# PROGRAM OVERVIEW

<table>
<thead>
<tr>
<th>DAY</th>
<th>EVENT</th>
<th>TIME</th>
<th>LOCATION</th>
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</thead>
<tbody>
<tr>
<td>Friday Evening</td>
<td>Welcome Mixer &amp; Registration</td>
<td>7.30 - 11.00 pm</td>
<td>Ramada Hotel and Conference Center, Ellicott Room</td>
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<tr>
<td>Saturday AM</td>
<td>Registration &amp; Coffee</td>
<td>8:15 am</td>
<td>Knox, Lower Rotunda</td>
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<tr>
<td></td>
<td>Opening Remarks</td>
<td>8.45 am</td>
<td>Knox 104</td>
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<tr>
<td></td>
<td>Session I Talks</td>
<td>9:00 - 10:20 am</td>
<td>Knox 104</td>
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<td></td>
<td>Coffee Break</td>
<td>10:20 - 10:50 am</td>
<td>Knox, Lower Rotunda</td>
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<td></td>
<td>Session II Talks</td>
<td>10:50 am - 12:10 pm</td>
<td>Knox 104</td>
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<td>Lunch</td>
<td>12:10 pm</td>
<td>Bert's, Talbert Hall (see map)</td>
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<tr>
<td>Saturday PM</td>
<td>Poster Session</td>
<td>1:00 - 3:00 pm</td>
<td>Knox, Upper Rotunda</td>
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<td>Session III Talks</td>
<td>3:00 - 4:00 pm</td>
<td>Knox 104</td>
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<td></td>
<td>Coffee Break</td>
<td>4:00 - 4:30 pm</td>
<td>Knox, Lower Rotunda</td>
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<td></td>
<td>Session IV Talks</td>
<td>4:30 - 5:50 pm</td>
<td>Knox 104</td>
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<td>Cocktails (Cash Bar)</td>
<td>6:30 - 7:00 pm</td>
<td>Byblos Restaurant</td>
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<td></td>
<td>Dinner</td>
<td>7:00 pm</td>
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<tr>
<td>Sunday AM</td>
<td>Session V Talks</td>
<td>9:00 - 10:20 am</td>
<td>Knox 104</td>
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<td>Coffee Break</td>
<td>10:20 - 10:50 am</td>
<td>Knox, Lower Rotunda</td>
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<td>Session VI Talks</td>
<td>10:50 - 11:50 am</td>
<td>Knox 104</td>
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<td>Closing Remarks</td>
<td>11:50 am</td>
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SATURDAY NOVEMBER 14

8:15 REGISTRATION AND COFFEE Knox Lecture Hall, Lower Rotunda

8:45 OPENING REMARKS Knox 104
Luis Colon, Chair, Department of Chemistry, University at Buffalo

Session I Knox 104
Chair: Bob Lemieux

9:00 O1. Mechanism of Cleavage of Radical Anions of Nitrocyclopropanes
Frédéric Couture-Martin, Cecilia Cristea, Achille Nassi, Alireza Sardashti,
Jean Marc Chapuzet and Jean Lessard, Université de Sherbrooke

9:20 O2. Nitrones as Rapid Dipoles for Strain-Promoted 1,3-Dipolar Cycloadditions with Cyclooctynes
Craig S. McKay, Joseph Moran and John Paul Pezacki, Steacie Institute for Molecular Sciences, National Research Council of Canada & University of Ottawa

9:40 O3. Chain Amplification in Photoreactions of N-Alkoxyypyridinium Salts in the Presence of Bases
Deepak Shukla, Samir Farid, Wendy Ahearn and Dianne Meyer, Eastman Kodak Company

10:00 O4. Synthesis of Copper Nanoparticles Mediated by Photogenerated Free Radicals
Natalia L. Pacioni, Katherine L. McGilvray and Juan. C. Scaiano, University of Ottawa

10:20 COFFEE

Session II Knox 104
Chair: Ken Maly

10:50 O5. Improving Photolithographic Resolution Using Photochemical Tricks: Strategies for Two-Photon Acid Generation
Paul S. Billone, Julie M. Park, James M. Blackwell and J. C. (Tito) Scaiano, University of Ottawa & Intel Corporation

