SUNDAY 10 NOVEMBER 2019

Plenary Session		Minyama 1
1600 - 1610	**Welcome to the 37th Australasian Polymer Symposium** *Kristofer Thurecht, The University of Queensland*	
1610 - 1700	**Plenary Presentation** - *Professor Patrick Stayton, University of Washington* ***Engineering polymer therapeutics for infectious disease and global health***	
1800 - 2000	**Welcome Reception** ***TROPIC like it's hot***	**Lorikeet Beach, Novotel Twin Waters**

MONDAY 11 NOVEMBER 2019

Plenary Session — Minyama 1

0900 - 0910 — **Welcome to Day 1 of the 37th Australasian Polymer Symposium**
Christopher Barner-Kowolik, Queensland University of Technology

0910 - 1000 — **Plenary Presentation**
Professor Martina Stenzel, University of New South Wales
Origami with sugar based polymers to create self-assembled nanoparticles for drug delivery

1000 - 1030 — **Morning Refreshments & Trade Exhibition** — Wandiny Room
Login to the Win Points section of the Mobile App and start participating to enter the prize draw!

	ADVANCED CHARACTERISATION AND MOLECULAR ARCHITECTURES M1:1	POLYMERS AS THERAPEUTICS AND DIAGNOSTICS M1:2	APPLICATIONS OF POLYMERS FOR ELECTRONICS AND ENERGY M1:3	LATEST DEVELOPMENTS IN POLYMER SYNTHESIS M1:4
Room	Minyama 1	Minyama 2	Minyama 3	Minyama 4
Chair	*Luke Connal, Australian National University*	*Georgina Such, The University of Melbourne*	*Hideharu Mori, Yamagata University*	*Kristian Kempe, Monash University* *James Blinco, Queensland University of Technology*
1030 - 1100	**Award Winner** **Bruce Guise Award** ***Everything that goes around comes around*** *Phil Barker, University of Wollongong*	**Invited Speaker** ***Potent lymphatic translocation and spatial control over innate immune activation by polymer-lipid amphiphile conjugates of small molecule TLR7/8 agonists*** *Bruno De Geest, Ghent University*	**Invited Speaker** ***The development of quasi-solid state thermoelectrochemical cells for harvesting waste heat*** *Jenny Pringle, Deakin University*	**Invited Speaker** ***Tuning dispersity by photo-Induced ATRP: monomodal distributions with ppm copper concentration*** *Athina Anastasaki, ETH Zurich*
1100 - 1115	***Metal-free silicone networks*** *Andrew Hickman, University of Warwick*	***Development of bioorthogonal smart polymers for quantitative therapeutic delivery*** *Gayathri Ediriweera, The University of Queensland*	***Correlating polymer solar cell performance with morphology changes using DMTA*** *Mats Andersson, Flinders University*	**Invited Speaker** ***Functional poly(2-oxazoline)s for surface modification and nanoparticle stabilization*** *Guillaume Delaittre, University of Applied Sciences Aachen*
1115 - 1130	***How precisely can in-depth analysis survey the compaction of defined single-chain nanoparticles?*** *Johanna Engelke, Queensland University of Technology*	***Poly(acrylic acid) as single-chain nanoparticle for drug delivery*** *Patrice Castignolles, Western Sydney University*	***Effect of backbone structure on electron transfer in radical polymers*** *Zhongfan Jia, The University of Queensland*	
1130 - 1145	***A comprehensive understanding of acrylates and cyclic ketene acetals copolymerization*** *Jean-Baptiste Lena, A*star, Singapore*	***New insights into biomimetic and biohybrid antimicrobial polymer materials*** *Lewis Blackman, CSIRO*	***Insights into coordination and Li+ transport in poly(ionic liquid)s-based polymer electrolytes*** *Xiaoen Wang, Deakin University*	***Highly living stars via core-first photo-RAFT: Exploitation for UHMW star synthesis*** *Stephanie Allison-Logan, The University of Melbourne*
1145 - 1200	***How the molecular structural characteristics of starch, a highly-branched polymer, control the taste of food*** *Bob Gilbert, The University of Queensland*	***Synthesis of a biodegradable-pH sensitive self-assembled polymeric theranostics for hepatic fibrosis*** *Arunpandian Balaji, The University of Queensland*	***Design and implementation of block copolymers as organic photovoltaic active layers*** *Valerie Mitchell, The University of Melbourne*	***Cellular redox fabrication of polymers using an fe catalyst system*** *Mechelle Bennett, University of Nottingham*
1200 - 1215	***Self-healing, tough and biocompatible gels for 3D Printing*** *Broden Diggle, Australian National University*	***The molecular surface chemistry of greener anchored anti-bacterial agents*** *Ralph Cooney, The University of Auckland*	***Controlling the area-selective atomic layer deposition of a metal oxide via surface-initiated ring-opening metathesis polymerization*** *Thomas Pattison, The University of Melbourne*	***New frontiers in polymers made by inverse vulcanisation*** *Justin Chalker, Flinders University*
1215 - 1230	***The long and the short of polymer grafting – exploring the limits of the 'grafting-to' approach*** *Lukas Michalek, Queensland University of Technology*	***Investigation of polymer drug conjugates for pancreatic cancer*** *Akosua Anane-Adjei, University of Nottingham*	***Photocrosslinkable polymer inks for solution-based OLED manufacturing*** *Susanna Kunz, Queensland University of Technology*	***Development of bio-based polymer nanocomposites from renewable lipids for application in packaging segment*** *Rehan Pradhan, University of Alberta*
1230 - 1245	***Polymer-silica nanocomposite spheres, vesicles and capsules via orthogonal RAFT polymerization and sol-gel chemistry*** *Stuart Thickett, University of Tasmania*	***Partial polymer coated graphene oxide as a potential anti-cancer drug carrier*** *Vien Huynh, The University of Sydney*	**Invited Speaker** ***Functionalisation of conducting polymers: towards advanced polymer electronic materials for biomedical applications*** *Jadranka Travas-Sejdic, The University of Auckland*	***Polymer janus nanoparticles by RAFT controlled emulsion polymerization and their potential applications*** *Duc Nguyen, The University of Sydney*
1245 - 1300		***Poly(N-vinylpyrrolidone) conjugates of membrane disruptive peptides*** *Simbarashe Jokonya, Stellenbosch University*		

