aqueous polyelectrolyte solutions in a wide temperature range
Petr Stepanek, Institute of macromolecular chemistry, Prague, Czech Republic

E18_P15 Shear and extensional rheometry of hydrophobically modified polysaccharides in aqueous media
Saamil Vadodaria, Glyndwr University, Wrexham, United Kingdom

E18_P16 Influence of fluorophenyl end-groups on hydrodynamic properties and aggregation of end-capped poly(methyl methacrylates)
Ekaterina Gasilova, Institute of Macromolecular Compounds, Russian Academy of Sciences, St.-Petersburg, Russian Federation

E18_P17 Production and characterization of whey protein/agar complex coacervates.
Pilar Gonçalves, Instituto de Macromoléculas Professora Eloisa Mano-UFRJ, Rio de Janeiro, Rio de Janeiro, Brazil

E18_P18 Polymer Modified Asphalts As Viscoelastic Emulsions
Jasper Azuatalam, University of Agriculture, Abeokuta, Ogun state, Nigeria

E18_P19 Effect of thermo-mechanical treatment on the rheological properties of crosslinked waxy corn starch

Jasper Azuatalam, University of Agriculture, Abeokuta, Ogun state, Nigeria

E18_P20 Rheological characterisation of co-solvent effects in poly(vinyl alcohol) gels.

Emma Wright, Queen's University Belfast, Belfast, United Kingdom

E18_P21 Reinforcement of natural rubber with cassava starch nanocrystals

Jasper Azuatalam, University of Agriculture, Abeokuta, Ogun state, Nigeria

E18_P22 Effect of temperature on polymer-surfactant networks

Vyacheslav Molchanov, Lomonosov Moscow State University, Moscow, Russian Federation

Hall 5

F20: Polysaccharides: Chemistry, Structure, Properties and Technology

F20_P02 Polysaccharide nanocrystals as substrates for the Surface-Initiated Ring-Opening Polymerization (SI-ROP) of ϵ -caprolactone catalysed by organic catalysts

Marianne Labet, The University of Nottingham, Nottingham, United Kingdom

F20_P03 NANOMATERIALS ON THE POLYSACCHARIDES BASE Rashidova S.Sh. Institute of Polymer Chemistry and Physics of AS RUz, 100128, Uzbekistan, Tashkent, A.Kadyrii str., 7 "b", e-mail:carbon@uzsci.net

Rashidova Sayera, Institute of Polymer Chemistry and Physics of AS RUz, Tashkent, Uzbekistan

F20_P04 STUDY OF FORMATION OF METAL COMPLEXES OF CHITOSAN BOMBYX MORI A.A.

Kholmuminov Abdulfatto, Institute of Polymer Chemistry and Physics of AS RUz, Tashkent, Uzbekistan

F20_P05 Deconstruction and reconstruction of polysaccharide materials by control of thermal and solvent environments: Starch, Cellulose and Hemicellulose

Roger Ibbett, University of Nottingham, Nottingham, United Kingdom

F20_P06 Stability of polysaccharide sulfates dependence on their molecular parameters

Nodirali Normakhamatov, Institute of Bioorganic Chemistry, Uzbek Academy of Sciences, Tashkent, Uzbekistan

F20_P07 Topological modeling of reaction ability and biological activity some amine polysaccharides

Bahodirjan Asqarov, Institute of polymer chemistry and physics, Tashkent, Uzbekistan

F20_P08 New liquid state NMR technique to probe polymer-colloid interaction : adsorption of xyloglucan chains onto cellulose surface

Laurent Heux, CERMAV-CNRS, Grenoble, France

F20_P09 In air synthesis of Gum ghatti-acrylamide based hydrogels and study of the effect of cationic charges on its swelling behavior

Rajeev Jindal, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India

F20_P10 Pressure induced synthesis of *Gum ghatti*-acrylamide based crosslinked networks for the selective absorption of saline from different petroleum fraction-saline emulsions

Rajeev Jindal, Dr. B. R. Ambedkar National Institute of technology, jalandhar, Punjab, India

F20_P11 Preparation of Functionalized Polysaccharide Based Materials: A Combination of Cellulose, RAFT and Supramolecular Chemistry

