

Melbourne, Australia, 14 – 16 September 2016

EMERGING POLYMER TECHNOLOGIES SUMMIT

Hosted by the International Innovative Research Network



SUMMIT PROGRAM BOOK

Emerging Polymer Technologies Summit (EPTS'16) Melbourne, Australia 14 – 16 September 2016

WELCOME MESSAGE FROM THE CHAIRS



Prof. San Thang
Monash University,
Australia



Prof. Graeme Moad
CSIRO,
Australia

On behalf of the organising committee, we are delighted to welcome all of you - the delegates and guests - to Melbourne, for the Emerging Polymer Technologies Summit 2016 (EPTS'16). The Summit is held in the heart of the Melbourne University precinct, only minutes away to central Melbourne City and to the famous Lygon Street where you can enjoy a variety of cultural activities and sumptuous epicure experiences.

EPTS'16 is an inaugural event that is devoted to the scientific and technological aspects of polymer sciences. It will give participants a warm and friendly environment to exchange ideas, discover novel opportunities, re-acquaint with colleagues, meet new friends, and showcase their latest and exciting innovations in polymer science, engineering and technology, including applications in areas of health, advanced materials and sustainability, etc.

We are so pleased to have a total of twelve distinguished overseas and local plenary speakers at this Summit, including Professor Mitsuo Sawamoto, Professor Millicent A. Firestone, Professor Thomas Russell, Professor Kurt Kremer, Laureate Professor Emeritus Andrew B Holmes, Dr. Ian Dagley, Professor Martina Stenzel, Professor Gordon Wallace, Professor Dave Winkler, Professor Greg Qiao, Associate Professor Dean Lusher and Professor Graeme Moad. In addition, the Summit also includes many other eminent keynote and invited speakers, as well as a raft of young and early career scientists' contributions. All these will form an integral part of the EPTS'16 scientific program. We also take a bold initiative in organising an 'Education Session' during the EPTS'16, where secondary school science teachers are invited to participate free-of-charge and to hear about recent advances in polymer technologies. The teachers may then share the learning with their colleagues and students upon returning to their schools.

The organising committee is grateful to iiRNet, a non-profit network for not only willingly underwriting the summit, but also their tireless efforts in facilitating all the administration workload to make this Summit operate smoothly.

Finally, all members of the organising committee wish you a superb conference experience, and hope that you have a memorable stay and enjoy the experience of sharing and exchanging your expertise during the EPTS'16 in Melbourne.

COMMITTEE MEMBERS



Prof. Maria Forsyth
Deakin University



Prof. Peter Daivis
RMIT University



Prof. Beth Webster
Swinburne University
of Technology



Dr. Georgina Such
University of Melbourne



Dr. Pete Cass
CSIRO



Dr. Grace Chan
Davies Collision Cave



Dr. Kei Saito
Monash University



Dr. Tu Le
iiRNet



SUMMIT INFORMATION

• Registration desk

The registration desk will be open in the foyer at level 4 of Rydges on Swanston hotel at the following times:

Wednesday 14 September

8:00am to 7pm

Thursday 15 September

8:30am to 6pm

Friday 16 September

8:30am to 5:15pm

• Name badges and dinner tickets

All delegates are required to wear name badges throughout the summit. Name badges are your ticket of admittance to all summit sessions. If you have registered and paid for dinner ticket, you will find your dinner ticket in the back of your name card in the name badge. Please remember to bring your ticket with you to the function. If you believe you have booked for the dinner and do not have a ticket, please see the team at the Registration Desk.

• Where do I get help?

Please contact the team at the Registration Desk or any of the EPTS'16 committee members. If you need urgent medical assistance, the hotel staff can also assist.

• Transport

Taxi can be arranged by the hotel reception on the ground level of the hotel. A tram stop is located right outside of the hotel, on Swanston street.

• Abstracts

Abstracts can be downloaded from the summit website (www.epts16.org).

• Internet Access

Free wireless internet access is available throughout the venue during the summit.

• Instructions for presenters

Oral presentations

There are three types of oral presentation. It is important to remember that the times listed below are the **total** times for presentations.

Speakers should aim to talk for several minutes less than these times, to allow for questions and changeover. Suggested times are included below. The session chairs will follow the schedule rigorously.