1310 - 1340 — **Lunch Session (Optional)** — Minyama 1
Managing Mental Heath
Corey Wilson, Beyond Blue

MONDAY 11 NOVEMBER 2019

1300 - 1400	**Lunch & Trade Exhibition**			**Wandiny Room** ACS Macro Letters · Bio MACROMOLECULES · Macromolecules
	ADVANCED CHARACTERISATION AND MOLECULAR ARCHITECTURES **M2:1**	**POLYMERS AS THERAPEUTICS AND DIAGNOSTICS** **M2:2**	**APPLICATIONS OF POLYMERS FOR ELECTRONICS AND ENERGY** **M2:3**	**LATEST DEVELOPMENTS IN POLYMER SYNTHESIS** **M2:4**
Room	Minyama 1	Minyama 2	Minyama 3	Minyama 4
Chair	*Markus Muellner, The University of Sydney*	*Angus Johnston, Monash University*	*Jadranka Travas-Sejdic, The University of Auckland*	*Benjamin Noble, Australian National University* *Katrin Kockler, Queensland University of Technology*
1400 - 1430	**Invited Speaker** ***Nano buffering from stimuli-responsive dendronized polymers*** *Afang Zhang, Shanghai University*	**Invited Speaker** ***Polymer- and lipid-based nanosensors for chemical and biological sensing*** *Rona Chandrawati, University of New South Wales*	**Invited Speaker** ***Sulfur- and nitrogen-rich polymeric nanomaterials: synthesis and applications*** *Hideharu Mori, Yamagata University*	**Invited Speaker** ***Electrochemical alkoxyamine cleavage*** *Michelle Coote, Australian National University*
1430 - 1445	**Invited Speaker** ***Polymers in foods: insights into (supra)molecular structure, dynamics and digestibility with capillary electrophoresis, X-ray diffraction, and (solid-state) NMR*** *Marion Gaborieau, Western Sydney University*	***A stimuli-responsive nanomedicine platform for monitoring therapeutic efficacy in vivo*** *Anna Gemmell, The University of Queensland*	***Efficient and stable single-layer organic light-emitting diodes based on thermally-activated delayed fluorescence*** *Gert-Jan Wetzelaer, Max Planck Institute for Polymer Research*	***Side-chain liquid crystal polymers for new emerging technologies*** *Caroline Bray, CSIRO*
1445 - 1500		***Fibre-like block copolymer nanoparticles of tunable size and their potential role in nanomedicine*** *John Finnegan, Monash University*	***Intrinsically stretchable, photo-patternable and conductive graft copolymers*** *Min Wang, The University of Auckland*	***Deconstructing oligomer distributions: discrete species and artificial distributions*** *Jeroen De Neve, Hasselt University*
1500 - 1515	***Remote control of macromolecules with different colors of light: from single chains to materials*** *Hendrik Frisch, Queensland University of Technology*	***Immune stimulating nanomedicines for cancer therapy*** *Nicholas Fletcher, The University of Queensland*	***Tuning poly(2-Oxazoline)s glass transition temperature for use as polymer electrolytes*** *Ross Wylie, The University of Melbourne*	***Multiblock copolymer synthesis via sequential RAFT emulsion polymerization*** *Thiago Guimaraes, University of New South Wales*
1515 - 1530	***Novel approach for the determination of the chemical heterogeneity of ternary copolymers*** *Thorsten Hofe, PSS GmbH*	***Macromolecular approach for effective radioimmunotherapy*** *Charmaine Hee, The University of Western Australia*		***Computer-guided discovery of pH-responsive organic photocatalyst*** *Cyrille Boyer, University of New South Wales*
1530 - 1600	**Afternoon Refreshments & Trade Exhibition**			**Wandiny Room** ACS Macro Letters · Bio MACROMOLECULES · Macromolecules

