

**39th Canadian High Polymer Forum
39^e Colloque Canadien sur les Polymères**

**August 2nd to 4th, 2022
2 au 4 août 2022**

Glen House Resort, Gananoque, ON

**Preliminary program
Programme préliminaire**

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Preliminary Program / Programme Préliminaire

39th High Polymer Forum, August 2nd – 4th, 2022
39^e Colloque canadien sur les polymères, 2 au 4 août 2022

Registration / Inscription
Tuesday August 2, from 10:00 to 11:50 (AM) Mardi 2 août, de 10:00 à 11:50 (AM)
Wednesday August 3, from 7:30 to 8:20 (AM) Mercredi 3 août, de 7:30 à 8:20 (AM)

Tuesday August 2, 2022 / Mardi 2 août 2022			
Theme: Polymer synthesis and modification / Synthèse et modification des polymères			
Chairperson / Président : TBA			
12:00	13:00		Lunch / Dîner
13:00	13:10		Opening remarks from the conference chair / Ouverture du colloque par le président, Eric Vignola
13:10	13:40	I-1	Invited speaker / Conférencier invité : Mario Gauthier, University of Waterloo Controlled Architecture Polymers: What, Why, and How?
13:40	14:00	O-1	Tomaz Pirman, Queen's University Depropagation kinetics in free radical co-polymerization of dibutyl itaconate
14:00	14:20	O-2	Opeyemi Ajogbeje, Queen's University A Study of Radical Polymerization Kinetics of Amino-functional Monomer in Solution
14:20	14:40	O-3	Hayden Deacon, Queen's University Methyl Acrylate Chain-Extension Kinetics in Cu-Mediated Controlled Radical Polymerization
14:40	15:00	O-4	Julian Zhu, Université de Montréal Formation of Molecular Gels and Crystals by Bile Acids and Derivatives
15:00	15:20		Break / Pause
15:20	15:40	O-5	Elizabeth Bygott, Queen's University The synthesis of isobornyl acrylate based macromonomers to produce structured copolymer dispersants using semi-batch radical polymerization
Theme: Polymer spectroscopy study / Étude par spectroscopie des polymères			
15:40	16:00	O-6	Arnaud Laramée, Université de Montréal Raman Investigation of the Processing Structure Relations in Individual Poly(ethylene terephthalate) Electrospun Fibers

16:00	16:20	O-7	Franklin Frasca, <i>University of Waterloo</i> Local Conformation of Macromolecules in Solution Characterized by Pyrene Excimer Formation
16:20	16:40	O-8	Kristijan Lulic, <i>University of Waterloo</i> Probing the Formation of Self-assembling Oligoquinoline Polymers with Time-Resolved Fluorescence Anisotropy
16:40	17:00	O-9	Sanjay Patel, <i>University of Waterloo</i> Macromolecular Conformations Characterized in Solution by Pyrene Excimer Formation
18h30 : <i>Dinner / Souper</i>			

Wednesday August 3, 2022 / Mercredi 3 août 2022			
Theme: Polymer self-assembly / Auto-assemblage polymère			
Chairperson / Président: TBA			
8:30	9:30	NOVA Chemicals Keynote Lecture	Keynote Lecturer / Conférencier plénier : Ian Manners, <i>University of Victoria</i> Polymer Solution Self-Assembly Controlled by Crystallization - Recent Advances and Applications
9:30	9:50	O-10	Jingjie Jiang, <i>University of Toronto</i> Morphological evolution and regulation of poly(ferrocenylsilane)-b-poly(methyl methacrylate) spherulites in dilute solution
9:50	10:20	I-2	Invited speaker / Conférencière invitée: Elizabeth Gillies, <i>The University of Western Ontario</i> Self-immolative polymers: Chemical designs and applications
10:20	10:40		<i>Break / Pause</i>
Theme : Biomedical applications / Applications biomédicales			
10:40	11:00	O-11	Mahtab Abtahi, <i>University of Toronto</i> Surface Modification of Lanthanide Nanoparticles with Bisphosphonate Derivatives for Mass Cytometry Application
11:00	11:20	O-12	Rachel Keunen, <i>University of Toronto</i> Using Surface-Modified Cellulose Nanocrystals to Investigate Cellular Uptake by Ovarian Cancer Cells
11:20	11:40	O-13	Edmond C.N. Wong, <i>University of Toronto</i> Development and Optimization of Dipicolylamine Metal-Chelating Polymers for Mass Cytometry
11:40	13 :00		<i>Lunch / Dîner</i>
Theme: Materials with tailored properties / Matériaux à propriétés modulées			
Chairperson / Président: TBA			

