

Monday 12 February

Plenary Session 2

Ballroom 1

Chaired by Martina H. Stenzel

9:00 am **PL2** Well-Defined Polymers – Applications from Cardiovascular Disease to Holography
Craig J. Hawker

10:00 am **Refreshments**

Session A1

CRP I – NMP/ATRP

Ballroom 1

Chaired by Craig Hawker

10:30 am **A1/1** Amphiphilic Diblock Copolymers: Synthesis via Nitroxide Mediated Polymerization and Adhesive Properties
Ginu Abraham, Jeremie Teisseire, Sylwia Poivet, Kai Schierholz, Pascal Fabre, Federic Nallet, Eric Papon, Yves Gnanou, Olivier Guerret

10:50 am **A1/2** Nitroxide-Mediated Polymerization of Methyl Methacrylate: Is the Challenge Overcome?
Yohann Guillaneuf, Sylvain R. A. Marque, Paola Astolfi, Lucedio Greci, Didier Giges, Paul Tordo, Denis Bertin

11:10 am **A1/3** Nitroxide Mediated Polymerization of MMA using SG1-Based Alkoxyamine
Yohann Guillaneuf, Pierre-Emmanuel Dufils, Didier Giges, Sylvain Marque, Paul Tordo, Denis Bertin

11:30 am **A1/4** Kinetic Assessment of the Atom Transfer Radical Polymerisation of both Styrene and Methyl Acrylate with the Novel Ligand, NH₂capten and Subsequent Atom Transfer Radical Coupling and RAFT Polymerization
Craig A. Bell, Lawrence R. Gahan, Michael R. Whittaker, Michael J. Monteiro

11:50 am **A1/5** ATRP as a Tool to Fabricate Superhydrophobic and Self-Cleaning Cellulose Surfaces
Daniel Nyström, Josefina Lindqvist, Emma Östmark, Per Antoni, Anders Hult and Eva Malmström

12:10 pm **A1/6** Synthesis of Chitosan Combs by ATRP
Natasha H. Munro, Lyall R. Hanton, Stephen C. Moratti, Brian H. Robinson

Session A2**Natural Polymers - Starch****Ballroom 2***Chaired by Bob Gilbert*

- 10:30 am **KN2** Self-Association and Crystallization of Amylose
A. Buléon, J.-L. Putaux, N. Montesanti, G. Veronese, C. Harb, P. Le Bail
- 11:10 am **A2/3** New Methods for the Characterization of Starch
Anthony Dona, Jonathan Peate, Chun Wai Yuen, Javier M. Hernandez, Patrice Castignolles, Marianne Gaborieau, Robert G. Gilbert
- 11:30 am **A2/4** Comprehensive Investigations of Model Starches for Design of New Thermoplastic Starch Polymers
I. Tan, B.M. Flanagan, M.J. Gidley, P.A. Sopade, A.K. Whittaker, P.J. Torley, Peter J. Halley
- 11:50 am **A2/5** Characterisation of Starch by Diffusion and NMR Techniques
Antony Dona, Jonathan Peate, Chu Wai Yuen, Marianne Gaborieau, Patrice Castignolles, Robert G. Gilbert
- 12:10 pm **A2/6** Key Interactions in Multi-Component Biodegradable Thermoplastic Starch Nanocomposites
Katherine Dean, Long Yu, Steven Petinakis, Alex Bilyk, Dong Yang Wu

Session A3**Processing and Polymer Properties****Chancellor 6***Chaired by Darren Martin*

- 10:30 am **A3/1** Physical Properties of Cross-Linked Fluorinated Polymers Used for Inlay Implants
Xiaojuan Hao, Jim Bates, Danelle Beattie, Tim Hughes, Justine Jeffery, Tam Le, Xuan Nguyen
- 10:50 am **A3/2** From Structure Property Relationship to Molecular Design
Heping Liu, Idriss Blakey, Lan Chen, Will Conley, Bronwin Dargaville, Graeme A. George, David J.T. Hill, Firas Rasoul, Bryan Rice, Andrew K. Whittaker, Paul Zimmerman
- 11:10 am **A3/3** Fundamental Mechanisms Applied to Electrospinning Process Control
Jonathan Stanger, Nick Tucker, Nigel Larsen, Roger Reeves, Mark Staiger
- 11:30 am **A3/4** Modulus Shift and Actuation in Polymer Actuators
Geoffrey M. Spinks
- 11:50 am **KN3** Electrospinning of Nanofibers: Towards New Techniques, Functions and Applications
A. Greiner, J.H. Wendorff
- 12:30 pm **Lunch** **HGC Mezzanine Level**

Session B1

CRP II – RAFT/MADIX – Theory and Practice

Ballroom 1

Chaired by Markus Busch

- 1:30 pm **KN4** Synthetic Methodologies to Star-Like Polymers by MADIX
Daniel Taton, Julien Poly (Lecture given by **J. Poly** on behalf of **D. Taton**), **Ludovic Dupayage, Inigo Gonzalez, Mathias Destarac, James Wilson**
- 2:10 pm **KN5** Ab Initio Kinetic Modelling in Free-Radical Polymerization
Michelle L. Coote, Elizabeth H. Krenske, Ekaterina I. Izgorodina, Markus Busch, Christopher Barner-Kowollik
- 2:50 pm **B1/5** Intermediate Radical Termination in the Dithiobenzoate-Mediated Polymerization of Butyl Acrylate
Patricia A. P. Geelen, Bert Klumperman
- 3:10 pm **B1/6** RAFT Mechanisms
Graeme Moad, Bill Chong, Roger Mulder, Ezio Rizzardo, San Thang

Session B2

Nanocomposites, Nanotubes and Nanoparticles

Ballroom 2

Chaired by Greg Qiao

- 1:30 pm **B2/1** New Polyaniline-Wrapped Carbon Nanotubes
Milena Ginic-Markovic, Janis G. Matison, Raoul Cervini, George P. Simon, Peter M. Fredericks
- 1:50 pm **B2/2** Structure and Morphology of Nanocomposites
B. Nuhiji, M. Forrest, D. Mitchell, B.L. Fox
- 2:10 pm **B2/3** A Novel Method for Characterizing Filler Dispersion in Composites and Nanocomposites Using X-Ray Ultramicroscopy
Dongyang Wu, Dachao Gao, Sheridan C. Mayo, Januar Gotama, Cameron Way
- 2:30 pm **B2/4** Crystalline Analysis of Nylon 6 – Calcium Carbonate Composites
Cameron Way, Dong Yang Wu
- 2:50 pm **B2/5** Enhancing the Mechanical Properties of Electrospun Carbon Nanotubes/Poly(vinyl alcohol) Nanofibre Membrane through Post-Treatments
Minoo Naebe, Tong Lin, Wendy Tian, Xungai Wang
- 3:10 pm **B2/6** Enhancing Wood Plastic Composite Performance via Nano-modification
Januar Gotama, Qiang Yuan, Stuart Bateman