11:10 O6. Photochemically Triggered Assembly of Composite Nanomaterials Through the Photodimerization of Adsorbed Anthracene Derivatives
Anthony R. Smith and David F. Watson, University at Buffalo, SUNY
11:30  **O7. Singlet Oxygen Delivery Through the Porous Cap of a Hollow-Core Fiber Optic Device**  
Matibur Zamadar, David Aebisher and Alexander Greer, *City University of New York, Brooklyn College*

11:50  **O8. A Facile Photosynthetic Route for Ruthenium Nanoparticles**  
Laetitia René-Boisneuf and J. C. (Tito) Scaiano, *University of Ottawa*

12:10  **LUNCH**  
*Bert's, Talbert Hall (see map inside back cover)*

1:00 - 3:00  **POSTER SESSION**  
*Knox Lecture Hall, Upper Rotunda*

The poster session will be split into two sections as follows:

1:00 - 2:00  Poster Session I (Odd-numbered posters)
2:00 - 3:00  Poster Session II (Even-numbered posters)

### Session III  
*Knox 104*

**Chair: Andrew Murkin**

3:00  **O9. Development of a Novel Class of Inhibitor Against α-Carboxyketose Synthases**  
Naresh Balachandran and Paul J. Berti, *McMaster University*

3:20  **O10. Chemistry of Signal Transduction by Cancer Chemopreventive Dithiolethiones**  
James C. Fishbein, *University of Maryland, Baltimore County*

3:40  **O11. The Effect of Phosphite Dianion on the Rate and Products of Wildtype and Mutant Forms of Triosephosphate Isomerase from Trypanosoma brucei brucei**  
Merced Malabanan, Tina L. Amyes and John P. Richard, *University at Buffalo, SUNY*

4:00  **COFFEE**
Session IV  Knox 104
Chair: Heidi Muchall

4:30  O12. The Reactions of Transient Silylenes with Oxiranes and Thiiranes - A Mechanistic Study
Svetlana Kostina and William Leigh, McMaster University

4:50  O13. Stereomutations and [1,3] Carbon Shifts of Vinylcyclobutane
John E. Baldwin, David J. Kiemle and Alexey P. Kostikov, Syracuse University & SUNY College of Environmental Science and Forestry

5:10  O14. Reactions within Fluorobenzene/Ammonia Heterocluster Ions: An Experimental and Theoretical Investigation
Kristin Butterworth and James F. Garvey, University at Buffalo, SUNY

5:30  O15. Computational Equilibrium and Rate Constants for the Aldol Addition
J. Peter Guthrie, University of Western Ontario

6:30  COCKTAILS & DINNER  Byblos Restaurant

SUNDAY NOVEMBER 15

Session V  Knox 104
Chair: Paul Berti

9:00  O16. Hydrolytic Decarboxylation
Ronald Kluger and Scott O. C. Mundle, University of Toronto

9:20  O17. Internal Return of Carbon Dioxide in Decarboxylation
Scott Mundle, Steven Rathgeber, Georges Lacrampe-Couloume, Barbara Sherwood Lollar and Ronald Kluger, University of Toronto

9:40  O18. Amidic Hydrolysis: A Competitive Reaction for the Breakdown of Some N-(Hydroxymethyl)benzamide Derivatives Under Basic Conditions
John L. Murphy and Richard W. Nagorski, Illinois State University

10:00 O19. Indirect and Direct Detection of the 4-(Benzothiazol-2-yl)phenylNitrenium Ion from a Putative Metabolite of a Model Anti-Tumor Drug
Mrinal Chakraborty, Kyoung Joo Jin, Samuel C. Brewer III, Huo-Lei Peng, Matthew S. Platz, and Michael Novak, Miami University & The Ohio State University
Session VI     Knox 104
Chair: Richard Manderville