Plenary lectures:

40 minutes (e.g. 35 + 5 mins)

Keynote/Invited lectures:

25 minutes (e.g. 20 + 5 mins)

Oral communications:

15 minutes (e.g. 13 + 2 mins)

Speakers are strongly encouraged to bring their talks to the summit on USB drivers. They should load them onto the computer before their session and allow time for checking. Technical staff will be available to assist if needed. If you are planning to use your laptop, please check the connect between your laptop and the projector prior to your session.

Poster presentations

Poster boards will be located in the Panorama room. When placing your poster on the appropriately-numbered poster board, please ensure that it is presented in a portrait (vertical) format. The size of the poster must not exceed 950mm in width by 1200mm in height. Please use Velcro to fix your portrait (vertical) poster to the allocated poster board in the morning on your presentation day. Please do not move the poster board numbers.

• Catering

The following catering is included in the summit registration: all morning teas, lunches, afternoon teas, cocktail during the poster session and pre-dinner cocktail.

The summit dinner is NOT included in the registration fee. If you have not booked and would like to attend the dinner function, please purchase the ticket online or contact the team at the Registration Desk before 15 September 2016.

• Room allocation

Plenary sessions will be held in the Horizon + Vista rooms.

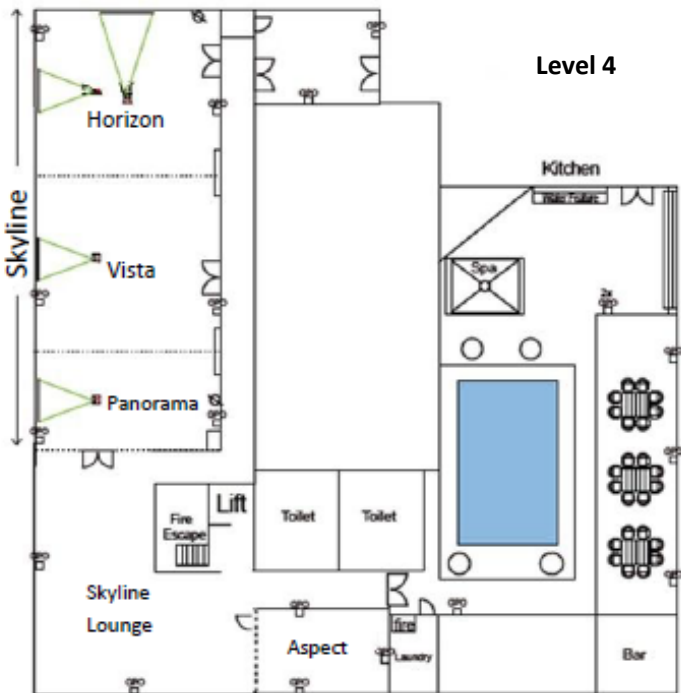
Concurrent session 1, 3, 5, 7, 9, 11, and 13 will be held at the Vista room. Concurrent session 2, 4, 6, 8, 12, and 14 will be held at the Horizon room. Concurrent session 10 will be held at the Panorama room.

Catering will be served at the Skyline lounge during breaks (morning teas, lunches and afternoon teas). Food and drinks can be brought outside on the swimming pool deck.

Poster session will be held at the Panorama room.

Pre-dinner cocktail will be held at the restaurant on the ground floor.

Dinner function will be held at the Orbit room on the ground floor.