Chaired by Brian Hawkett

- 1:30 pm **B3/1** Production of Biodegradable Foams for Biomedical Applications via Supercritical CO₂ Processing
Adrian S. Riding, Lisbeth Grondahl, David J.T. Hill, and Andrew K. Whittaker
- 1:50 pm **B3/2** Properties of Nanosized Well-Defined Molecules Based on Hydroxypropyl Cellulose
Emma Östmark, Daniel Nyström, Josefina Lindqvist, Craig J. Hawker, Karen L. Wooley, Eva Malmström
- 2:10 pm **B3/3** Effect of Zwitterion Concentration on the Biocompatibility of Perfluoropolyethers Implants
T.C. Hughes, B. Bojarski, G.Y.N Chan, M.D.M. Evans, G. Johnson, W.S. Knowler, G. McFarland, K. McLean, X. Nguyen, D.F. Sweeney, J.S. Wilkie, R.S. Xie
- 2:30 pm **B3/4** Biodegradability of Linear Poly(2-Hydroxyethyl Methacrylate)
Imelda Keen, Traian V. Chirila and Andrew Whittaker
- 2:50 pm **B3/5** Novel Chitosan-Based Non-Viral Vectors for Gene Delivery
M. Khan, S. H. Eng, P. Chan and Y. Y. Yang
- 3:10 pm **B3/6** Synthesis of Pendant Aldehyde Polymers for Biological Applications
Sarah Shaw, Tiziana Russo, David Solomon and Greg Qiao
- 3:30 pm **Refreshments**

Chaired by Michelle L. Coote

- 4:00 pm **KN6** Kinetics and Simulation of Polymerization Reactions
Markus Busch, Marion Roth, Katrin Becker, Christopher Barner-Kowollik, Michelle L. Coote
- 4:40 pm **C1/3** A Quantum Chemical Approach to Polymerisation Design: Thioketone Mediated Polymerisation
Hugh Chaffey-Millar, Ekaterina I. Izgorodina, Christopher Barner-Kowollik, Michelle L. Coote
- 5:00 pm **C1/4** Using Spin Traps in Radical Polymerization: A New Approach to Achieve Controlled Polymerization Characteristics
Thomas Junkers, Michelle L. Coote, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik

- 5:20 pm **C1/5 Kinetics and Mechanism of Controlled Radical Copolymerization Mediated by RAFT Agents (*ARC Centre for Excellence in Free Radical Chemistry Special Lecture*)**
E. Chernikova, A. Morozov, A. Tarasenko, V. Yulusov, E. Garina, V. Golubev
- 5:40 pm **C1/6 Metal-Catalyzed Living Radical Polymerization of Methyl Acrylate Mediated by SET at 25 °C**
Michael J. Monteiro, Tamaz Guliashvili, Virgil Percec
- 6:00 pm **C1/7 The Effect of Chain Length Dependent Propagation on Free Radical Polymerization Kinetics**
Johan P.A. Heuts, Gregory T. Russell, Gregory B. Smith, Alex M. van Herk

Session C2

Nano- and Micropatterning

Ballroom 2

Chaired by Martina H. Stenzel

- 4:00 pm **C2/1 POSS Nanoparticle Self-Assembly Behaviour in Polymer Matrix**
Shuyan Li, George Simon
- 4:20 pm **C2/2 Synthesis of Novel Polymer Resists for 193nm Immersion Lithography**
Lan Chen, Idriss Blakey, Will Conley, Bronwin Dargaville, Graeme A. George, David J.T. Hill, Heping Liu, Firas Rasoul, Bryan Rice, Andrew K. Whittaker, Paul Zimmerman
- 4:40 pm **C2/3 Design of Porous Polymer Monoliths for Boronate Affinity Extraction**
Oscar G. Potter, Emily F. Hilder, Michael C. Breadmore
- 5:00 pm **C2/4 Enriched Honeycomb Structured Porous Membranes for Selective Proteins and Cells Depositions**
Kok Hou Wong, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel
- 5:20 pm **C2/5 Insights into the Mechanism of Formation of Honeycomb Structured Porous Polymer Films**
Maribel Hernández-Guerrero, Christopher Barner-Kowollik, Thomas P. Davis, and Martina H. Stenzel
- 5:40 pm **C2/6 The Rational Design of Polymeric EUV Resist Materials by QSPR Modelling**
Kevin Jack, Heping Liu, Idriss Blakey, David J.T. Hill, Andrew K. Whittaker
- 6:00 pm **C2/7 Anti-Reflective Coatings**
Lynley J. Crawford, Neil R. Edmonds, Peter N. Plimmer

Chaired by Robert Waymouth

- 4:00 pm **C3/1** Janus Discs: Preparation, Self-Assembly and their Application as Emulsifiers
Andreas Walther, Axel H. E. Müller
- 4:20 pm **C3/2** Synthesis and Self-Assembly Behavior of Poly(acrylic acid)-b-poly(l-valine) System
A. Sinaga, P. Ravi, P., T. A. Hatton, K. C. Tam
- 4:40 pm **C3/3** Synthesis, Characterization, and Proton Conductivity of Poly(vinyl phosphonic acid)
Bahar Bingöl, Young Joo Lee, Wolfgang H. Meyer, Manfred Wagner, Hans Wolfgang Spiess, Gerhard Wegner
- 5:00 pm **C3/4** Self-Assembly of Fluorinated Polymers into Micellar Structures for ¹⁹F Contrast Imaging Agents
Oliver K. Squires, Idriss Blakey, Nyoman Kurniawan, Andrew K. Whittaker
- 5:20 pm **KN7** Use of Microwaves and Cyclodextrins in Polymer Chemistry
Helmut Ritter
- 6:00 pm **C3/7** Poly(acrylic acid) Scale Inhibitors: Molecular Weight, Polydispersity, and End-Group Functionality
Christopher M. Fellows, A. D. Wallace, W. O. S. Doherty
- 6:30 pm **IUPAC Kinetics and Mechanism Subgroup Meeting** **Macquarie Room**

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Tuesday 13 February

Plenary Session 3

Ballroom 1

Chaired by Frank Caruso

9:00 am **PL3 Nanostructured Functional Materials via ATRP**
Krzysztof Matyjaszewski