MONDAY 11 NOVEMBER 2019

	ADVANCED CHARACTERISATION AND MOLECULAR ARCHITECTURES M3:1	POLYMERS AS THERAPEUTICS AND DIAGNOSTICS M3:2	POLYMER EMULSIONS, SURFACES AND INTERFACES M3:3	LATEST DEVELOPMENTS IN POLYMER SYNTHESIS M3:4
Room	**Minyama 1**	**Minyama 2**	**Minyama 3**	**Minyama 4**
Chair	*Marion Gaborieau, Western Sydney University*	*Laura De Laporte, Aachen University*	*Christian Pester, Pennsylvania State University*	*Athina Anasastaki, ETH Zurich*
1600 - 1630	**Invited Speaker** ***Hierarchical photonic pigments via the confined self-assembly of bottlebrush block copolymers*** *Silvia Vignolini, University of Cambridge*	**Invited Speaker** ***Precision nanoparticles through aqueous polymerisation-induced self-assembly*** *Amanda Pearce, University of Birmingham*	**Invited Speaker** ***Functional protocell formed under non-equilibrium conditions*** *Andreas Walther, University of Freiburg*	**Invited Speaker** ***Precise control over dispersity and modality in reversible deactivation radical polymerization*** *Tanja Junkers, Monash University*
1630 - 1645	**Invited Speaker** ***On demand switching of polymerization mechanism*** *Brett Fors, Cornell University*	***Superparamagnetic iron oxide nanorattles as multimodal imaging contrast agents for preclinical imaging*** *Nguyen Pham, University of Sydney*	***Using macrocycles to enhance selectivity in enzyme mimicry*** *Heather Aitken, Australian National University*	***Chemiluminescence as a trigger and visible light read-out for molecular transformations*** *Karin Kockler, Queensland University of Technology*
1645 - 1700		***Trehalose-based and glucose-based Glyco-gold Nanoparticles for Anti-adhesion treatment*** *Yimeng Li, University of New South Wales*	***Topographic patterning of block copolymer films through photochemically directed solvent vapour annealing*** *Lewis Chambers, Australian Institute for Bioengineering and Nanotechnology*	***Photoinduced polymerization in flow for value-added macromolecular synthesis*** *Nathaniel Corrigan, University of New South Wales*
1700 - 1715	***A dynamic hydrogel with toughness, self-healing and programmable shape changing*** *Zhen Jiang, Australian National University*	***Synthesis off fatty acid-terminated polymers by copper-mediated polymerization for drug delivery applications*** *Alexander Moersdorf, Monash University*	***Kinetic control of aggregation shape in micellar self-assembly*** *Axel-Laurenz Buckinx, Monash University*	***From sequence-defined macromolecules to macromolecular pin codes*** *Joshua Holloway, Ghent University*
1715 - 1730	***Synthesis of novel hybrid biomimetic networks and their opto-mechanical studies*** *Jan Lauko, The University of Queensland*	***Antimicrobial polymers: controlling length, polarity and sequence to maximize therapeutic window*** *Katherine Locock, CSIRO*	***A photochemical ligation system enabling solid-phase chemiluminescence read out*** *Laura Delafresnaye, Queensland University of Technology*	***A far-red light-mediated photopolymerization utilizing oxygen as a catalyst*** *Liwen Zhang, University of New South Wales*
1730 - 1745	***Monomer expansion and building discrete oligomers from 1,2-disubstituted monomers via alternating single unit monomer insertion*** *Ruizhe Liu, University of New South Wales*	***Hyperbranched poly(2-oxazolines) and PEG nanoparticles: A comparison of in vivo stealth properties.*** *James Humphries, Australian Institute for Bioengineering and Nanotechnology*	***Synthesis of photoactive polymer colloids by polymerization in aqueous dispersed media for interfacial singlet oxygen production*** *Maud Save, CNRS*	***Computational design of highly activating ligands for atom transfer radical polymerisation*** *Phuong Doan, Australian National University*
1745 - 1800	**Invited Speaker** ***Beyond traditional RAFT: New ways of doing RAFT polymerization*** *Greg Qiao, The University of Melbourne*	**ECR Speaker** ***RAFT polymers for surface modification and in vivo applications of inorganic nanocrystals*** *Ruirui Qiao, The University of Queensland*	**Invited Speaker** ***Responsive polymer nanocontainers based on supramolecular templates*** *Bart Jan Ravoo, University of Muenster*	***A process for well-defined polymer synthesis through heterogeneous catalysis*** *Yingying Chu, University of New South Wales*
1800 - 1815				***High efficient photoinitiators of polymerisation under LEDs*** *Pu Xiao, Australian National University*
1830 - 1900	**Rapid Fire Poster Presentations** *Camille Bakkali-Hassani, Monash University* *Kash Bhullar, Western Sydney University* *Lukas Michalek, Queensland University of Technology* *Vanessa Soh, The University of Queensland* *Merryn Strange, The University of Queensland* *Ming Li Tan, Australian National University* *Matthew Urquhart, Monash University* *Karuna Veeramani, Monash University* *Cindy Xiao, Monash University*			**Minyama 1**
1900 - 2000	**Poster Session**			**Wandiny Room**