SUMMIT PROGRAM - 14 September			
8:00-8:45	Registration		
8:45-9:00	Opening ceremony and grants ceremony		
9:00-10:20	Plenary session 1 Chair: Prof. San Thang, <i>Monash University (Australia)</i>		
9:00-9:40	Prof. Mitsuo Sawamoto, <i>Kyoto University (Japan)</i> Living radical and living cationic polymerizations: Emerging technology for precision functional polymers		
9:40-10:20	Prof. Martina Stenzel, <i>University of New South Wales (Australia)</i> Albumin-micelles via a one-pot technology platform for the delivery of drugs		
10:20-10:50	Morning tea		
10:50-12:45	Concurrent session 1: Polymer Synthesis Chair: Prof. Graeme Moad, <i>CSIRO (Australia)</i>	10:50-12:55	Concurrent session 2: Polymers for medical and biological applications Chair: Prof. San Thang, <i>Monash University (Australia)</i> and Dr. Pete Cass, <i>CSIRO (Australia)</i>
10:50-11:15	A/Prof. Atsushi Goto, <i>Nanyang Technological University (Singapore)</i> Organocatalyzed living radical polymerization: Synthetic technique and application to materials	10:50-11:15	Prof. Pei Li, <i>Hong Kong Polytechnic University (China)</i> Amphiphilic core-shell nanoparticles as emerging nanomaterials for biological applications
11:15-11:40	Dr. Katherine Locock, <i>CSIRO (Australia)</i> Amphiphilic RAFT polymers as biofilm-busting antimicrobials	11:15-11:40	Dr. Xian Jun Loh, <i>Institute of Materials Research and Engineering, A*STAR (Singapore)</i> Thermogelling polymers – An emerging biomaterial for biomedical applications
11:40-12:05	Dr. Julien Rosselgong, <i>Centre National de la Recherche Scientifique (France)</i> Scaling up hemicelluloses production: a source of xylan-based building blocks for functional biomaterials	11:40-12:05	Prof. David Mainwaring, <i>Swinburne University of Technology (Australia)</i> Biopolymer microhydrogels as injectable vaccine delivery systems showing persistently high antibody levels
12:05-12:30	Dr. Stuart Thickett, <i>University of Tasmania (Australia)</i> Utilising reversible deactivation radical polymerization for the rational design of structured polymeric	12:05-12:30	Prof. Swaminathan Iyer, <i>University of Western Australia (Australia)</i> Enabling non-viral technologies for genome editing
12:30-12:45	Frank van Mastrigt, <i>University of Groningen (Netherlands)</i> Synthesis and Evaluation of Star-Like Polyacrylamides for Enhanced Oil Recovery (EOR)	12:30-12:55	Dr. Tim Hughes, <i>CSIRO (Australia)</i> Photo-modulated ocular drug delivery of biomacromolecular therapeutics
12:55-1:55	Lunch		

SUMMIT PROGRAM - 14 September			
1:55-3:55	Plenary session 2 Chair: Prof. Mitsuo Sawamoto, <i>Kyoto University (Japan)</i>		
1:55-2:35	Prof. Andrew Holmes, <i>Australian Academy of Science (Australia)</i> Oversight of the printed organic solar cell project in Victoria, Australia		
2:35-3:15	Prof. Gordon Wallace, <i>University of Wollongong (Australia)</i> Arranging polymer materials for enhanced performance 3D printing, spinning, knitting and braiding		
3:15-3:55	Prof. Greg Qiao, <i>University of Melbourne (Australia)</i> Building the polymeric platform technologies		
3:55-4:25	Afternoon tea		
4:25-5:55	Concurrent session 3: Electro materials Chair: Prof. Maria Forsyth, <i>Deakin University (Australia)</i>	4:25-5:50	Concurrent session 4: Polymers for medical and biological applications Chair: Prof. Martina Stenzel, <i>University of New South Wales (Australia)</i>
4:25-4:50	Prof. Elsa Reichmanis, <i>Georgia Institute of Technology (USA)</i> Synergisms between molecular design and materials processing for flexible devices	4:25-4:50	Dr. John Quinn, <i>Monash University (Australia)</i> Biochemically Active Nanostructures Incorporating Macromolecular Gasotransmitter Donors
4:50-5:15	Prof. Tong Lin, <i>Deakin University (Australia)</i> Electrospinning of piezoelectric nanofiber webs	4:50-5:05	Dr. Victoria Piunova, <i>IBM Almaden Research Center (USA)</i> Biodegradable nanogel star polymers: A platform for programmable macromolecular self-assembly and cargo delivery
5:15-5:40	Dr. Markus Mullner, <i>University of Sydney (Australia)</i> Compartmentalised polymer architectures as templates for uniform hybrid nanomaterials	5:05-5:20	Dr. Gen Yong, <i>Institute of Materials Engineering and Research, A*STAR (Singapore)</i> Nano-crystalline glycosaminoglycan delivery vectors
5:40-5:55	James Ponder, <i>Georgia Institute of Technology (USA)</i> Designing organic and aqueous processable/ compatible conjugated polymers for charge storage	5:20-5:35	Dr. Manisha Sharma, <i>University of Auckland (New Zealand)</i> Investigating of formulation composition on the gelling properties of drug loaded poloxamer gels
		5:35-5:50	Dr. Ali Seyfoddin, <i>Auckland University of Technology (New Zealand)</i> 3D printed poly lactic acid ballistic contraceptive device for wildlife administration
6:00-7:00	Poster session + Cocktail		