10:00 am **Refreshments**

Session D1 **Characterization-Mass Spectrometry and CRC-Prize Lecture** Ballroom 1

Chaired by Axel H. E. Müller

10:30 am **D1/1 A High Resolution Electrospray Ionization - Mass Spectrometry Study of Photoinitiation Processes in Methyl Methacrylate Free Radical Polymerization**
Zachary Szablan, Tara M. Lovestead, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik

10:50 am **D1/2 γ -Radiation Initiated Living Radical Polymerizations: Determination of Initiating Species via Electrospray Ionization Mass Spectrometry**
Gene Hart-Smith, Tara M. Lovestead, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik

11:10 am **D1/3 A Molecular Approach to Studying Long-Term Constant Temperature Thermal Degradation of Poly(Methyl Methacrylate) via ESI-MS and ESR**
Francesca Bennet, Philip Barker, Martina H. Stenzel, Thomas P. Davis, Christopher Barner-Kowollik

11:30 am **D1/4 Polymer Characterization by Hyphenated Liquid Chromatographic Techniques Coupled with MALDI- and ESI-TOF Mass Spectrometry**
Jana Falkenhagen, St. Weidner, U. Just, R.-P. Krüger, A. Thünemann

11:50 am **D1/5 High-Resolution Separation of Oligoacrylates by Capillary Electrophoresis – Mass Spectrometry (CE-MS)**
Emily F. Hilder, Patrice Castignolles, Marianne Gaborieau, Robert G. Gilbert

12:10 pm **D1/6 CRC Prize Lecture**
CRC Prize Awardee

Session D2 Emulsion Polym., Heterogeneous Systems and On-line Monitoring Ballroom 2

Chaired by Hans Heuts

- 10:30 am **D2/1** Polymerically Stabilized Emulsion Systems: A New Kinetic Model
Stuart C. Thickett, Robert G. Gilbert
- 10:50 am **D2/2** The Control of Nanoparticle Architecture Using RAFT Controlled Radical Polymerisation Techniques
Brian S. Hawkett, Gregory G. Warr, Hollie S. Zondarnos, Binh T. T. Pham, Duc Nguyen, Desi Ganeva, Annabelle Blom, Ewan Sprong, Christopher H. Such
- 11:10 am **D2/3** Particle Formation in Surfactant-Free Emulsion Systems under RAFT Control
Desislava E. Ganeva, Ewan Sprong, Gregory G. Warr, Christopher H. Such, Brian S. Hawkett
- 11:30 am **D2/4** Polymeric Hollow Particles Stabilized by Macro RAFT Copolymers using a Double Emulsion Approach
Binh T. T. Pham, Duc Nguyen, Christopher H. Such, Brian S. Hawkett
- 11:50 am **D2/5** Size Controlled Poly(methyl methacrylate) Beads Produced via Suspension Polymerisation
Rohan Holmes, Robert Burford, Christopher Bertram
- 12:10 am **D2/6** Automatic Continuous Online Monitoring of Polymerization Reactions (ACOMP)
Alina M. Alb, Michael F. Drenski, Wayne F. Reed

Session D3 Surfaces, Interfaces and Nanocomposites Chancellor 6

Chaired by Anthony Ryan

- 10:30 am **KN8** Dramatic Property Changes in Glassy Polymers Confined in Thin Films and Nanocomposites Effects of Polymer Structure, Surfaces and Interfaces
John M. Torkelson, Christopher J. Ellison, Manish K. Mundra, Rodney D. Priestley, Perla Rittigstein, Connie B. Roth
- 11:10 am **D3/3** UV Polymerised Nanocomposites Prepared From Active Clays
Ranya Simons, Katherine M. Dean, Stuart A. Bateman
- 11:30 am **D3/4** Polyurethane Nanocomposites Incorporating Double Walled Carbon Nanotube Variants of Controlled Length Distributions
Simon Smart, Wencai Ren, Hui-Ming Cheng, Max Lu, Darren Martin
- 11:50 am **D3/5** Surface-Grafting of Poly(N,N Dimethyl Acrylamide) Brushes on to Silicon Wafers via RAFT Polymerization
Sharmila Muthukrishnan, Christopher Barner-Kowollik, Martina Stenzel, Thomas P. Davis, Leonie Barner

12:10 am **D3/6 Well-Defined Graft Polymers Synthesized via RAFT Polymerization and Initiated via γ -Irradiation**
Murat Barsbay, Olgun Güven, Martina Stenzel, Thomas P. Davis, Christopher Barner-Kowollik, Leonie Barner

12:30 pm **Lunch** **HGC Mezzanine Level**

Session E1 **Commercialization and Intellectual Property** **Ballroom 1**

Chaired by Ramon Tozer and David Lewis

1:30 pm **HT Patent or Publish?! A Hypothetical Style Discussion Forum**
David A. Lewis (Discussion Leader), John Bates, Thomas P. Davis, Graeme George, Wendy Spencer, Julian Curwen

2:10 pm **E1/3 Patent Searching**
Richard Grant

2:30 pm **E1/4 Putting the Horse Before the Cart – Pre-filing Steps to Maximize Patent Potential**
Jeff Holman

2:50 pm **E1/5 Inventorship – Get it Right the First Time**
Alison McMillan

3:10 pm **E1/6 Industry Needs New Products: Why is it so Hard to Sell your Invention to them ?**
John Bates

Session E2 **Nano- and Microparticles** **Ballroom 2**

Chaired by Andrew Whittaker

1:30 pm **E2/1 Yttrium Loaded Hollow Microspheres for the treatment of Liver Cancer**
Simon S.R. Ting, T.L. Uyen Nguyen, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel

1:50 pm **E2/2 A Novel Method for the Self Assembly of Polymer Stabilized Gold Nanoparticles and Their Encoding with Surface Enhanced Raman Dyes**
Zul Merican, Tara L. Schiller, Craig J. Hawker, Peter M. Fredericks, Idriss Blakey

2:10 pm **E2/3 Synthesis of Poly(Divinylbenzene) Microspheres by Precipitation Polymerization via UV Initiation at Ambient Temperature**
Raymond Joso, Eh Hau Pan, Martina Stenzel, Christopher Barner-Kowollik, Thomas P. Davis, Leonie Barner

- 2:30 pm **E2/4 SERRS Active Polymer Beads**
R. Arun Prasath, A.F. McCabe, A. Hernandez Santana, P.A.G. Cormack, D.Graham, W. E. Smith
- 2:50 pm **E2/5 Core-shell Microspheres with Poly(vinyl alcohol) Brushes as Drug Carriers**
T.L.Uyen Nguyen, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel
- 3:10 pm **E2/6 The Encapsulation of Magnetic Nanoparticles by RAFT Polymerization**
Yanjun Wang, Brian Hawkett