Mona Semsarilar, University of Sheffield, Sheffield, United Kingdom

F20_P12 ESTIMATION OF DEGREE TRANSFORM OF CARBOXYMETHYLCHITOSANBY METHOD PULSED NMR

Abdulfatto Kholmuminov, Institute of polymer chemistry and physics, Tashkent, Uzbekistan

F20_P13 Weathering of chitosan films in the presence of additives

Alina Sionkowska, Nicolaus Copernicus University, Torun, Poland

F20_P14 Effect of the sodium phosphate dibasic concentration on the swelling properties of chitosan hydrogels

Agustin Martinez-Ruvalcaba, University of Guadalajara, Chemical Engineering Department, Guadalajara, Jalisco, Mexico

F20_P15 Drug delivery kinetics of polyacrylamide-co-itaconic acid/chitosan hydrogels

Alejandro Gonzalez-Alvarez, Chemical Engineering Department. University of Guadalajara, Guadalajara, Jalisco, Mexico

F20_P16 NEW NANOSTRUCTURES BASED ON GLYCOPOLYMERS

Hulya Arslan, Zonguldak Karaelmas University, Zonguldak, Turkey

F20_P17 Study of an environmentally friendly alternative method for agar extraction from commercial *Gelidium sesquipedale*

Ana Sousa, Faculty of Engineering of University of Porto, Porto, Portugal

F20_P18 The Mechanism and Kinetics of the Free-Radical Degradation of Xyloglucan in Aqueous Solution Using Gel Permeation Chromatography

Amilcar Pillay Narrainen, University of Manchester, Manchester, United Kingdom

F20_P19 Production of Dried Alginate-Chitosan Microcapsules for Bacterial Encapsulation and their Controlled Release in Simulated Gastro-Intestinal Conditions.

Michael Cook, University of Reading, Reading, United Kingdom

F20_P20 Characterization of the blends of bacterial cellulose/gum Arabic treated with swelling or dissolving solvents

Cesar A. Tischer, Federal University of Parana - UFPR, Curitiba - Parana, Brazil

F20_P21 Nanogels of chitosan and its derivatives

Olga Philippova, Physics Department of Moscow State University, Moscow, Russian Federation

F20_P22 Grafts copolymers of cellulose with controlled architecture prepared in homogeneous phase

Vladimír Raus, Institute of Macromolecular Chemistry, AS CR, v.v.i., Prague, Czech Republic

F20_P23 Films of bacterial cellulose modified after ultrasound

Paula Faria Tischer, Federal University of Parana (UFPR), Curitiba, Parana, Brazil

F20_P24 Cellulose grafted with poly(2-alkyl-2-oxazoline)s

Paula Jarvi, University of Helsinki, Helsinki, Finland

F20_P25 Hydrophobization of nanofibrillated cellulose with hydrocarbon tails and polymers grafted from the surface

Ulla Hippi, Aalto University, Espoo, Finland

F20_P26 Structure-biosynthesis relations for starch and glycogen

Alex Chi Wu, The University of Queensland, Brisbane, QLD, Australia

Hall 5

G21: Polymer Electronics

G21_P01 Interfacial Synthesis of Conducting Polymers: Formation of Hollow Spheres

Bhavana Gupta, School of Materials Science and Technology, Institute of Technology, Banaras Hindu University, Varanasi, India

G21_P02 Conducting Polymer nano-composite Electrode for High Power Supercapacitors

Ashok K. Sharma, Department of Chemistry, G. J. University of Science & Technology, Hisar (Haryana), India

G21_P03 Patterning of Low-bandgap dithiophene Polymer and their application to organic photovoltaics.