13:00	13:20	O-14	Guojun Liu, <i>Queen's University</i> Transparent, Wear Resistant, Flexible, and Omniphobic Coatings for Various Applications
13:20	13:40	O-15	Kevin Golovin, <i>University of Toronto</i> Polydimethylsiloxane brushes and the search for extraterrestrial life
13:40	14:00	O-16	Jasmine Buddingh, <i>Queen's University</i> Preparation of transparent thermo-responsive fluorinated organogels with exceptional and durable ice shedding properties and improved surface dewettability
14:00	14:20	O-17	Naiheng Song, <i>National Research Council Canada</i> Erosion resistant hydrophobic coatings for passive ice protection of leading edge surfaces
14:20	14:40	O-18	Ziruo Lai, <i>Queen's University</i> Facile Preparation of a Transparent and Rollable Omniphobic Coating with Exceptional Hardness and Wear Resistance
14:40	15:00		<i>Break / Pause</i>
Theme: Conjugated polymer applications / Applications des polymères conjugués			
15:00	15:30	I-3	Invited speaker / Conférencier invité : Thomas Baumgartner <i>University of Calgary and York University</i> Phosphaviologens – A Versatile Multifunctional Platform for Electrochemical Energy Storage
15:30	15:50	O-19	Yuning Li, <i>University of Waterloo</i> Novel alkyloxime-substituted thiophene-based wide bandgap polymer donors for organic solar cells
15:50	16:20	I-4	Invited speaker / Conférencier invité : Pierre D. Harvey <i>Université de Sherbrooke</i> Organometallic Polymers Showing High Efficiencies in Bulk Heterojunction Solar Cells
16:20	18:00		SESSION D’AFFICHES / POSTER SESSION
17:30	18:00		HPF Meeting / Réunion du Colloque canadien sur les polymères
18h30 : Banquet / Banquet			

Thursday August 4, 2022 / Jeudi 4 août 2022

Theme: Polymer and carbon nanotubes / Polymère et nanotubes de carbone

Chairperson / Président : TBA

8:30	9:00	I-5	Invited speaker / Conférencier invité : Jianfu Ding, <i>National Research Council of Canada</i> Well defined silver nanoparticle/carbon nanotube composites with the sensing efficiency enhanced by a conjugated polymer
9:00	9:20	O-20	Barbara Martin, <i>National Research Council Canada</i> Synthesis of Ephemeral Polymeric Surfactants as Binders for Conductive Inks
9:20	9:50	I-6	Invited speaker / Conférencier invité : Benoît H. Lessard, <i>University of Ottawa</i> Polymers for Green Electronics
9:50	10:10	O-21	Jianying Ouyang, <i>National Research Council Canada</i> Enrichment of single chirality SWCNTs by conjugated polymers
10:10	10:50		<i>Break / Pause</i>

Theme: Structure–property relationships of polymers / Relations structure–propriété des polymères

10:50	11:10	O-22	Audrey Laventure, <i>Université de Montréal</i> Establishing Structure-processing-property Relationships in 3D Printed Functional Polymer Materials
11:10	11:30	O-23	Derek Russell, <i>Queen's University</i> Characteristics and Environment Fate of a Hydrolytically Degradable Cationic Polymer Flocculant
11:30	11:50	O-24	Aman Ullah, <i>University of Alberta</i> Synthesis of Renewable, Self-Healable and Reprocessable Polymers