Session E3 **Dendrimers, Highly Branched and Biopolymers** **Chancellor 6**

Chaired by Michael Monteiro

- 1:30 pm **E3/1 A Model for Highly Branched Polymers**
Dominik Konkolewicz, Angus Gray-Weale, Robert G. Gilbert
- 1:50 pm **E3/2 Effect of Molecular Topology, Concentration and Length on Diffusion of Entangled DNA Molecules Studied by Single-Molecule Imaging**
Rae M. Robertson, Douglas E. Smith
- 2:10 pm **E3/3 A Novel Silica-Encapsulated Dendrimer-Palladium Catalyst**
David Vincent, Stephen Clarke, Petar Dvornic, Clare Hartmann-Thompson, Janis Matisons
- 2:30 pm **KN9 Synthesis, Characterization and Applications of Dendritic Polymers Based on Bis-MPA**
Eva Malmström, Anders Hult, Mats Johansson
- 3:10 pm **E3/6 Thermoset Resins with Various Architectures**
Camilla Nilsson, Neil Simpson, Michael Malkoch, Mats Johansson, Eva Malmström
- 3:30 pm **Refreshments**

Session F1 **Polymerization Mechanism and Kinetics** **Ballroom 1**

Chaired by Christopher Barner-Kowollik

- 4:00 pm **KN10 Bringing Polymer Chemistry Closer to Physical Chemistry: The Emergence of a Comprehensive Microscopic Description of the Kinetics of Radical Polymerization**
Michael Buback, Johan P.A. Heuts, Elena Müller, Gregory T. Russell, Gregory B. Smith

- 4:40 pm **KN11** Pulsed Laser Experiments Directed toward the Detailed Analysis of Radical Polymerization Kinetics
Michael Buback
- 5:20 pm **F1/5** Accessing the Chain Length Dependence of the Termination Rate Coefficient for Disparate Length Radicals via Reversible Addition Fragmentation Chain Transfer Chemistry: A Theoretical Study
Tara M. Lovestead, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik
- 5:40 pm **F1/6** Chain Length Dependent Termination Rate Coefficients of Methyl Methacrylate (MMA) in the Gel Regime: Accessing k_t^{ii} using Reversible Addition Fragmentation Chain Transfer (RAFT) Polymerization
Geoffrey Johnston-Hall, Martina H. Stenzel, Thomas P. Davis, Christopher Barner-Kowollik, Michael J. Monteiro
- 6:00 pm **F1/7** Curing Kinetics and Dynamic Mechanical Thermal Analysis of New IPNs via Sequential Photo and Thermal Polymerization
Fei Chen, Aurelie Boisard, Wayne D. Cook

Session F2

Delivery Systems I

Ballroom 2

Chaired by Volga Bulmus

- 4:00 pm **F2/1** The Versatility of the RAFT Process in the Preparation of Nanocontainers for Biomedical Applications
Martina H. Stenzel, T.L. Uyen Nguyen, Simon Ting, Ling Zhang, Andre Ismadji, Eunhee Min, Thomas P. Davis, Christopher Barner-Kowollik
- 4:20 pm **F2/2** Designing Polymeric Micelles for the Delivery of Photodynamic Therapy Agents
Michael R. Whittaker, Nicole A. McDougall, Aaron S. Micallef, Michael J. Monteiro
- 4:40 pm **F2/3** Acid-Cleavable Polymeric Core-Shell Particles for Delivery of Hydrophobic Drugs
Yannie Chan, Frances L. Byrne, Maria Kavallaris, Leonie Barner, Tom Davis, Volga Bulmus
- 5:00 pm **F2/4** Engineered DNA Delivery Vehicles
Alisa L. Becker, Alexander N. Zelikin, Angus P. R. Johnston, Kim Wark, Fabio Turatti, Frank Caruso
- 5:20 pm **F2/5** Swelling and Drug Release Behaviour of Poly (AA-co-NVP) Hydrogels
Firas Rasoul, David Wang, Jessica Cameron, David J. T. Hill, Andrew K. Whittaker

5:40 pm **F2/6** Thermosensitive Glycopolymer Stars as Multivalent Drug Deliveries Prepared via RAFT Polymerization
Ling Zhang, Julien Benard, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel

6:00 pm **F2/7** Phthalocyanine Photosensitisers with Solubilising Polymer Arms Introduced by Nitroxide Trapping of a Living Polymer
Aaron S. Micallef, Carl N. Urbani, Michael R. Whittaker, Michael J. Monteiro

Session F3

Characterization of Synthetic and Natural Polymers

Chancellor 6

Chaired by John Torkelson

4:00 pm **F3/1** Characterization of Complex Branched Polymers by NMR and SEC
Patrice Castignolles, Marianne Gaborieau, Javier M. Hernandez, Angus Gray-Weale, Robert G. Gilbert

4:20 pm **F3/2** Molecular Weight and Size Distributions of Rice: Structure-Property Relation
Rosa Paula Cuevas, Melissa Fitzgerald, Robert G. Gilbert

4:40 pm **F3/3** AFM Probing of Hydrogels: Development of Single Molecule Actuators
Philip G. Whitten, Geoffrey M. Spinks, Hugh R. Brown

5:00 pm **F3/4** Studies of Proteins at Low Moisture Content using Solid-State NMR
Ekaterina Strounina, Mike Gidley, Andrew Whittaker, Aung Htoon, Manoj Rout

5:20 pm **F3/5** ^{129}Xe NMR Methods for the Study of the Degree of Interaction of Supercritical Carbon Dioxide with Polymers
Kylie M. Varcoe, Idriss Blakey, Andrew K. Whittaker

5:40 pm **F3/6** The Conformation of Polymer Molecules in Solution Studied by Hyperpolarized ^{129}Xe NMR
Katie Baldwin, Idriss Blakey, Cavin Talbot, Deming Wang, Marlies Friese, Andrew K. Whittaker

6:00 pm **F3/7** Automatic and Continuous Online Monitoring for Polymerisations
Stephen O'Donohue, G. Saunders, I. Willoughby, J. McConville