Sehwan Kim, Yonsei University, Seoul, 262 Seongsanno, Seodaemun-gu, Korea, Republic of

G21_P05 Towards Materials With Reversible Oxidation and Tuneable Colours Using Heterocyclic Conjugated Azomethines

Will Skene, Université de Montréal, Montreal, QC, Canada

G21_P07 In situ Ordered Nano-assembly of Cellulose Fibers / Polyaniline

Yue Zhang, College of Life Science & Technology, Huazhong University of Science & Technology, Wuhan, Hubei, China

G21_P08 Highly stable, high-capacitance cellulose-polypyrrole nanocomposites

Soon Yee Liew, University of Nottingham, Nottingham, United Kingdom

G21_P09 Electrochemical formation metal polymers and coverings

E W Kazarian, State University of Armenia, Yerevan, Armenia

G21_P10 Optoelectronic processes in pristine and ion irradiated kapton-h polyimide

Jitendra Quamara, National Institute of technology, Kurukshetra-136119, India

G21_P11 Semiconductor character of polyaniline doped by sulfonic acid

NAAR Nacera, EMP, ALGIES, Algeria

G21_P12 Morphology and Optical Properties of Electrospun Light-Emitting Fibers from a Tertiary Blend Solution of an Inert Polymer and Two Conjugated Polymers

Sutheerat Changsarn, The Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand

G21_P13 Poly(fluorenevinylene)s and Poly(phenylenevinylene) with Quinoline or Bisquinoline Electron-Accepting Segments

Spiliopoulos Ioakim, Technological Education Institute of Kalamata,
Kalamata, Greece

G21_P14 *The Synthesis and Evaluation of Conducting Polyaniline Blends*

Zaid K. Abbas, Kingston University, Kingston Upon Thames, United Kingdom

G21_P15 Anomalous Enhancement of Conductivity on PEDOT Films with Salts

Shin-ichiro Nakajima, Japan Aviation Electronics Ind., Ltd., Akishima, Tokyo, Japan

G21_P16 Synthesis and testing of fast switching electrochromic conjugated polymers

Sandeep Kaur, University of Strathclyde, Glasgow, United Kingdom

G21_P17 Mechanistic study on the p-quinodimethane formation in the synthesis of PPV through the Sulfinyl and Dithiocarbamate Precursor Routes

Joke Vandenberg, Institute for Materials Research (IMO), Hasselt University, Diepenbeek, Belgium

G21_P18 Investigation of the synthesis and physical properties of novel sulfur-containing polyfluorene co-polymers for the application in OLEDs

Katja Dahms, Department of Chemistry, Durham University, Durham, United Kingdom

G21_P19 Synthesis, photoluminescence, and electrochromism of novel polyamides with 3,6-di-*tert*-butylcarbazol-9-yl-substituted triphenylamine units

Sheng-Huei Hsiao, National Taipei University of Technology, Taipei, Taiwan

G21_P20 One- and two-photon excited fluorescence of two-photon polymerized structures

Daniel Correa, Instituto de Física de Sao Carlos, Universidade de Sao Paulo, Sao Carlos, Sao Paulo, Brazil

G21_P21 Properties and Electrical Conductivity Percolation Threshold for Blends of Poly(epichlorhydrin) with Polyaniline Dodecylbenzenesulfonate

Elaheh Bakhtiarian, Materials Research Group, Faculty of Science, Kingston University, Penrhyn Road, Kingston upon Thames, Surrey KT1 2EE, United Kingdom

G21_P22 Synthesis and Characterization of Conducting Polyaniline

Elaheh Bakhtiarian, Kingston University, London, Penrhyn Road, Kingston upon Thames, Surrey, United Kingdom

G21_P23 Control of the nano-morphology of P3HT/PCBM blend using crystallization accelerant

Leeyih Wang, National Taiwan University, Taipei, Taiwan

G21_P24 Investigation of annealing effects of polymer solar cells based on the CdSe-PVK electron acceptor

Tzong-Liu Wang, Department of Chemical & Materials Engineering, National University of Kaohsiung, Kaohsiung, Taiwan

G21_P25 Deep blue OLEDs based on ambipolar triphenylamine-oxadiazole-fluorene triad molecules

Katharine Linton, Department of Chemistry, Durham University, Durham, United Kingdom

G21_P26 New semiconducting copolymers based cyclopentadithiophene and its derivatives

Ekaterina Myshkovskaya, Institute of Synthetic Polymer Materials Russian Academy of Sciences, Moscow, Russian Federation

G21_P27 Extending the range of spectrum utilised in organic photovoltaics by dye sensitisation

Hannah Jasper, University of Sheffield, Sheffield, United Kingdom

G21_P29 Inhomogeneous Quantum Yield Distribution of Photochromic Reactions of some Diarylethenes in Solid State Polymers