SUMMIT PROGRAM - 15 September			
8:30-10:30	Plenary session 3 Chair: Prof. Thomas Spurling, <i>Swinburne University of Technology (Australia)</i>		
8:30-9:10	Prof. Thomas Russell, <i>University of Massachusetts, Amherst (USA)</i> Breaking Moore's law		
9:10-9:50	Dr. Ian Dagley, <i>CRC Polymers (Australia)</i> Industry-driven polymer research in a Cooperative Research Centre		
9:50-10:30	A/Prof. Dean Lusher, <i>Swinburne University of Technology (Australia)</i> Commercialisation of public research innovation projects that use Controlled Radical Polymerization (CRP): Networks, Intellectual Property and Business Models		
10:30-11:00	Morning tea		
11:00-12:40	Concurrent session 5: Successful translation and Industry collaboration Chair: Dr. Ian Dagley, <i>CRC Polymers (Australia)</i>	11:00-12:40	Concurrent session 6: Polymer self-assembly Chair: Prof. Thomas Russell, <i>University of Massachusetts, Amherst (USA)</i>
11:00-11:25	Chris Such, <i>Dulux (Australia)</i> Engaging with industry - Overcoming the language barrier	11:00-11:25	Prof. Wenlong Cheng, <i>Monash University (Australia)</i> Polymer-based soft plasmene nanosheets, nanoribbons and origami
11:25-11:50	A/Prof. Brian Hawke, <i>University of Sydney (Australia)</i> Why doesn't excellent and well-directed research always yield a product in the market place?	11:25-11:40	Prof. Qiang Yan, <i>Fudan University (China)</i> H ₂ S gasotransmitter-responsive polymer vesicles
11:50-12:15	Justine Walter, <i>Boron Molecular (Australia)</i> Commercial RAFT agents at Boron Molecular	11:40-11:55	Ahmed Al-Sherei, <i>Monash University (Australia)</i> Photo-chemical reaction and polymerization of DNA-base containing bolaamphiphiles
		11:55-12:10	Bas van Genabeek, <i>Eindhoven University of Technology (Netherlands)</i> Synthesis and self-assembly of discrete dimethylsiloxane-lactic acid diblock co-oligomers: New materials for nanolithography
12:15-12:40	Prof. Peter Halley, <i>University of Queensland (Australia)</i> From test tube to supermarket shelf: Translational polymer research	12:10-12:25	Shenglin Yang, <i>University of Melbourne (Australia)</i> Water soluble fullerenes by solvent exchange and polymer self-assembly methods
		12:25-12:40	Gijs ter Huurne, <i>Eindhoven University of Technology (Netherlands)</i> Exploring the interplay of phase segregation and hydrogen bonding in the folded polymers
12:40-1:40	Lunch		