6:30 pm **PD Standing Committee Meeting**

Macquarie Room

- P1 Structure Reactivity Trends in Nitroxide Mediated Polymerization
Jennifer L. Hodgson, Steven E. Bottle, Michelle L. Coote
- P2 An Investigation of the Initiation Mechanism during ^{60}Co γ -Irradiated RAFT-Mediated Bulk Acrylate Polymerizations Using ESI-MS
Tara M. Lovestead, Gene Hart-Smith, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik
- P3 Polymer Grafting onto Wheat Proteins-Based Natural Polymer Materials through Epoxy-Amine Reactions
L. Kurniawan, Greg G. Qiao, Xiaoqing Zhang
- P4 Size Exclusion Chromatography Coupled to Fourier Transform Infrared Spectroscopy
Lee Creaser, S. O'Donohue, G. Saunders, I. Willoughby, A. Woods
- P5 The PL-GPC 50 Plus – An Integrated Platform for Size Exclusion Chromatography
Alan Brookes, S. O'Donohue, G. Saunders, I. Willoughby, L. Gilbert
- P6 γ -Radiation Initiated Living Radical Polymerizations in Aqueous Media: Determination of Initiating Species via Electrospray Ionization Mass Spectrometry
Gene Hart-Smith, Tara Lovestead, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik
- P7 Utilisation of β -Glucan Gels for Encapsulation and Controlled Release of Bioactives
Shaoyuan Xiong, Laurence D. Melton, Diana Siew, Allan J. Easteal
- P8 Novel Organometallic Initiators for ATRP polymer synthesis
Zheng Shi, Lyall R. Hanton, Brian H. Robinson, Jim Simpson, Hong Sheng Wang
- P9 Conducting Polymer/Clay Nanocomposites and their Electrorheological Characteristics
B.J. Park, Hyoung Jin Choi
- P10 Well-Exfoliated Polyolefin-Clay Nanocomposites Made by Solid-State Shear Pulverization
Cynthia Pierre, John M. Torkelson
- P11 Delaying the Onset of Macrogelation via Binary Solvent Effects
Jing Fung Tan, Anton Blencowe, Greg G. Qiao
- P12 Gold-Loaded Organic/Inorganic Nanocomposite Honeycomb Membranes
Kok Hou Wong, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel
- P13 Synthesis of Well-Defined Amphiphilic Poly(styrene-co-acrylic acid) Copolymers via Nitroxide-Mediated Polymerization: Use as Emulsion and Miniemulsion Polymerization Stabilizer
Catherine Lefay, Maud Save, Olivier Guerret, Stephanie Magnet, Bernadette Charleux
- P14 Manipulating Architectural Features of PS Nanofibrous Membranes to Control Neurite Extension
Hanqing Feng, J. S. Forsythe, M. K. Horne, W. Shen, D. I. Finkelstein, R. Tinsley
- P15 Rate Controlling Steps in the Emulsion Polymerization of (Electro)Sterically Stabilized Latexes
Elham Hosseini Nejad, Hank de Bruyn, Yohann Guillaneuf, Robert G. Gilbert
- P16 Reversibly Photo-Cross-Linkable Honeycomb Materials
Luke A. Connal, Robert Vestberg, Craig J. Hawker, Greg G. Qiao

- P17 Radical Entry Mechanisms in Redox- Initiated Emulsion Polymerisations
David J. Lamb, Christopher M. Fellows, Robert G. Gilbert presented by Amany Wahba
- P18 Synthesis and Characterization of Polypyrrole Coated Latex Particles by Admicellar Polymerization
Sirinya Chantarak, Rathanawan Magaraphan
- P19 Development of PVC-Based Polymer Nanocomposites
I. Kemal, M. Hoffman, Robert Burford, A. Whittle
- P20 Preparation of Epoxidized Natural Rubber-g-poly(methyl methacrylate) Latex for Water Vapour Barrier Coatings for Paperboard Packaging
Hui Wang, Allan Easteal, Neil Edmonds
- P21 *N*-vinyl-2-pyrrolidone: Dimerisation and Applications
Jessica Cameron, David J.T. Hill, Tri Le, Firas Rasoul, Andrew K. Whittaker
- P22 Synthesis and Characterisation of Sulfur-Containing Polymers as Photo-Resist Materials for 193 nm Immersion Lithography
Bronwin Dargaville, Idriss Blakey, Lan Chen, Will Conley, Graeme A. George, David J.T. Hill, Heping Liu, Firas Rasoul, Bryan Rice, Andrew K. Whittaker, Paul Zimmerman
- P23 Enhanced Radiation Degradation of Poly(methyl methacrylate) for Non-Chemically Amplified Resists
Barry Drew, Heping Liu, Kevin S. Jack, Idriss Blakey, David J.T. Hill, Andrew K. Whittaker
- P24 The Development of Acrylic Based Hydrogels for the Therapeutic Delivery of Protein Complexes
David Wang, Jess Cameron, David J.T. Hill, Firas Rasoul and Andrew K. Whittaker
- P25 Polymer Supported Catalysts Prepared from Crosslinked Polystyrene Beads Grafted with Functional Polymers
Rulin Wang, Aaron S. Micallef, Idriss Blakey
- P26 RAFT-Mediated Emulsion Polymerization of Styrene using a Non-Ionic Surfactant
Carl N. Urbani, Hang N. Nguyen, and Michael J. Monteiro
- P27 Design and Synthesis of Novel Complex Polymer Architectures for Vaccine Delivery Devices
Daria Lonsdale, Christie L. Bentley, Nicholas S. Trotter, Joanne T. Blanchfield, Michael J. Monteiro
- P28 Synthesis and Drug Release Kinetics of Biodegradable Microspheres with Varying Crosslinkers
Maria J. Junkers, Jonathan Jonathan, T.L. Uyen Nguyen, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel
- P29 Organic Nano-Particles Formed in Aqueous Solutions
Alex Bilyk, Maria Espiritu, Iko Burgar, Jamie Booth, Anthony G. Pandolfo
- P30 Water Soluble Dendronized RAFT Agents: Generation of Dendronized Polymers of NIPAAm and Acrylic Acid in Aqueous Solution
Minna Carlberg, Camilla Nilsson, Eva Malmström, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik
- P31 Towards a Proper Characterisation of Native Starch
Jonathan Peate, Antony Dona, Chun-wai Yuen, Marianne Gaborieau, Patrice Castignolles, Robert G. Gilbert