Takashi Yamashita, Tokyo University of Science, Chiba, Japan

G21_P30 Enhancement of thermal conductivity of silicon epoxy/ Al_2O_3 composite via using modified polysiloxane containing metal oxide

Hyungu Im, Chung-Ang University, Seoul, Korea, Republic of

G21_P31 Electrical conductivity of PU-g-MWNTs / PU composite film ; Effect of hard segment structure on PU matrix

Sungjin Yoon, Chung-Ang university, Seoul, Korea, Republic of

G21_P32 Direct Porous structure patterning of Polyimides without development process

Yasushi Matsuzawa, Tokyo University of Science, Noda, Japan

G21_P33 Thermoelectric Property Enhancements of PEDOT:PSS by Structural Modification

Tsung-Che Tsai, National Chiao Tung University, NCTU, Hsinchu City, Taiwan

G21_P34 Star-like conjugated oligothiophenesilanes for photovoltaic applications.

Elena Kleymyuk, Institute of Synthetic Polymer Materials of Russian Academy of Sciences, Moscow, Russian Federation

G21_P35 Towards Materials for Polymer Solar Cells with Controlled Polymerization Techniques

Maria Heuken, Leibniz-Institut für Polymerforschung Dresden e.V., Dresden, Germany

G21_P36 Oligofluorene-functionalised Truxenes as Electron Conducting/Hole Blocking Layers in Electroluminescent Devices

Neil Thomson, The University of Strathclyde, Glasgow, United Kingdom

G21_P37 Fabrication of fatty acid-poly(*p*-phenylene vinylene) mixed nanostructured films through the Langmuir-Blodgett technique

Shu Wang, Universidade de Sao Paulo, Sao Paulo, Brazil

G21_P38 Inkjet printing with inks based on PANI and PPy conductive polymers

Monika Rom, University of Bielsko-Biala, Institute of Textile Engineering and Polymer Materials, Bielsko-Biala, Poland

G21_P39 High Thermal Stability and Transparency of Polyester Having Main-Chain Terminal OH Group Capped by using Benzoyl Chlorides

Masayoshi Tabata, Muroran Institute of Technology, Muroran, Japan

G21_P40 Design of Highly Thermal Resistant Plastic Optical Fibre (POF) as a Step-Index Type Using a Chemically Modified Aromatic Polyester

Masayoshi Tabata, Muroran Institute of Technology, Muroran, Japan

G21_P41 Truly critical constitutional defects in poly(*p*-phenylene vinylene)s and their impact on ageing and fatigue of light-emitting diodes

Nicole Vilbrandt, Technical University of Darmstadt, Darmstadt, Hessen, Germany

G21_P42 Novel solution-processable materials for (opto)electronic applications: polymer-immobilized small-molecule semi-conductors

Jochen Wulff, Ernst-Berl-Institut for chemical engineering and macromolecular chemistry, Darmstadt, Germany

G21_P43 A Facile Approach Towards Optically Isotropic, Colorless, and Thermoplastic Polyimidothioethers with High Refractive Index

Guey-Sheng Liou, National Taiwan University, Taipei, Taiwan

G21_P44 Use of novel Polyvinylidene (di) Fluoride products as electrode binders for printed Li-ion Thin Film Batteries

Lionel PICARD, CEA-Grenoble/DRT/LITEN/DEHT/LBA, Grenoble, France

G21_P45 Polyaniline Synthesis Using Fenton Reagent: Reaction Course Study

Michal Blaha, Charles University in Prague, Hlavova 2030, Prague, Czech Republic

G21_P46 PLEDs devices with OC₁C₁₀-PPV as emissive polymer comparing chloroform and toluene as solvents and treated ITO films by UV-Ozone using modified HID mercury lamp.