TUESDAY 12 NOVEMBER 2019

Plenary Session — Minyama 1

0900 - 0910 — **Welcome to Day 2 of the 37th Australasian Polymer Symposium**
Michelle Coote, Australian National University

0910 - 1000 — **Plenary Presentation**
Professor Chris Barner-Kowollik, Queensland University of Technology
Making light work of materials design

1000 - 1030 — **Morning Refreshments & Trade Exhibition** — Wandiny Room

	POLYMERS IN INDUSTRY AND TRANSLATIONAL RESEARCH T1.1	POLYMERS AS THERAPEUTICS AND DIAGNOSTICS T1.2	JAPAN/AUSTRALIA SYMPOSIUM T1.3	LATEST DEVELOPMENTS IN POLYMER SYNTHESIS T1.4
Room	**Minyama 1**	**Minyama 2**	**Minyama 3**	**Minyama 4**
Chair	*Ramon Tozer, Davies Collison Cave*	*Bruno De Geest, Ghent University*	*Per Zetterlund, University of New South Wales* *Kei Saito, Monash University*	*Tanja Junkers, Monash University*
1030 - 1100	**Invited Speaker** ***Formulating for 3D printing: high throughput screening of inks for inkjet 3D printing multi-functional drug delivery implants*** *Derek Irvine, University of Nottingham*	**Invited Speaker** ***Synthetic building blocks for injectable and structured regenerative materials*** *Laura De Laporte, Leibniz Institute For Interaktive Materials*	**Invited Speaker** ***Enhancing toughness, self-recoverability and self-healing ability of polymers crosslinked with dynamic bonds*** *Naoko Yoshie, The University of Tokyo*	**Invited Speaker** ***Function and beauty: transforming biopolymer-motifs into synthetic functional materials*** *Frederik Wurm, Max Planck Institute for Polymer Research*
1100 - 1115	**Invited Speaker** ***Accelerated creep testing of polyethylene resins used in engineering applications via the Stepped Isothermal Method*** *Lauren Mann, Qenos*	***Design of novel degradable di-block copolymers as potential drug delivery vessels*** *Salma Ahmed, The University of Queensland*	***Green light-induced thiol-propiolate addition*** *Vinh Truong, Monash University*	***High throughput synthesis of star-shaped bioactive polymers*** *Zihao Li, University of New South Wales*
1115 - 1130		***Melt electrowriting for fabrication of implantable polymer scaffolds*** *Tim Dargaville, Queensland University of Technology*	**(1115 – 1135) – *Crosslinking phospholipid polymer of surface modification for biomedical devices contacting with blood*** *Madoka Takai, The University of Tokyo*	***A cocktail of vitamins for aqueous RAFT polymerization in an open-to-air microtiter plate*** *Tong Zhang, University of New South Wales*
1130 - 1145	**Invited Speaker** ***The challenges in translating an idea into a product*** *David Lewis, Flinders University*	***pH-Responsive Polymeric Micelles for Controlled Delivery of Glycolysis Inhibitors*** *Kyle Brewer, University of South Australia*	**(1135 – 1155) – *Synthesis of cellulose derivatives using ionic liquids and their properties*** *Masahiro Yoshizawa-Fujita, Sophia University*	***Smart design of thiol-ene polymer networks*** *Sergio Cespedes, University of Warwick*
1145 - 1200		***A synthetic polymer mimicking the osteocyte 3D microenvironment*** *Jung Un Choi, Australian Institute for Bioengineering and Nanotechnology*	**(1155 – 1210) – *Single unit monomer insertion: a versatile platform for molecular engineering through radical addition reactions and polymerization*** *Jiangtao Xu, University of New South Wales*	***Polymers and electrochemistry: A RAFT of possibilities*** *Lisa Strover, CSIRO*
1200 - 1215	**Invited Speaker** ***The role of polymers and polymer technology in Australian banknotes*** *Greg Dicinoski, Reserve Bank of Australia*	***Oral delivery of multicompartment nanomedicine for colorectal cancer therapeutics*** *Dewan Akhter, The University of Queensland*	**(1210 – 1230) – *Recent development of li-ion conductive polycarbonate-based electrolytes*** *Yoichi Tominaga, Tokyo University of Agriculture and Technology*	***Pushing the boundaries of high throughput PET-RAFT polymerization*** *Gervase Ng, University of New South Wales*
1215 - 1230		***Novel terpolymers for inhibiting the precipitation of poorly water-soluble drugs*** *John Quinn, Monash University*	**(1230 – 1245) – *Hybrid polymer/graphene (oxide) materials via aqueous emulsion based approaches*** *Per Zetterlund, University of New South Wales*	***Electrochemical alkoxyamine cleavage; a 'on-demand' source of radicals and cations for synthesis*** *Benjamin Noble, The Australian National University*
1230 - 1300	**Invited Speaker** ***Spinifex-derived cellulose nanofibers (CNF), scale-up, applications and commercial Indigenous partnerships*** *Darren Martin, The University of Queensland*	***Materials design and biological barriers: cross-correlative imaging approaches for investigating bio-nano interactions*** *Joshua Simpson, The University of Queensland*	**Invited Speaker** **(1245 – 1315) – *Preparation of cylindrical polystyrene particles and its adsorption behavior*** *Hideto Minami, Kobe University*	**Invited Speaker** ***Controlled polymerization of ethylene and polymerization-induced self-assembly*** *Franck D'Agosto, CNRS*
		Hybrid pH responsive self-immolative nanoparticles: a first look at the next generation of ultra responsive nanoparticles *Samuel Smith, The University of Melbourne*		