- P32 Fibre Reinforced Coatings
Pui Huen Luk, Neil Edmonds, Allan Easteal
- P33 Protein-Reactive Polymers and Protein Macroinitiators for the Preparation of Well-Defined Bioconjugates
Karina L. Heredia, Heather D. Maynard
- P34 Synthesis of Polymer Encapsulated Silica Particles Using Amphiphathic Macro-RAFT copolymers
Duc Nguyen, Chris H. Such, Brian S. Hawkett
- P35 Structure and Conductivity of Multiwalled Carbon Nanotube / poly(3-hexylthiophene) Conductive Polymer Composite Films
Anthony W. Musumeci, Glaura G. Silva, Jiang-Wen Liu, Wade N. Martens, Graeme A. George, Eric R. Waclawik
- P36 Photoinitiation Processes in Methyl Acrylate and Dimethyl Itaconate Free Radical Polymerization Studied via Electrospray Ionization - Mass Spectrometry
Sandy Koo, Zachary Szablan, Thomas P. Davis, Martina H. Stenzel, Christopher Barner-Kowollik
- P37 Living Free Radical Polymerization of Sterically Hindered Monomers: Improving Understanding of 1,1-Disubstituted Monomer Systems
Zachary Szablan, Andrew Ah Toy, Alexandre Terrenoire, Thomas. P. Davis, Martina H. Stenzel, Axel H. E. Müller, Christopher Barner-Kowollik
- P38 Reaction Engineering Aspects of Forming PMMA via Sedimentation / Ascension Polymerisation
Rohan Holmes, Robert Burford
- P39 Molecular weight Distributions and Termination Rate Coefficients in Free-Radical Polymerization: Styrene
David I. Christie, Paul A. Clay, Guillaume Mouzet, Hank de Bruyn, Robert G. Gilbert
- P40 Effect of Hydrogen Bonding on the Crystallization Behavior of Poly (3-hydroxybutyrate-co-3-hydroxyhexanoate)/Silica Hybrid Composites
Jung Seop Lim, Isao Noda, Seung Soon Im
- P41 Colloidal Stability of Sterically Stabilized Colloids using RAFT Technology to Control the Structure of the Stabilizing Layer
Hank de Bruyn, Robert G. Gilbert
- P42 Development of Novel Polymer Monoliths for Fast Ion Chromatography
David Schaller, Emily F. Hilder, Paul R. Haddad
- P43 In-Situ Curable Accommodating Implant
Xuan T. T. Nguyen, D. Denham, L. Donovan, V. Fernandez, A. Ho, T. C. Hughes, J. L. Jeffery, F. Manns, B. Manor, J.-M. Parel, J. Watling, J. S. Wilkie
- P44 Property Optimisation of a Fluoropolymer Corneal Inlay by Factorial Design
Danelle Beattie, Jim Bates, Xiaojuan Hao, Tim Hughes, Richard Jarrett, Justine Jeffery, Graham Johnson, Tam Le, Gail McFarland, Xuan Nguyen
- P45 Synthesis of Galactosylated Core-Shell Nano Particles for Drug Delivery via RAFT Chemistry
Simon S.R. Ting, Thomas P. Davis, Christopher Barner-Kowollik, Martina H. Stenzel
- P46 ATR/FTIR Imaging of Polymer Degradation
Dylan J. Nagle, Llew Rintoul, Graeme G. George, Peter M. Fredericks

- P47 What Do Calcium Oxalate Monohydrate, Optical Fibre, Sugar and ATRP Have in Common?
A.D. Wallace, C.M. Fellows
- P48 Functional Hydrophilic Microspheres for Biotechnology Application
Raymond Joso, Volga Bulmus, Christopher Barner-Kowollik, Martina H. Stenzel, Thomas P. Davis and Leonie Barner
- P49 Preparation and Characterization of PET/pristine and Modified Montmorillonite Nanocomposites by using in-situ polymerization
Sung-Yeon Hwang, Seung-Soon Im
- P50 Novel Synthetic Bio-mimic Polymers for Mesenchymal Stem Cell Delivery
Hui Peng, Ross Crawford, Lan Chen, Andrew K. Whittaker, Yin Xiao
- P51 Evaluation of the Termination Mode in Radical Polymerization via Electrospray Ionization Mass
Michael Buback, Fabian Günzler, Greg T. Russell, Philipp Vana
- P52 Bonding Chromophores “In Situ” for Stabilization of Polypropylene
Allan Easteal, Neil Edmonds, Peter Plimmer, Ann J. Roberts
- P53 Stability, Photocure Kinetics, and Photoinduced Plasticity in Cross-Linked Thiol-ene Systems
Wayne D. Cook, Fei Chen, Sophie Chausson, Loïc Le Pluart, Timothy F. Scott, Christopher N. Bowman, S. E. Bottle, J. Blinco
- P54 Epoxy as a Reactive Plasticizer in Process of Polycarbonate
Wayne D. Cook, Genhai G. Liang, Laleh Tcharkhtchi, Abbas Tcharkhtchi, Henry Sautereau
- P55 Kinetic Studies of Emulsion Polymerization of Methyl Methacrylate via in-situ Raman Spectroscopy and Chemometrics Analysis
Wee Chew, Yeap Hung Ng, Christina L.L. Chai, Han Hong
- P56 Structure-Property Relationship in Polyurethanes Based on Starch-in-Transesterified Castor Oil Suspensions
J.E. Pulido, A. Ramírez, M.F. Valero, Zhengdong Cheng
- P57 Syntheses and Characterization of Tannin-Based Polymer
Chunhua Luo, Allan Easteal, Neil Edmonds, Warren Grigsby, Jafar Hakkakj
- P58 Tertiary Amine-Catalysed Esterification of Trimethylolpropane Epoxy Resin with Acrylic Acid
Jia Lu, Allan J Easteal
- P59 Surface Modification on PTFE Films with Well-Defined Polymeric Architectures
Ying-Ling Liu, Chen-Yuan Tu, Min-Tzu Luo, Juin-Yih Lai
- P60 Synthesis of Novel High RI Polyphosphazene Polymers for Immersion Lithography
Richard Donovan, John Forsythe, Bryan J Rice, Andrew Whittaker, Paul A Zimmerman
- P61 Improvement in the Hydrophilicity of Polyester Fabric by Aminolysis of the PMMA-coated Fabric
Ampornphan Siriviriyannun, Edgar A. O’Rear, and Nantaya Yanumet
- P62 Investigation on Polymerisation of Diallyl Ortho Phthalate and its Thermal Mechanical Properties
Genhai G. Liang, Wayne D. Cook
- P63 Effect of Monomer Ratio and its Molecular Structure on Synthesis and Properties of Poly(amide-imide) Prepared by Diimide-Diacid and Diisocyanate
H. Afsharian-Moghadam, V. Haddadi-Asl