List of Posters / Liste des affiches

- P1. **Jenner H. L. Ngai, John Polena, Xiguang Gao, Mihir Kapadia, Daniel Afzal, Yuning Li, *University of Waterloo, Green Solution-Processed Hemi-isoidigo (HID) Polymers for Stable Temperature Sensors***
- P2. **Jiavi Chen, Audrey Laventure, *Université de Montréal, Polymer Matrix Mediated Assembly of P3HT Nanowires***
- P3. **Olivier Roy, Arnaud Laramée, Christian Pellerin, *Université de Montréal, Development and Optimization of Highly Reflective Electrospun Poly(oxymethylene) Nanofibers***
- P4. **Clarence Allen, Christian Pellerin, Audrey Laventure, *Université de Montréal, Electrospun nanofibers prepared from conjugated and non-conjugated polymer blends***
- P5. **Nicola Teolis, Arnaud W. Laramée, Christian Pellerin, *Université de Montréal, Influence of Polymer Crystallinity and Molecular Weight on the Orientation of Electrospun Nanofibers***
- P6. **Nahel Blanc, Megan McGeehan, Meghan McNeil, Ramzi Zidani, *Université de Montréal, Polymer additive manufacturing for antimicrobial materials***
- P7. **Myles Creran, Manon Faral, Maxime Goulet, Tristan Perodeau, Mickaël Dollé, Audrey Laventure, *Université de Montréal, Polymer additive manufacturing for energy conversion and storage applications***
- P8. **Nicolas Macia, Christian Pellerin, *Université de Montréal, Materials Characterization at the LCMP***
- P9. **Derrick Hastings, Harald Stover, *McMaster University, Study of Physical Polyampholyte Hydrogels and the Effects of Charge Density by Termonomer Addition***
- P10. **Nora Chelfouh, Gaël Coquil, Steeve Rousselot, Gabrielle Foran, Elsa Briqueleur, Léa Caradant, Mickaël Dollé, *Université de Montréal, Apple Pectin based Hydrogel Electrolyte for Energy Storage Application***
- P11. **Alexy Sanseigne, Alexander Cunningham, Xavier Banquy, Jeanne Leblond, Marc Lavertu, Julian Xiaoxia Zhu, *Université de Montréal, Bile acid-containing amphiphilic copolymers for use in targeted delivery of genes and drugs***
- P12. **Xinzhen Fan, Xiaoxia Zhu, *Université de Montréal, Stimuli-responsive crystalline colloidal arrays formed by core-shell particles***
- P13. **Andrew Chung, Elizabeth Gillies, *The University of Western Ontario, Oligo ((polyethylene glycol) fumarate) hydrogels with triggerable degradation***

- P14. **Paul Asselin, Adrien Schlachter, Paul-Ludovic Karsenti, Daniel Fortin, Pierre D. Harvey, Université de Sherbrooke**, *Morphological Influence on Forster Energy Migration and Singlet Oxygen Photosensitization in Porphyrinic Coordination Polymers*
- P15. **Jared Pardy, Elizabeth Gillies, The University of Western Ontario**, *The Preparation of Stimuli Responsive Hydrogels with Self-Immolative Polymers*
- P16. **Kenneth Tran, Yang Liu, Mohsen Soleimani, Frédéric Lucas, Mitchell Winnik, University of Toronto**, *Waterborne Polyurethanes for Environmentally Friendly Industrial Coatings*
- P17. **Wilson Chung, Yefeng Zhang, Yang Liu, Mitchell Winnik, University of Toronto**, *Development of High-Sensitivity TaO₂ Nanoparticle Reagents for Mass Cytometry Applications*
- P18. **Donghan Liu, Jean Duhamel, University of Waterloo**, *Probing the Conformation of Poly(g-benzyl-L-glutamate) by Using Pyrene Excimer Formation (PEF)*