TUESDAY 12 NOVEMBER 2019

1300 - 1400	**Lunch & Trade Exhibition**			Wandiny Room BRUKER
	POLYMERS IN INDUSTRY AND TRANSLATIONAL RESEARCH DAVIES COLLISON CAVE INTELLECTUAL PROPERTY **T2.1**	**POLYMERS AS THERAPEUTICS AND DIAGNOSTICS** **T2.2**	**POLYMER EMULSIONS, SURFACES AND INTERFACES** **T2.3**	**LATEST DEVELOPMENTS IN POLYMER SYNTHESIS** **T2.4**
Room	**Minyama 1**	**Minyama 2**	**Minyama 3**	**Minyama 4**
Chair	*Darren Martin, The University of Queensland*	*Amanda Pearce, University of Birmingham*	*Muriel Lansalot, Claude Bernard University Lyon*	*Guillaume Delaittre, University of Applied Sciences Aachen*
1400 - 1430	**Invited Speaker**	**Invited Speaker**	**Invited Speaker**	**Invited Speaker**
	Working with industry – a different focus for academics *Brian Hawkett, The University of Sydney*	***Functionalizable spyrocyclic polycarbonate: a versatile platform for drug delivery*** *Maria Chiara Arno, University of Birmingham*	***Towards improved and functional stabilisers for complex lipid liquid crystal particles*** *Ben Boyd, Monash University*	***Force-activated covalent bond transformations via polymer mechanochemistry*** *Maxwell Robb, Caltech*
1430 - 1445	***Plastics sustainability - driving for a circular world*** *James Wiltshire, Dow Chemical*	***Targeted stealth nanoparticles: A tool for understanding the effect of ligand density for better cancer targeting*** *Amal Jayakumar Sivaram, The University of Queensland*	***Dynamic covalent chemistry on surfaces*** *Anja Goldmann, Queensland University of Technology*	***Immobilised enzymes for controlled radical polymerisation*** *Mitchell Nothling, The University of Melbourne*
1445 - 1500	***Synthesis of polyamide resins from bio-based monomers for hot-melt adhesive applications*** *Kash Bhullar, Western Sydney University*	***Exploring the interaction of cyclic peptide-polymer nanotubes with biological models: from lipid bilayers to small tumours*** *Sean Ellacott, University of Warwick*	***Self-assembled structure of amphiphilic diblock co-oligomers in aqueous solution*** *Minh Lam, The University of Sydney*	***Ab initio RAFT emulsion polymerization using small RAFT agents to form low molar mass dispersity polymers*** *Graeme Moad, CSIRO*
1500 - 1515		***Incorporation of antiviral drugamer pGMA -b-pTAF into PCL electrospun fibers*** *Alexander Dart, Swinburne University of Technology*	**Invited Speaker** ***Chemical patterning through light-mediated surface-initiated polymerization*** *Christian Pester, Pennsylvania State University*	***Absolute control over molecular weight distributions through autonomous polymer synthesis*** *Maarten Rubens, University of Hasselt*
1515 - 1530		***Site-specific delivery of a topoisomerase inhibitor for enhanced tumour treatment with a synergistic targeted polymer nanotheranostic*** *Zachary Houston, The University of Queensland*		***Application of visible light induced polymerisation to 3d printing*** *Zhiheng Zhang, University of New South Wales*
1530 - 1600	**Afternoon Refreshments & Trade Exhibition**			Wandiny Room BRUKER