SUMMIT PROGRAM - 15 September			
1:40-3:40	Concurrent session 7: Industry collaboration Chair: A/Prof. Dean Lusher, <i>Swinburne University of Technology (Australia)</i>	1:40-3:25	Concurrent session 8: Smart materials Chair: Dr. Kei Saito, <i>Monash University (Australia)</i>
1:40-2:05	Prof. Edward Kosior, <i>NexTek (UK)</i> Advanced automatic sorting and recycling of packaging polymers based on intelligent labels	1:40-2:05	A/Prof. John Forsythe, <i>Monash University (Australia)</i> Light responsive click-based hydrogels for cell culture applications
2:05-2:30	Dr. James Wiltshire, <i>DOW Chemical (Australia)</i> Accelerating collaborative innovation	2:05-2:30	Prof. Ying-Ling Liu, <i>National Tsing Hua University (Taiwan)</i> Preparation, properties, and application of Meldrum’s acid derivatives based thermosetting resins
2:30-2:55	Dr. Cathy Foley, <i>CSIRO (Australia)</i> Building relationship with industry big and small	2:30-2:55	A/Prof. Madhu Bhaskaran, <i>RMIT University (Australia)</i> Transparent stretchable electronics – Towards wearable gas and UV Sensors
2:55-3:20	Derek Buckmaster, <i>Deakin University (Australia)</i> Perspectives on commercialization from Carbon Nexus	2:55-3:10	A/Prof. Stephen Moratti, <i>University of Otago (New Zealand)</i> Super-stretchy gels through macrocrosslinking
3:20-3:40	Dr. Scott Fraser, <i>Perkin Elmer (Australia)</i> Promising Partnerships: A Story in Connecting the R and the D for Meaningful Outcomes	3:10-3:25	Dr. Ngoc Nguyen, <i>Hanoi National University (Vietnam)</i> Hydrolysable copolymers for antifouling paints
3:40-4:10	Afternoon tea		
	Concurrent session 9: Enabling technologies Chair: Dr. Grace Chan, <i>Davies Collison Caves (Australia)</i>		Concurrent session 10: Education Chair: Prof. Thang and Prof. Moad
4:10-4:35	Dr. Christian Hornung, <i>CSIRO (Australia)</i> The use of continuous flow processing for the synthesis of speciality polymers		Prof. Martina Stenzel, <i>University of New South Wales (Australia)</i> Prof. Thomas Russell, <i>University of Massachusetts (USA)</i> Prof. Millicent Firestone, <i>Los Alamos National Laboratory (USA)</i> A/Prof. John Forsythe, <i>Monash University (Australia)</i> Prof. Elsa Reichmanis, <i>Georgia Institute of Technology, (USA)</i> Prof. Edward Kosior, <i>NexTek (UK)</i> Demonstration Dr. Yulin Zhong, <i>Griffith University (Australia)</i> Dr. Wallace Wong, <i>University of Melbourne (Australia)</i>
4:35-4:50	Dr. Shaun Howard, <i>CSIRO (Australia)</i> CSIRO’s Rapid Automated Materials & Processing Centre		
4:50-5:05	Dr. Chuang-Fong Kong, <i>Perkin Elmer (Australia)</i> Advanced nanomaterials characterization with thermal analysis and hyphenated techniques		
5:05-5:20	Dr. Emma Prime, <i>Deakin University (Australia)</i> Introduction to the ARC Future Fibres Hub		
5:20-5:45	Prof. Erica Wanless, <i>University of New Castle (Australia)</i> Electrostatic formation of polymer latex stabilized liquid marbles		
5:45-6:00	Dr. Justin Chalker, <i>Flinders University (Australia)</i> Polysulfide polymers for economical mercury plate		
6:00-7:00	Pre-dinner cocktail		
7:00-9:45	Dinner function Dinner speaker: Prof. Thomas Spurling, <i>Swinburne University of Technology (Australia)</i>		

SUMMIT PROGRAM - 16 September

8:30-10:30	Plenary session 4 Chair: Prof. Peter Davis, <i>RMIT University (Australia)</i>		
8:30-9:10	Prof. Kurt Kremer, <i>Max Planck Institute for Polymer Research (Germany)</i> Multiscale simulations for soft matter: From molecular details to technically relevant properties		
9:10-9:50	Prof. Dave Winkler, <i>CSIRO (Australia)</i> Designing polymers for cell culture and safer implantable devices		
9:50-10:30	Prof. Millicent Firestone, <i>Los Alamos National Laboratory (USA)</i> Cascade synthesis of nanoparticle-polymer composites		
10:30-11:00	Morning tea		
11:00-12:45	Concurrent session 11: Polymer synthesis Chair: Dr. Georgina Such, <i>University of Melbourne (Australia)</i>	11:00-12:40	Concurrent session 12: Composites and other smart materials Chair: Prof. George Simon, <i>Monash University (Australia)</i>
11:00-11:25	Prof. Qui Tran-Cong-Miyata, <i>Kyoto Institute of Technology (Japan)</i> Polymer mixtures with gradient morphology designed by photopolymerization	11:00-11:25	Prof. Darren Martin, <i>University of Queensland (Australia)</i> Cellulose nanofibers from spinifex arid grasses: "Greener, Longer and Tougher", thanks to 20 million years of resilient adaptation
11:25-11:50	Dr. Camelia Miron, <i>Leibniz Institute for Plasma Science and Technology (Germany)</i> Structural modifications of polymers by pulsed electrical discharges in liquids	11:25-11:40	Prof. James Johnston, <i>Victoria University of Wellington (New Zealand)</i> Nanogold and nanosilver polymer composites and their potential applications
		11:40-11:55	Dr. Manas Mondal, <i>Derby Rubber Products (Australia)</i> Additive free polypropylene based thermoplastic vulcanizates by electron induced reactive processing
11:50-12:15	A/Prof. Cyrille Boyer, <i>University of New South Wales (Australia)</i> Selective photocatalysis: A new tool for polymer chemists	11:55-12:10	Dr. Bibo Wang, <i>University of Science and Technology of China (China)</i> Effect of silica-gel materials on the flame retardancy and thermal properties of EP/APP composites
12:15-12:30	Dr. He-Kuan Luo, <i>Institute of Materials Research and Engineering, A*STAR (Singapore)</i> Efficient and high MW PE production using highly active multi-nuclear group –IV metal catalysts	12:10-12:25	Dr. Delower Bhuiyan, <i>Callaghan Innovation (New Zealand)</i> Photochromic properties of spiropyrans in polymer matrices