- P64** Synthesis and Characterization of a New Semi-Aliphatic Poly(amide-imide) with Regular Structure Through Diimide-Diacid and Diisocyanate and Evaluation of the Effect of Diamine Addition Regime
H. Afsharian-Moghadam, V. Haddadi-Asl
- P65** A Novel Catalytic System for synthesis of Unsaturated Polyester Resins from PET Wastes
Sina Chaeichian, F.Afshar Taromi, S.Pourmahdian
- P66** Novel Hydrogel Wound Dressings Based on Polyvinyl Alcohol/Montmorillonite Nanocomposites
Mohammad Sirousazar, Mehrdad Kokabi, Zuhair Muhammad Hassan
- P67** Investigation of the Mechanical and Barrier Properties of the Polypropylene/montmorillonite Nanocomposites as Food Packaging
Mohammad Sirousazar, Mortaza Yari, Bahram Fathi Achachlouei
- P68** A Novel Method for the Production of UV Protective Cotton
Suchada Tragoonwichian, Edgar A. O'Rear, Nantaya Yanumet
- P69** Protein-Organic Catalyst Biohybrids : Synthesis and Activity Studies
Sidhanath Bhosale, Benjamin Le Droumaguet, Kelly Velonia
- P70** Study of the Mechanical, Thermal, Rheological and Morphology Properties of Polyurethanes Synthesized from Castor Oil Modified by Transesterification
J.E. Pulido, A. Ramírez , M.F. Valero, Zhengdong Cheng



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Wednesday 14 February

Plenary Session 4

Bayer Material Science Lecture

Ballroom 1

Chaired by Greg Russell and Michael Buback

9:00 am **PL4** New Amphiphilic and Hybrid Nanoparticles: Janus Micelles, Core-Shell Cylinders, Nanomagnets, Nanowires
Axel H. E. Müller

10:00 am **Refreshments**

Session G1

Cross-Linked Polymers and Gels

Ballroom 1

Chaired by Axel H. E. Müller

10:30 am **G1/1** A Novel Approach to Synthesize Reversible Cross-linked Polymer via RAFT Polymerization
Yong-Keng Goh, Andrew K. Whittaker, Michael J. Monteiro

10:50 am **G1/2** The Rheology of Core Crosslinked Star Polymers
Kris Coventry, Tor Kit Goh, Anton Blencowe, Greg G Qiao

11:10 am **G1/3** The Development of Novel Macromolecular Architectures Using Core-Crosslinked Star Polymers
Anton Blencowe, Greg Qiao

11:30 am **G1/4** Dendron Functionalized Core Cross-linked Star Polymers
Luke A. Connal, Robert Vestberg, Craig J. Hawker, Greg G. Qiao

11:50 am **G1/5** Selectively Tagged Fluorescent Core Cross-linked Star Polymers
Marisa Spiniello, Greg G. Qiao

12:10 pm **G1/6** Selectively Degradable Core Cross-linked Star Polymers
James T. Wiltshire, Greg G. Qiao

12:30 pm **G1/7** Core-Crosslinked Star (CCS) Polymers and Clusters via Conventional Free Radical Polymerization
Tor Kit Goh, Anton Blencowe, Greg G. Qiao

12:50 pm **G1/8 *Special Lecture*** ESR Study of Paramagnetic Species in Radical Polymerizations: From Conventional to Controlled Radical Polymerizations
Atsushi Kajiwara

Session G2**Tissue Engineering and Polymer Processing****Ballroom 2***Chaired by Michael Whittaker*

- 10:30 am **KN12** Microenvironmental Control through Nanomanipulation: Creating Biomimetic Scaffolds for Tissue Engineering Applications
Justin Cooper-White
- 11:10 am **G2/3** Model Study: Synthesis and Modification of Hydrogel Pore Morphologies for Tissue Engineering Applications
Z. A. Abdul Hamid, Anton Blencowe, Greg G. Qiao, G. Stevens
- 11:30 am **G2/4** Interaction of Embryonic Cortical Neurons on Nanofibrous Scaffolds for Neural Tissue Engineering
David R. Nisbet, David I. Finkelstein, Malcolm H. Horne, John S. Forsythe
- 11:50 am **G2/5** Electrospun Poly(ϵ -Caprolactone) Scaffolds for Nerve Tissue Engineering Applications
Deniece Fon, David I. Finkelstein, Malcolm H. Horne, John S. Forsythe
- 12:10 pm **G2/6** Honeycomb Structured Porous Films as Cell Growth Scaffolds
EunHee Min, Thomas P. Davis, Christopher Barner-Kowollik, Penny Martens, Martina H. Stenzel
- 12:30 pm **G2/7** Investigation of Polypropylene Degradation in Reactive Extrusion by using a novel Nitroxide as a Probe
Lalehvash Moghaddam, G. George, S. Bottle, P. Halley, P. Fredericks

Session G3**Conjugation Methods and Nanomaterials****Chancellor 6***Chaired by Eva Malmström*

- 10:30 am **G3/1** Direct Synthesis of Thiol-Reactive Polymers by RAFT Polymerization
Volga Bulmus, Jingquan Liu, Christopher Barner-Kowollik, Martina H. Stenzel, Thomas P. Davis
- 10:50 am **G3/2** Bis-MPA Encapsulation of a Metal-Ligand Core using Click Chemistry
Per Antoni, George Vamvounis, Michael Malkoch, Daniel Nyström, Andreas Nyström, Mikael Lindgren, Eva Malmström, Anders Hult
- 11:10 am **G3/3** RAFT and Click Chemistry : A Versatile Approach to Well-Defined Block Copolymers
Damien Quemener, Thomas P. Davis, Christopher Barner-Kowollik, Martina Stenzel

- 11:30 am **G3/4** Towards Ring-Shaped Polymers: Combining RAFT and Click-Chemistry
**Anja S. Goldmann, Damien Quémener, Thomas P. Davis, Martina H. Stenzel,
Christopher Barner-Kowollik, Axel H. E. Müller**
- 11:50 am **G3/5** Development of Protein-Resistant Surfaces by Controlled Radical Polymerization
Timothy Hill, Dominique Gorse, Michael J. Monteiro, Raisa Monteiro
- 12:10 pm **G3/6** Comparison of Covalent Connectivity and Physical Mixing in
Poly(silsesquioxane) Copolymers and Blends
Weijin Alex Qian, George P. Simon
- 12:30 pm **G3/7** PMMA-Epoxy-Clay Ternary Blends – Influence of Dispersion on Morphologies at
Different Scales and on Properties
**M. Hernandez, B. Sixou, J. Duchet, Henry Sautereau, R.B. Knott, G.P. Simon,
W.D. Cook**
- 12:50 pm **G3/8** Multicomponent Polymer-Based Surfaces for Avidity Binding of Proteins
**Raisa Monteiro, Dominique Gorse, Dean Jennins, Linda Raineri, Simon Collett,
Joe Maeji**
- 13:10 – 7:00 pm **Leisure Afternoon**
- 5:00 – 6:30 pm **AGM of the Polymer Division of the RACI** **Macquarie Room**
- 7:00 pm for 7:30 pm **Conference Dinner – Henry Jones Art Hotel**