TUESDAY 12 NOVEMBER 2019

	POLYMERS IN INDUSTRY AND TRANSLATIONAL RESEARCH DAVIES COLLISON CAVE INTELLECTUAL PROPERTY T3.1	POLYMERS AS THERAPEUTICS AND DIAGNOSTICS T3.2	POLYMERIC COMPOSITES AND NANOCOMPOSITES THE UNIVERSITY OF QUEENSLAND AUSTRALIA T3.3	LATEST DEVELOPMENTS IN POLYMER SYNTHESIS T3.4
Room	**Minyama 1**	**Minyama 2**	**Minyama 3**	**Minyama 4**
Chair	*David Lewis, Flinders University*	*Michael Whittaker, Monash University*	*Nasim Amiralian, The University of Queensland*	*Nathan Boase, Queensland University of Technology*
1600 - 1630	**Invited Speaker** ***Polymers in medical/pharmaceutical devices; innovation, challenges and regulation*** *Sasikaran Kandasamy, Vaxxas Pty Ltd*	**Invited Speaker** ***Polysaccharides and proteins as versatile biopolymer material for nanoparticles*** *Peter Wich, University of New South Wales*	**Invited Speaker** ***Particle-hydrogel composite scaffolds for cartilage tissue engineering*** *Neil Cameron, Monash University*	**ECR Speaker** ***Naphthalimide derivatives as versatile photoinitiators under LEDs*** *Jing Zhang, Monash Chemical Engineering*
1630 - 1645	***Photo-cross-linkable and thermo-sensitive poloxamer-based hydrogel for the development of injectable protein depot and sustained release system*** *John Basuki, CSIRO*	***Efficient innate immune killing of cancer cells by multivalent antibody recruiting polymers*** *Annemiek Uvyn, Ghent University*	***Compatibilisation of composites of cysteamine functionalised reduced graphene oxide and polypropylene*** *Syeda Shamakh Abbas, University of Warwick*	***A fast and versatile reversible-deactivation radical polymerization process regulated by red to NIR wavelengths*** *Zilong Wu, University of New South Wales*
1645 - 1700	***New approach for polyolefin photo-crosslinking*** *Boris Gorelik, Mobichem Scientific Engineering Ltd*	***Enhanced treatment of glioblastoma using EphA2-targeted bispecific antibodies an adjuvant for a doxorubicin-loaded hyperbranched polymer*** *Phillip Janowicz, Centre for Advanced Imaging*	***Elucidating the structure property relationship of graphene oxide in polymer films fabricated using miniemulsion polymerisation*** *Vipul Agarwal, University of New South Wales*	***Determination of propagation rate coefficients by SEC-PLP – the final word?*** *Gregory Russell, University of Canterbury*
1700 - 1715	***Enzyme mimicking surfactants: next generation of detergents*** *Qiao Yan, Australian National University*	***Manipulating oxidative stress in a co-cultured model using macromolecular H2S donors*** *Nam Dao, Monash University*	***Strategies towards sustainable rigid polyurethane insulation foam using biomass-derived materials*** *Pratheep Annamalai, The University of Queensland*	***Macro-RAFT agent synthesis and penultimate unit effect study*** *Lei Zhang, University of New South Wales*
1715 - 1730	***Nitric oxide generation from the surface of industrially relevant extruded PVC*** *Lachlan Yee, Southern Cross University*	***Real time monitoring of peptide delivery in vitro using high payload pH responsive nanogels*** *Robert Chapman, University of New South Wales*	***Structure-property relationships of photopolymerized thiol-ene thermoplastics*** *Kimberly Childress, University of Colorado*	***Fabrication of injectable and degradable poly(2-oxazoline) hydrogels for bioapplication*** *Jongryul Park, Queensland University of Technology*
1730 - 1745	***Patents – can I patent and publish?*** *Andrew Gregory, FB Rice*	***pH responsive swellable nanoparticles for drug delivery*** *Sarah Kermaniyan, The University of Melbourne*	***Agarose as a scaffolding material for surface enhanced raman spectroscopy based dosimeters*** *Paul Denman, The University of Queensland*	***Synthesis polymeric nanoparticles via PET-RAFT one-pot polymerization-induced self-assembly*** *Sihao Xu, University of New South Wales*
1745 - 1800	**Invited Speaker** ***Development of piezoelectric films for future australian banknotes*** *Vanessa Lussini, Reserve Bank of Australia*	***Employing venom proteins to control fibrin network morphology and mechanical properties for in vitro and in vivo application*** *Amanda Kijas, The University of Queensland*	***CAP on MOF: construction of ultrathin Film composite membranes for CO2 capture*** *Qiang Fu, University of Technology Sydney*	***Photo-initiated thiol-dibromomaleimide conjugation for the production of photowritable polymers*** *Gerald Er, The University of Queensland*
1800 - 1815		***The importance of networking – Routes towards the preparation of reversibly cross-linked polymer nanostructures*** *Meike Nicole Leiske, Monash University*	***Using electrochemically initiated polymerisation to improve carbon fibre properties and interfacial adhesion in a composite*** *Luke Henderson, Deakin University*	***Development of thermoresponsive polysaccharides with tunable lower-critical solution temperatures*** *Sarah Otto, University of South Australia*
1815 - 1900	**Annual General Meeting**			**Minyama 1**
1930 on-wards	**Student Night**			**Minyama Foyer**