SUMMIT PROGRAM - 16 September			
12:30-12:45	Dr. Tianchi Xu, <i>Soochow University (China)</i> Synthesis of perfluorocarbon-containing alternating copolymers	12:25-12:40	Dr. Tatiya Trongsatitkul, <i>Suranaree University of Technology (Thailand)</i> In situ fiber-reinforced composite films of poly(lactic acid)/low density polyethylene blends: effects of compositions on morphology, transport, and mechanical properties
12:45-1:45	Lunch		
1:45-3:55	Concurrent session 13: Smart materials Chair: Dr. Pete Cass, <i>CSIRO (Australia)</i>	1:45-3:55	Concurrent session 14: Surfaces Chair: Dr. Katherine Locock, <i>CSIRO (Australia)</i>
1:45-2:10	Prof. George Simon, <i>Monash University (Australia)</i> Polymeric draw media for forward osmosis desalination	1:45-2:10	Prof. Richard Evans, <i>CSIRO (Australia)</i> Prebiotic polymers for coatings in biomedical and materials sciences
2:10-2:35	Prof. Jadranka Travas-Sejdic, <i>University of Auckland (New Zealand)</i> Polymer brushes grafted conjugated polymers as dynamic biointerfaces	2:10-2:35	Prof. Amanda Ellis, <i>Flinders University (Australia)</i> Antimicrobial coatings for reverse osmosis membranes
2:35-3:00	Dr. Kei Saito, <i>Monash University (Australia)</i> Green polymers from dynamic polymers to lignin based polymers	2:35-3:00	Prof. Peter Kingshott, <i>Swinburne University of Technology (Australia)</i> Colloidal crystal based micro- and nanostructures as biomaterial surfaces
3:00-3:25	Dr. Chaoyang Song, <i>Monash University (Australia)</i> Lobster-inspired hybrid actuator	3:00-3:25	A/Prof. David Beattie, <i>University of South Australia (Australia)</i> Novel polyelectrolyte multilayers for application in wound dressing
3:25-3:40	Dr. Shuying Wu, <i>RMIT University (Australia)</i> Strain sensors based on graphene aerogel composites	3:25-3:40	Dr. Karyn Jarvis, <i>Swinburne University of Technology (Australia)</i> Controlling the uniformity of plasma polymerized acrylic acid films with reactor geometry
3:40-3:55	Steven Spoljaric, <i>Aalto University (Finland)</i> Enhancing the properties and expanding applicability of poly(propylene carbonate)	3:40-3:55	Marouen Hamdi, <i>Texas A&M University (USA)</i> Fundamental understanding on scratch behaviour of polymeric films and laminates
3:55-4:25	Afternoon tea		
4:25-5:05	Prof. Graeme Moad, <i>CSIRO (Australia)</i> RAFT (co)polymerization of the conjugated diene monomers		
5:05-5:15	Award ceremony and closing ceremony		

POSTER PRESENTATION LIST

P01 Dr. Anis Yohana Chaerunisaa, Padjadjaran University (Indonesia)

Development of Pharmaceutical Grade Carrageenan from Local Indonesian Eucheima cottonnii

P02 Beth Dickens, University of Warwick (UK)

Incorporation of RAFT Synthesised Hyperbranched Polymers into Solid Networks By Photoinitiated Thiol-ene Reactions

P03 Dr. Charles Heath, CSIRO (Australia)

Polymer based hybrid materials for improved hydrocarbon sensor response

P04 Dr. Chiaki Yoshikawa, National Institute for Materials Science (Japan)

Non-biofouling Properties of Graft-Type Gel with Concentrated Polymer Brush Structure

P05 Dr. Dan-Thuy Van-Pham, Can Tho University (Vietnam)

Study on Production of Banana Fiber-Reinforce Composites

P06 Eudora Yeo, Defence Science and Technology Group (Australia)

Hierarchical Composites with High Volume Fractions of Carbon Nanotubes

P07 Dr. Eve Revalor, University of Melbourne (Australia)

Visibility of polymers in medical imaging techniques

P08 Dr. Hasrinah Hasbullah, Universiti Teknologi Malaysia (Malaysia)

Effect of Coagulation Bath Composition on Oxygen Enrichment of Cellulose Acetate Membrane