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Thursday 15 February

Session H1

Polymer-Protein Conjugates

Ballroom 1

Chaired by Thomas P. Davis

- 9:00 am **KN13** Polymers by ATRP for Chemoselective Conjugation to Proteins
Heather Maynard, Karina L. Heredia, Zachary P. Tolstyka
- 9:40 am **H1/3** Protein-Polymer Amphiphiles: Novel Approaches and Aggregation Studies
Kelly Velonia
- 10:00 am **H1/4** In-situ Synthesis of Protein-Polymer Conjugates via γ -Initiated RAFT Polymerization
Volga Bulmus, Jingquan Liu, Christopher Barner-Kowollik, Martina H. Stenzel, Thomas P. Davis

Session H2

Polymer Degradation and Transformation

Ballroom 2

Chaired by Justin Cooper-White

- 9:00 am **H2/1** Synthesis of Linear and Branched Poly(Trimethylene Carbonate-co-Lactide) Copolymers and an Investigation of Chemical Structure on Hydrolytic Degradation
Idriss Blakey, Vinh Truong, Andrew K. Whittaker
- 9:20 am **H2/2** Degradation Process and Morphology Behaviour of Biodegradable Polymer Poly(lactic acid) under Different Conditions
Xiaoqing Zhang, M. Espiritu, A. Bilyk, L. Kurniawan
- 9:40 am **H2/3** The Radiation Degradation of CNT-filled Polyimides for Space Applications
Kresten Nielsen, David J.T. Hill, Andrew K. Whittaker
- 10:00 am **H2/4** Cloisite Na⁺/LLDPE – Composite: Effect of Layered Silicate on the Thermal, Mechanical and Photo-oxidation Properties
Wael A. Ghafor, Peter J. Halley, David J. T. Hill, Darren Martin, Firas Rasoul, Rowan R Truss, Andrew K. Whittaker

Session H3

Step Polymers and Composites

Chancellor 6

Chaired by Robert Burford

- 9:00 am **H3/1** Thermal Curing, Rheology and Shrinkage of Dicyanate Esters
Wayne D. Cook, Joyce Pun, Sam Cook, Fei Chen
- 9:20 am **H3/2** Natural Fiber Reinforced Biodegradable Polyester Composites
Steven Petinakis, Long Yu, Graham Edward, Katherine Dean, Alex Bilyk
- 9:40 am **H3/3** Self Healing Polymer Composites and Their Potential Application in the Aerospace Industry
Sam Meure, Dong Yang Wu
- 10:00 am **H3/4** The Mechanical and Water Absorption Characteristics of Thermoplastic Modified Epoxies
Steve J. Shaw
- 10:20 am **Refreshments**

Session I1

Layer-by-Layer Assembly and Delivery Systems II

Ballroom 1

Chaired by Grace Chan

- 10:50 am **KN14** Nanostructured Polymer Assemblies via the Programmable Assembly of DNA Oligonucleotides (*Phillips Ormonde & Fitzpatrick Lecture*)
Frank Caruso
- 11:30 am **I1/3** A Click Chemistry Approach to LbL Assembly
Georgina K. Such, John F. Quinn, Elvira Tjipto, Anthony Quinn, Almar Postma, Frank Caruso
- 11:50 am **I1/4** Novel Block Copolymers for Layer-by-Layer Assemblies Prepared by F-RAFT Technology
Chakravarthy S. Gudipati, Martina H. Stenzel, John F. Quinn, Frank Caruso, Christopher Barner-Kowollik, Thomas P. Davis
- 12:10 pm **I1/5** Degradable Polyelectrolyte Capsules Filled with Oligonucleotide Sequences
Alexander N. Zelikin, Alisa L. Becker, Qi Li, Fabio Turatti, Kim Wark, Rob De Rose, Stephen Kent, Frank Caruso

Session I2

Controlled Polymerization

Ballroom 2

Chaired by Greg Russell

- 10:50 am **I2/1** Synthesis of Amphiphilic Fluorinated Polymer Brushes via ATRP
Hui Peng, Tingting Yang, Shiyuan Cheng
- 11:10 am **I2/2** How the Penultimate Effect Could Lead to Uncontrolled and Unliving Polymerization. Example: Iodine Transfer Polymerization of Vinylidene Fluoride
Cyrille Boyer, D. Valade, L. Sauguet, P. Lacroix-Desnazes, B. Aneduri, B. Boutevin
- 11:30 am **I2/3** Combination of Catalytic Ethylene Polymerization with Controlled Radical Polymerization Techniques for the Production of Polyethylene Based Polar Block Copolymers
R. Godoy Lopez, C. Boisson, F. D'Agosto, R. Spitz, F. Boisson, D. Gimes, D. Bertin
- 11:50 am **KN15 R.** Organocatalysis: Strategies for Controlled Polymerization Reactions
Robert M. Waymouth, James L. Hedrick, Szilard Csihony, Darcy A. Culkin, Olivier Coulembier, Andrew P. Dove, Russell Pratt, Wohnee Jeong, Nahrain Kamber

Session I3

Polymer Coatings and Finishes

Chancellor 6

Chaired by Wayne Cook

- 10:50 am **I3/1** Photoinduced Hydrophilic Coatings on Polymers
R. Burford, J. Campbell, D. Attard, P. Evans, G. Triani
- 11:10 am **I3/2** Polymer Microgel Monolayers on Substrates
V. Nerapusri, Brian Vincent, J. Keddie, I. Bushnak
- 11:30 am **I3/3** Living Paint – Towards a Marine Antifouling Coating
Lachlan H. Yee, Nigel Lewin, Carola Holmström, Evi Fuary, Staffan Kjelleberg, Peter D. Steinberg
- 11:50 am **I3/4** Stone Impregnation Behaviour of Fluorinated Acrylates
Ali Youssef, Robert G. Gilbert, Martial Pabon
- 12:10 pm **I3/5** Unique Radiation Cured Polymers for Coating and Recycling Cellulosics: Application to a Novel Banana Ply Paper
Gary R. Dennis, John L. Garnett, Kevin J. Jarrett

Plenary Session 5

RPO Lecture

Ballroom 1

Chaired by Sebastien Perrier and Christopher Barner-Kowollik

12:50 pm **PL5** Design and Synthesis of Electrophosphorescent Polymers and High Triplet Energy Polymer Hosts for Light Emitting Displays
Andrew Holmes

Close 1:40 pm