WEDNESDAY 13 NOVEMBER 2019

Plenary Session				Minyama 1
0900 - 0910	**Welcome to Day 3 of the 37th Australasian Polymer Symposium** *Georgina Such, The University of Melbourne*			
0910 - 1000	**Plenary Presentation** *Professor Natalie Stingelin, Georgia Institute of Technology* ***Phase diagrams of complex materials: from the katana, swiss chocolates to plastic electronic devices***			
1000 - 1030	**Morning Refreshments & Trade Exhibition**			Wandiny Room
	FIGHTING POLYMER WASTE: BIODEGRADABLE POLYMERS AND RECYCLING STRATEGIES QUT ife Institute for Future Environments **W1.1**	**POLYMERS AS THERAPEUTICS AND DIAGNOSTICS** **W1.2**	**POLYMERIC COMPOSITES AND NANOCOMPOSITES** The University Of Queensland AUSTRALIA **W1.3**	**ADVANCED CHARACTERISATION AND MOLECULAR ARCHITECTURES** **W1.4**
Room	**Minyama 1**	**Minyama 2**	**Minyama 3**	**Minyama 4**
Chair	*Frederik Wurm, Max Planck Institute for Polymer Research*	*Peter Wich, University of New South Wales*	*Luke Henderson, Deakin University*	*Afang Zhang, Shanghai University*
1030 - 1045	**Invited Speaker** ***Biodegradable polymers and their role in the circular economy*** *Bronwyn Laycock, The University of Queensland*	***Guanidine functionalized pH-responsive materials for therap*** *Changhe Zhang, The University of Melbourne*	***Self-assembly of zinc phthalocyanine-core-satellite nanoassemblies mediated by RAFT-synthesized hyperbranched p(PEGMA) for the detection of hydrogen sulfide*** *Josua Markus, The University of Queensland*	**Invited Speaker** ***Advanced electron microscopy of block copolymer nanostructures*** *Andrea Groeschel, University of Duisburg-Essen*
1045 - 1100		***Engineered vertically aligned polymer nanowire arrays for regulating cellular processes*** *Hao Zhe Yoh, Monash University*	***Formation of single enzyme nanoparticles via polyion complex (PIC) micelle assembly for enhanced biocatalytic stability*** *Yiping Wang, University of New South Wales*	
1100 - 1115	***One resin to rule them all and with radical electrons bind them*** *Jaworski Capricho, Swinburne University of Technology*	***Lymph-node-targeted immune activation by interactive polymer–TLR7/8 agonist conjugates*** *Simon Van Herck, Ghent University*	***Selection of optimal polymer coating conditions for UCNPs to achieve highest cellular uptake and luminescence intensity for cell imaging*** *Lin Zhang, University of New South Wales*	***Molecular brush building blocks in self-assembly*** *Markus Muellner, The University of Sydney*
1115 - 1130	***Development of a bio-derived and biodegradable composite based on polyhydroxyalkanoate (PHA) and wood: Effectiveness of compatibilisation techniques*** *Clement Matthew Chan, The University of Queensland*	***Tracking macromolecular complexes in live cells using pair correlation microscopy*** *Cameron Evans, University of Western Australia*	***Nacre-mimetic materials produced via chemical functionalisation of graphene-oxide nanosheets*** *Andrew Smith, University of Warwick*	***Deriving structure – binding relationships in polyion complex micelle formation using Förster resonance energy transfer*** *Ahmed Mustafa, University of New South Wales*
1130 - 1145	***Factors that influence the environmental degradation of biodegradable polymers: A polybutylene adipate-co-terephthalate (PBAT) case study*** *John Colwell, Queensland University of Technology*	***An optimised cu(0)-RDRP approach for the synthesis of lipidated oligomeric vinyl azlactone: toward a versatile antimicrobial materials screening platform*** *Michael Whittaker, Monash University*	***Water governs the mechanical performances of poly(vinyl alcohol)*** *Pingan Song, University of Southern Queensland*	***Colour switchable polar polymers based on spiropyran*** *Wenlian Qiu, The University of Melbourne*
1145 - 1200	***Biodegradation of plastic waste by thermophilic bacteria*** *Sarah Ede, Queensland University of Technology*	***Thermoresponsive fluorinated PEG-based polymers/hydrogels for monitoring drug release*** *Adil Usman, The University of Queensland*	***Ultrastretchable and highly sensitive double-network hydrogel for strain sensor*** *Kaiqi Pan, University of New South Wales*	***Hyphenation of size-exclusion chromatography with high resolution mass spectrometry for monitoring single chain nanoparticle collapse*** *Tobias Nitsche, Queensland University of Technology*
1200 - 1215	***The global recycled plastics market: stakeholder views of trends, gaps and R&D opportunities*** *Katherine Locock, CSIRO*	***Bottle-brush polymers as prospective drug delivery carrier*** *Erny Sagita, Monash University*	***Rheological percolation in composites of boron nitride nanosheets (BNNS) and polypropylene (PP)*** *Valentina Guerra, University of Warwick*	***Transformersomes: toward controlled shape transformations of degradable and self-immolative polymer self-assemblies*** *Derrick Roberts, The University of Sydney*
1215 - 1230	***Biopolymer polyelectrolyte complexed nanocomposites prepared by melt processing with unexpected hydrolytic stability*** *Fengwei Xie, University of Warwick*	***Correlation of grafting density on cylindrical polymer brushes and their in vitro behaviour with cancer cells*** *Antoine Niederberger, The University of Sydney*	***Optimising the curing cycle of polymer-based composites using DSC and thermokinetic modelling*** *Andrew Gillen, NETZSCH Analyzing and Testing*	***Tailoring the surface morphology of polymer microspheres*** *Christian Schmitt, Queensland University of Technology*
1230 - 1245	**Invited Speaker** ***Bio-based polymers from lignin and green solvents*** *Kei Saito, Monash University*	**Invited Speaker** ***Pointing in the right direction: controlling the orientation of proteins to improve cell targeting*** *Angus Johnston, Monash University*	***Nanocellulose Extraction and Application*** *Nasim Amiralian, The University of Queensland*	**Invited Speaker** ***Monodisperse micelles with the aggregation numbers corresponding to platonic solids: structures and dynamics*** *Kazuo Sakurai, University of Kitakyushu*
1245 - 1300				
1300 - 1345	**Lunch**			Minyama Foyer

