

**INSTITUTE FOR POLYMER RESEARCH  
CELEBRATING 34 YEARS OF OFFICIAL INSTITUTE STATUS  
FORTIETH ANNUAL SYMPOSIUM  
ON POLYMER SCIENCE/ENGINEERING 2017  
Conrad Grebel College  
Great Hall  
University of Waterloo, Waterloo, Ontario  
Wednesday, May 9, 2018**

---

8:30 a.m.	<b>Coffee</b>
8:50	<b>Welcome and Opening Remarks</b>
9:00 - 9:20	<b>Alison Scott , Chemical Engineering, Waterloo</b> Principal Component Analysis Applied to Polymeric Sensing Materials <b>(Winner of the 2017 IPR Award for Academic Excellence in Polymer Science/Engineering)</b>
9:20 - 10:00	Industry Speaker: <b>Dr. Joel Goldstein, OMNOVA Solutions Inc.</b> New Hydrophobic Emulsions for Release Coatings
10:00 – 10:20	<b><u>5-Min. Mini Presentations</u></b> <b>1) Basma Mahi</b> Synthesis of pH-responsive Arborescent Amphiphilic Copolymers for Drug Delivery Applications <b>2) Abdullah Basalem</b> Characterization of Gemini Surfactants and their interactions with DNA by PEF <b>3) Zhen Zhang</b> UV-absorbing Cellulose Nanocrystals as Functional Reinforcing Fillers in Poly (vinyl chloride) Film <b>4) Serxho Selmani</b> Access to Poly(heteroarylene–vinylene)s via Rhodium(III)–Catalyzed Hydroarylation of Alkynes
10:20 – 11:00	<b>Coffee and Posters</b>
11:00 - 11:20	<b>Janine Thoma</b> Characterizing the Molecular Dimensions of Flexible Dendrimers in Solution
11:20 – 11:40	<b>Sanjay Patel</b> Detecting Minute Quantities of Nitroaromatic Compounds with Pyrene-Labeled Starch Nanoparticles

11:40 – 12:00	<p><b><u>5-Min. Mini Presentations</u></b></p> <p><b>5) Pengxiang Si</b> Synthesis of Water Dispersible Polypyrrole (PPy) Nanowires</p> <p><b>6) Che Zhang</b> Behaviour of pMDI and Water as a Wood Adhesive on the Wood Chips of Various Hydrophobicity</p> <p><b>7) Jenner Ngai</b> Low-cost Synthetic Approach to Prepare Indigoid-based Polymers for Solution Processable P-type Organic Field-effect Transistors</p> <p><b>8) Jingqi Wang</b> Characterization of Self-Assembling Quinoline-Based Foldamers by Fluorescence Anisotropy</p>
12:00 - 1:00	<b>Lunch</b>
1:00 - 1:40	<p><b>Industry Speaker Dr. David Campbell, BASF</b> High Temperature Radical Polymerization – from Inception to Commercial Practice</p>
1:40 – 2:00	<p><b>Junjie Yin</b> Production and Analysis of Highly Monodisperse Oligomeric Poly(Ethylene Oxide)</p>
2:00 – 2:20	<p><b>Noushin Majdabadifarahani</b> An Overview of Model Discrimination Techniques in Polymerization Processes</p>
2:20 - 2:40	<p><b>Remi Casier , Chemistry, Waterloo</b> Long Range Polymer Chain Dynamics of Structured and Unstructured Polypeptides Probed by PEF <b>(Winner of 2017 IPR Award for Academic Excellence in Polymer Science/Engineering)</b></p>
2:40 - 3:05	<p><b><u>5-Min. Mini Presentations</u></b></p> <p><b>9) Kiarash Gholami</b> Effect of Solution Temperature on the Properties of Pour Point Depressant Mimics in Octane and Oil</p> <p><b>10) Zehou You</b> Probing the Effect of Low Molecular Weight Polymer Diluent on Latex Film Formation by Pyrene Excimer Fluorescence (PEF)</p> <p><b>11) Xiaocheng Zhou</b> New Conjugated Building Block IBDP For Organic Solar Cell</p> <p><b>12) Xiguang Gao</b> Epoxy resin enabled robust and multifunctional binders for high energy lithium-sulfur batteries</p> <p><b>13) Mohammed Awed</b> Improving MMA Monomer Conversion Via AGET ATRP Using Two Step Method in Emulsion System</p>

3:05 - 3:40	Coffee and Posters
3:40 - 4:00	<b>Damin Kim</b> Compression of Nano-sized Amylopectin Fragments Probed by PEF in DMSO
4:00 - 4:20	<b>Dapeng Liu</b> Dilution-Induced Hierarchical Self-Assembly of nanovesicles: the Role of Hydrophobic Hydration
4:20 - 4:40	<b>Joseph Khouri</b> Viscoelastic Response of Crosslinked Chitosan Edible Films
4:40 - 5:00	<b>Sara Abuadas</b> Dehydration Polymerization for Poly(hetero)arene Conjugated Polymers
5:00 – 6:00	<b>Poster Session and Closing remarks</b>
6:30- 9:00	<b>IPR DINNER</b> University Club, Main Dining Room

Poster presentations follow on next page

**INSTITUTE FOR POLYMER RESEARCH  
FORTIETH ANNUAL SYMPOSIUM  
ON POLYMER SCIENCE/ENGINEERING 2018  
POSTER SESSION  
WEDNESDAY, MAY 9, 2018  
CONRAD GREBEL**

Jenner Ngai Chem. Eng., Waterloo	New Conjugated Building Block IBDP For Organic Solar Cell
Geoffrey Sinclair Chemistry, Waterloo	Directed Oxidation of Thiazoles for use in Conjugated Polymer Synthesis
Prachi Panchal and Thipisha Sivakumaran Chem. Eng., Waterloo	Polymeric Sensing Materials for Acetone Detection
Rafael Mirabal Chemistry, Waterloo	Palladium Pre-Catalyst for Direct Arylation Polymerization
Hunter Little Chemistry, Waterloo	Probing the Conformation of OPV-Labelled Foldamers in Solution using Time Resolved Fluorescence Anisotropy
Xiaocheng Zhou Chem. Eng., Waterloo	New Conjugated Building Block IBDP For Organic Solar Cell
Ryan Amos Chemistry, Waterloo	Systematic Hydrophobic Modification of Starch with Commercially Available Substituted Succinic Anhydrides and Maleated Vegetable Oil
Janine Thoma Chemistry, Waterloo	Characterizing the Dimensions and Dynamics of Pyrene Labeled Dendritic Macromolecules in Solution
Damin Kim Chemistry, Waterloo	Characterization of Hydrophobically Modified Starch NanoParticle by Pyrene Fluorescence
Remi Casier Chemistry, Waterloo	Using Pyrene Excimer Fluorescence to Probe Intermolecular Forces
Abdullah Ba Salem Chemistry, Waterloo	Probing the Interactions Between Pyrene-Labeled Gemini Surfactant and Sodium Dodecylsulfate (SDS) by Fluorescence