P09 Dr. Hasrinah Hasbullah, Universiti Teknologi Malaysia (Malaysia)

Effect of IONPs as Nano-fillers on PSf Haemodialysis Membrane Structure and Separation Characteristics

P10 Dr. He-Kuan Luo, Institute of Materials Research and Engineering, A*STAR (Singapore)

Functional Alkynyl-terminated Star-Shaped Carbonates Synthesized with CO₂ as Feedstock

P11 A/Prof. Ing Kong, University of Nottingham (Malaysia)

Natural fiber composite flame retarded by zinc borate or hybrid of zinc borate and alumina tri-hydrate: Flammability, thermal and mechanical properties

P12 A/Prof. Ing Kong, University of Nottingham (Malaysia)

Magnetite-functionalized graphene/poly (styrene-butadiene-styrene) nanocomposites: Thermal and mechanical properties

P13 Innamia Indriani, Institut Teknologi Bandung (Indonesia)

Synthesis of Hydrophobic Natural Fiber and Yarn using Rod-like Silica and Chitosan as Surface Modifier

P14 Insan Kurniawansyah, Universitas Padjadjaran (Indonesia)

Formylation of Chloramphenicol Ophthalmic Hydrogel using Hydroxy Propyl Methyl Cellulose (HPMC)

P15 Jittiporn Saeng-on, Chulalongkorn University (Thailand)

Banana Starch Nanocrystals/ Poly(butylene succinate) Bio-nanocomposite Films: Influences of Chemical Modification with Long-Chain Fatty Acid on Physical and Mechanical Properties

P16 Juan M.R.Albano, NANOBIOTEC-UBA-CONICET (Argentina)

Lamellar and Mecellar Phases of Pluronic F127: Insights from Computer Simulations

P17 Mark Stoffels, University of Canterbury (New Zealand)

Equilibrium Moisture Content of a Crosslinked Epoxy Network via Molecular Dynamics Simulations

P18 Dr. Marlin Abdassah, Padjadjaran University (Indonesia)

Isolation and Modification of Durian Seed (Durio zibethinus Murr) Starch by Acid Hydrolysis

P19 Marouen Hamdi, Texas A&M University (USA)

Effect of colour, gloss, and surface texture perception on scratch and mar visibility resistance in polymers

P20 Muhaimin, University of Jambi (Indonesia)

Study of Solvent Type Effect on Preparation of Ethyl Cellulose Microparticles by Solvent Evaporation Method Double Emulsion System (W/O/W) Using Focused Beam Reflectance Measurement (FBRM)

POSTER PRESENTATION LIST

P21 Mustafa Abdalh, Monash University (Australia)

Self-healing polymers using photo-responsive dynamic reactions

P22 Nicolau Saker Neto, University of Melbourne (Australia)

Synthetic Challenges on the Road to High Performance Conjugated Polymers for Organic Photovoltaics

P23 Dr. Norhaniza Yusof, Universiti Teknologi Malaysia (Malaysia)

Gas Separation Properties of Carbon Tubular Membrane derived from Matrimid

P24 Dr. Norhaniza Yusof, Universiti Teknologi Malaysia (Malaysia)

Effects of incorporating ferrihydrite nanoparticles on physicochemical properties of polysulfone membranes to be used for water/wastewater treatment

P25 Dr. Cosmin Leordean, Babes Bolyai University (Romania)

Altering the emission and absorption properties of conjugated polymers using convective self-assembly

P26 Pitcha Liewchirakorn, Chulalongkorn University (Thailand)

Optical, Mechanical, and Morphological Properties of Poly(lactic acid)/Poly(butylene adipate-co-terephthalate) Blend Films: Effect of Temperature and Chill Roll's Velocities

P27 Dr. Qilong Tai, University of Science and Technology of China (China)

Synthesis, structure-property relationships of polyphosphoramides with high char residues

P28 Tina Zhang, Australian National University (Australia)

Polypyrrole coated Fe_3O_4 nanoparticles for light-triggered release of glutamate

P29 Soraya Ratnawulan Mita, Padjadjaran University (Indonesia)

Development of Pacth Using Chitosan as Polymer Matrix

P30 Sriwidodo, Universitas Padjadjaran (Indonesia)

Protein Transport Studies of Human Epidermal Growth Factor (hEGF) Recombinant of E. coli on Extracellular Secretory of Signal Peptide of Outer Membrane Protein A (OmpA)