WEDNESDAY 13 NOVEMBER 2019

	FIGHTING POLYMER WASTE: BIODEGRADABLE POLYMERS AND RECYCLING STRATEGIES QUT ife Institute for Future Environments W2.1	POLYMER EMULSIONS, SURFACES AND INTERFACES W2.2	POLYMERIC COMPOSITES AND NANOCOMPOSITES The University Of Queensland AUSTRALIA W2.3	COMBINATION W2.4
Room	Minyama 1	Minyama 2	Minyama 3	Minyama 4
Chair	*Bronwyn Laycock, The University of Queensland*	*Bart Jan Ravoo, University of Muenster*	*Clement Matthew Chan, The University of Queensland*	*Maria Chiara Arno, University of Birmingham*
1345 - 1400	***Biobased resins for composite manufacturing in the circular economy*** *John Dorgan, Michigan State University*	**Invited Speaker** ***Surfactant-free latexes using hydrophilic macroRAFT in emulsion polymerization*** *Muriel Lansalot, CNRS*	**Invited Speaker** ***Biocomposites as a sustainable materials solution: from manufacturing to market analysis*** *Luigi Vandi, The University of Queensland*	**POLYMERS AS THERAPEUTICS AND DIAGNOSTICS** ***Synergy between synthetic antimicrobial polymer and antibiotics/nitric oxide: a promising platform to combat multidrug-resistant bacteria*** *Rashin Namivandi-Zangeneh, University of New South Wales*
1400 - 1415	**ECR Speaker** ***Degradable polymer assemblies by controlled radical ring-opening polymerization*** *Craig Bell, The University of Queensland*			**POLYMERS AS THERAPEUTICS AND DIAGNOSTICS** ***Engineered dendronized polymers for investigating the proton sponge effect in cell transfection*** *Marck Norret, University of Western Australia*
1415 - 1430		***Hydrophobic modification of nanocellulose by surface grafting with naturally derived epoxidized soybean oil*** *Katarzyna Kepa, The University of Queensland*	***Fluorescent polymer composites with aggregation-induced emission (AIE) features*** *Youhong Tang, Flinders University*	**POLYMER EMULSIONS SURFACES AND INTERFACES** ***Microcapsules and films of a nontoxic thermochromic binary system via ϖ-ϖ stacking of sulfonephthaleins*** *Bingxin Liu, The University of Melbourne*
1430 - 1445	**Invited Speaker** ***The potential of bioplastics in a circular economy from a life cycle assessment perspective*** *Sebastian Spierling, Leibniz University Hannover*	***The interaction between the chain length and particle size distribution in radical miniemulsion (co)polymerization: going beyond the smith-ewart approach*** *Yoshi Marien, Laboratory for Chemical Technology*	***Polymer -titanium dioxide nanorattles for opacity enhancement in polymer film*** *Minh Lam, The University of Sydney*	
1445 - 1500		***Stability and antifouling properties of adsorbed polymer films on 316l-stainless steel*** *Stephen Moratti, University of Otago*	***Enhanced dispersion of lignin in polyols for improving sustainability and performance of polyurethane foam based insulation materials*** *Hima Haridevan, Australian Institute for Bioengineering and Nanotechnology*	
1500 - 1515	**PANEL DISCUSSION** *Plastic waste is a pressing global challenge which is in urgent need for innovative solutions to reduce its impact on pollution, the environment and our modern way of living. Researchers, individuals, industry and governments are all seeking solutions to reduce and manage waste and this panel will discuss how the polymer community can support the resolution of the plastic waste problem.*	**ECR Speaker** ***Nitroxide releasing polymers to protect against bacterial biofilms*** *Nathan Boase, Queensland University of Technology*	***Hierarchical structure and properties of composites of un-functionalized MWCNTs and HDPE*** *Lorena Amoroso, University of Warwick*	
1515 - 1530				
1530 - 1600	**Afternoon Refreshments**			Minyama Foyer BRUKER
Plenary Session *Patrice Castignolles, Western Sydney University*				Minyama 1
1600 - 1650	**Plenary Presentation** *Professor Bert Meijer, Eindhoven University of Technology* ***Supramolecular polymerizations – chirality as a muse***			Dulux Worth doing, worth Dulux.
1650 - 1700	**Symposium Conclusion**			
1900 - 2300	**Symposium Dinner** ***Rock & Roll All Night***			Minyama Ballroom