Wang Shu Hui, Engenharia Metalúrgica e de Materiais da Escola Politécnica da Universidade de São Paulo, São Paulo, SP/Cidade Universitária, Brazil

G21_P47 Synthesis and Photovoltaic application of Block Copolymers Based on Poly(3-hexylthiophene) and Polystyrene

Harikrishna Erothu, LCPO, ENSCPB, UNIVERSITY OF BORDEAUX 1, BORDEAUX, AQUITAINE, France

G21_P48 The synthesis and characterisation of novel organic conjugated molecules based on a benzothiadiazole unit

Saadeldin Elmasly, University of strathclyde, Glasgow/Scotland, United Kingdom

G21_P49 The incorporation of the dye molecule BODIPY into conjugated polymers for solar cell applications

Zuzana Vobecka, University of Strathclyde, WestCHEM, Department of pure and applied chemistry, Glasgow, United Kingdom

G21_P50 Blends of TIPS-pentacene and a glassy polymer: Optical and morphological study for lasing applications

Kittiyaporn Singsumphan, Department of Physics, University of Surrey, Guildford, Surrey, United Kingdom

G21_P51 New aromatic polybenzoxazine matrix

SORINA GAREA, University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania

G21_P52 A Novel OFET Design Exploiting Dielectric Peculiarity and Compatibility of the Thiophene Based Gel at the Interface of the Device

Zekeriya Dogruyol, Yildiz Technical University, Department of Physics, Istanbul, Turkey

G21_P53 Tuning the Electronic Properties of Conjugated Polymer by Tethering Low Band-Gap Rhenium(I) Complex on the Main Chain

Chris S. K. Mak, Department of Chemistry, The University of Hong Kong, Pokfulam Road, Hong Kong, Hong Kong

G21_P54 Molecular dynamics of poly-alkyl-thiophenes: experimental study by neutron scattering, rheology and calorimetry

Victoria Garcia Sakai, ISIS Facility, Oxfordshire, United Kingdom

Hall 5

G22: Molecularly Imprinted Polymers

G22_P01 Hierarchically structured porous beads as artificial receptors with high capacity and favorable mass transfer for protein separation and depletion

Ali Nematollahzadeh, Institute of Environmental Research (INFU)
University of Dortmund, Dortmund, Germany

G22_P02 The development of enzyme conjugated molecularly imprinted polymers.

Joanne O'Connor, Limerick Institute of Technology, Limerick, Ireland

G22_P03 Synthesis and characterization of MIP coatings as sensing layers of low-cost sensors for security applications

Gudrun Bunte, Fraunhofer ICT, 76327 Pfinztal, Germany

G22_P04 Molecularly imprinted hydrogels for the peptide-hormone hepcidin prepared by the epitope approach via water-in-oil suspension polymerization under mild conditions.

Vincenzo Abbate, King's College London, London, United Kingdom

G22_P05 Design and Development of New Diamino-pyridine Based Functional Monomer for the Effective Imprinting of the Pharmaceutical Drug Aminoglutethimide: Water Compatible Sol-Gel Approach

Porkodi Kadhivel, University of Porto, Porto, Portugal

G22_P06 MOLECULARLY IMPRINTED POLYMER FOR SELECTIVE EXTRACTION AND CLEAN-UP OF CATECHINS FROM NATURAL SAMPLES

María del Mar Castro López, Laboratorio de Química - Centro de Investigaciones Tecnológicas - Universidade da Coruña, Campus de Esteiro s/n, 15403, Ferrol, Spain

G22_P07 CHARACTERIZATION OF MOLECULARLY IMPRINTED POLYMERS FOR ATMER-129

María Concepción Cela Pérez, Laboratorio de Química-Centro de Investigaciones Tecnológicas-Universidade da Coruña, Campus de Esteiro s/n, 15403, Ferrol, Spain

G22_P08 Temperature Responsive Imprinted Polymer Hydrogels Based on Electrostatic Interaction and Hydrogen bonding
Xueyong Liu, Institute of Chemical Materials, Mianyang, Sichuan, China

G22_P09 Developments in the synthesis of molecularly imprinted polymers with different functional monomers
Sonia Scorrano, University of Salento, Lecce, Italy

G22_P10 Malachite green detection based on MIP sensing concepts; proof of principle sensing for environmental screening
Ans Weustenraed, Hasselt University, Institute for Materials Research (IMO), Diepenbeek, Belgium

G22_P11 Investigation of the influence of Reversible Addition Fragmentation chain Transfer (RAFT) agent on the performance and properties of an L-phenylalanine anilide MIP
Mahadeo Halhalli, Technische Universität, Institut für Umweltforschung, Dortmund, NRW, Germany