P31 Thomasukutty Jose, Bharathia University (India)

Pervaporation separation of water-organic azeotropic mixture using Poly vinyl alcohol nanocomposite membrane

P32 A/Prof. Van Thanh Thi Tran, National Academy of Science (Vietnam)

Characterization and Properties of Nanosilica/Epoxy-Titanate Nanocomposite with Titanate Coupling Agent

P33 Wai Fen Yong, National University of Singapore (Singapore)

Miscibility Study of Polyimide and Highly Permeable Polymers

P34 Yuki Yamashita, Kyoto Institute of Technology (Japan)

Effects of Local Osmotic Pressure on Phase Separation in Polymer Blends by Polymerization

P35 Dr. Xiaodong Liu, Soochow University (China)

Polymeric micelles with pH-sensitive NIR fluorescence imaging and controlled drug delivery functions

P36 Dr. Ioan Botiz, Babes-Bolyai University (Romania)

Enhancing the Photoluminescence Emission of Conjugated Polyfluorene by Light Processing

P37 Jingjunjuai Long, Auckland University of Technology (New Zealand)

A 3D Printed Veterinary Drug Delivery Device: *In Vitro* Characterisation

P38 Dr. Anagha Sabnis, Institute of Chemical Technology (India)

Renewable Resources for Binder Synthesis in Coating Applications

P39 Ahmed Al-Dulaimi, Universiti Kuala Lumpur (Malaysia)

Modification of conductive polymers nanostructures via nanocrystalline cellulose

P40 Laila Al-Harbi, King Abdulaziz University (Saudi Arabia)



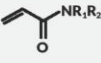

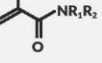


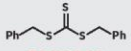







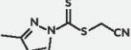







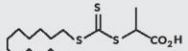







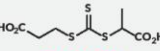







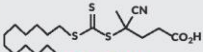







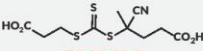







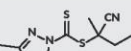







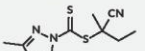







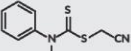







Adsorption of Polyvinylpyrrolidone over the Silica Surface: As Affected by Pretreatment of Adsorbent and Molar Mass of Polymer Adsorbate







RAFT AGENTS AT COMMERCIAL SCALE

The RAFT Agents featured in the table are now available from **Boron Molecular**. These versatile, low to no-odour, low cost RAFT Agents are now available in gram to metric tonne quantities.

The **RAFT Agents Selection Table** is designed to assist the RAFT Technology user to make the right RAFT Agent – monomer selections to ensure the best polymerization outcome.

RAFT AGENTS SELECTION TABLE

	SOLUBILITY (Log P*)	 Ph STYRENES	 OR ACRYLATES	 NR ₁ R ₂ ACRYLAMIDES	 OR METHACRYLATES	 NR ₁ R ₂ METHACRYLAMIDES	 OR VINYL ESTERS	 NR ₁ R ₂ VINYL AMIDES
 BM1361	5.68							
 BM1481	2.56							
 BM1430	6.56							
 BM1429	1.54							
 BM1432	6.93							
 BM1433	1.90							
 BM1542	3.93							
 BM1565	4.49							
 BM1434	3.47							

 solvent soluble *values obtained from ChemDraw
 water and solvent soluble (amphiphilic)
  Excellent control of MW; narrow PDI (< 1.1)
 Good control of MW; broad PDI (>1.3)
  Excellent control of MW; moderate PDI (1.1–1.3)
 Not suitable



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Our people are the reason for FB Rice's success. Our teams come from diverse backgrounds and cultures which means that every solution we create for a client benefits from diversity of approach.

John Landells has over 12 years' experience in the patent attorney profession. He has extensive experience in the fields of plastics and polymer chemistry and synthetic organic chemistry. He works with various companies and universities in Australia and overseas in the drafting, filing, prosecution and provision of strategic advice for Australian, New Zealand and overseas applications.



John is a registered patent attorney and legal practitioner in Australia and New Zealand. He is a Partner in the Melbourne Chemistry team.

Andrew Gregory is an Associate in the Sydney Chemistry team and is an experienced chemist with over 10 years' laboratory experience leading scientific projects. He has extensive knowledge in organic and inorganic chemistry, with a particular focus in the field of polymers.



As a registered Australian and New Zealand patent attorney, Andrew provides advice to both domestic and international clients.

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Meet DCC's representatives, Grace Chan and Dario Buso, at the EPTS 2016.



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