G22_P12 Development of Point-of-care Sensors to Improve Drug Delivery using Molecular Imprinted Polymers
Stuart Gilby, Cranfield University, Bedfordshire, United Kingdom

G22_P13 Molecularly Imprinted Polymers (MIPs) targeting posttranslationally modified protein fragments.
Sudhirkumar Shinde, INFU, TU, Dortmund, NRW, Germany

G22_P14 Role of polymerization temperature on recognition properties of Thermo-responsive MIPs: switchable behaviour.
Francesco Puoci, Università della Calabria, Rende, Italy

G22_P15 BULK VS EMULSION POLYMERISATION FOR IMPRINTED PARTICLES PREPARATION
Catherine Branger, MAPIEM Laboratory - Université SUD Toulon-Var, La Valette du Var, France

G22_P16 MOLECULARLY IMPRINTED POLYMERS IN DISPERSED PHASE
Ibon Iturralde, University of The Basque Country-POLYMAT, Donostia-San Sebastian/Gipuzkoa, Spain

G22_P17 Molecularly imprinted polymers for recognition of neopterin in diagnostic applications
Roberta Del Sole, University of Salento, Lecce, Italy

G22_P18 Molecularly Imprinted Polymers: A Market Overview based on the Patent Situation
Soeren Schumacher, Fraunhofer IBMT, Potsdam-Golm, Germany

G22_P19 Effective molecular imprints of mono-functional templates.

Yvonne Luk, Cardiff University, Cardiff, United Kingdom

G22_P20 Comparative evaluation of molecular imprinted polymer equilibrium binding data

Marc Kelly, Cardiff University, Cardiff, United Kingdom

G22_P21 Optimisation of MIP Performance by Porogen Tuning and Post-Polymerisation Modification

Jenna Bowen, Cardiff University, Cardiff, United Kingdom

Hall 5

G25: Polymers in Liquid Crystalline Materials

G25_P03 Novel Liquid Crystalline and Enhanced Light Emitting Polyacetylenes: Effects of Substitution, Spacers and Terminal Groups on Polyacetylenes Bearing Terphenyl Pendants

Yiwang Chen, Nanchang University, Nanchang, China

G25_P04 A study of cationic polymerization of 1-(2-hydroxyethyl)aziridine

Marta Giamberini, Departament d'Enginyeria Química, Universitat Rovira i Virgili, Tarragona, Spain

G25_P05 Molecular orientation behavior of azobenzene polymer liquid crystals and their application for photoresponsive 1D-photonic crystal

Seiji Kurihara, Kumamoto University, Kumamoto, Japan

G25_P06 DSC and synchrotron studies of liquid crystalline copolyesters

María L Cerrada, Institute of Polymer Science and Technology (CSIC), Madrid, Spain

G25_P07 Relations between the Diisocyanate Structure and Properties of Liquid Crystalline Polyurethane Elastomers

Steven Fuhrmann, Heriot-Watt University, Edinburgh, United Kingdom

Hall 5

H27: Polymer Education

H27_P01 Multidisciplinary project: Synthesis and application of transparent lattices

Pooja Daswani, Technical University of Eindhoven(TU/e), Eindhoven, Netherlands

H27_P02 Masterclass Project: Controlled drug release from biodegradable polymer nanoparticles

T.G.T. Jansen, Eindhoven University of Technology, Eindhoven, Netherlands

H27_P03 Design-based Learning & The synthesis of colloidal nanocomposites

Joris Salari, Polymer Chemistry Group, Eindhoven, Netherlands

FRIDAY 16 JULY 2010 - ORAL SESSIONS

Clyde Auditorium

Plenary: Laura Kiessling

09:00 PLEN_06 **Synthesis of Polymeric Probes to Control Cell Recognition and Signaling**

Laura Kiessling, University of Wisconsin-Madison, Madison, United States

Clyde Auditorium

Plenary: Ming Jiang

PLEN_07 **New Strategies in Macromolecular Self-assembly in Solutions**

Ming Jiang, Fudan University, Shanghai, China

Clyde Auditorium

Plenary: Sir Richard Friend

PLEN_08 **Control of Structure and Electronic Structure in Polymeric Semiconductor Diodes**

Richard Friend, University of Cambridge, Cambridge, United Kingdom