10:50  O20. Synthesis and Self-Assembly of Novel Polycyclic Aromatic Hydrocarbons
Philip T. Lynett and Kenneth E. Maly, Wilfrid Laurier University

11:10  O21. Influence of the Alkoxide Precursor on the Synthesis of Metal Oxide Nanocrystals
Sean W. Depner, Kenneth R. Kort and Sarbajit Banerjee, University at Buffalo, SUNY

11:30  O22. Toward a Design Strategy for "de Vries-Like" Liquid Crystals
J. C. Roberts, K. Ayub, N. Kapernaum, F. Giesslemann and R. P. Lemieux, Queen’s University

11:50  CLOSING REMARKS
37th POMS LIST OF POSTERS

P1. Unnatural Phospholipids for Lung Surfactant Therapy
Natasha Best, Jason A. Davy, Zhongyi Wang, Zhengdong Wang, Robert H. Notter and Adrian L. Schwan, University of Guelph

P2. Xanthone Acetic Acid Photochemistry From the Protonated State: The Other Side of the Story
Jessie A. Blake and J. C. Scaiano, University of Ottawa

P3. New EDOT and DAT Comonomers for Conjugated Materials With Tuneable Photophysical Properties
Andréanne Bolduc and Will G. Skene, Université de Montréal

P4. Poly(Acrylic Acid) Brushes: Study of Surface Properties
Olga Borozenko, Béatrice Lego, W.G. Skene and Suzanne Giasson, Université de Montréal

P5. Switchable Dyes in Switchable Solvents
A. R. Boyd, P. G. Jessop and E. Buncel, Queen's University

P6. Aromatic-Heteroaromatic Electrophiles and Super-Electrophiles
Erwin Buncel, Julian M. Dust, Regis Goumont and Francois Terrier, Queen's University

P7. Partitioning Behavior of Sulfonamide Antibacterials to Aqueous Micellar Systems
Patrick J. Cashin, Erwin Buncel, Gary vanLoon and R. Stephen Brown, Queen's University

P8. Structure-Reactivity Studies of Iminoxyl Radicals Formed in the Photooxidation of Benzylketoximes
H. J. Peter de Lijser, Lalisa Stutts and Kwanruthai Tadpetch, California State University, Fullerton

P9. Development of Cation-Specific Optical Sensors
Matthew R. Decan, Marta Liras and J. C. Scaiano, University of Ottawa

P10. Conjugated Azomethines
Stéphane Dufresne and Will Skene, Université de Montréal

P11. Oxidation of Copper Nanoparticles: Kinetic and Mechanistic Investigations
Vasilisa Filippenko, Natalia L. Pacioni, Nathalie Presseau and Juan C. Scaiano, University of Ottawa

P12. Cucurbituril Complexes Cross the Cell Membrane
M. González-Béjar, P. Montes-Navajas, J. C. Scaiano and H. García, University of Ottawa
P13. A $^1O_2$ Delivery Device for the Inactivation of Bacteria
Matibur Zamadar, David Aebisher, Goutam Ghosh, Catherine McEntee and Alexander Greer, CUNY Brooklyn College

P14. Olefin and Fullerene Sulfurations with Thiozone ($S_3$). A Theoretical Study
Alvaro Castillo and Alexander Greer, CUNY Brooklyn College

P15. Theoretical Investigation of the Bergman Cyclization of Tropylannelated Enediyne Ligands for Dual Function Metal-Containing Drugs
Edyta M. Greer, Olga Lavinda and Dat Mai, CUNY Baruch College

Keith Ramig, Edyta M. Greer, David J. Szalda, Rabail Razi, Fahima Mahir, Nataliya Pokeza, Wei Wong, Benjamin Kaplan, Joanne Lam, Ayesha Mannan, Christopher Missak, Dat Mai, Gopal Subramaniam, William F. Berkowitz, Prakash Prasad, Sasan Karimi, Ngai Hin Lo and Linas V. Kudzma, CUNY Baruch College

P17. The Generation of Au Nanoparticles on Solid Supports and the Application of these Composites as Heterogeneous Catalysts
Geniece Hallett-Tapley, Charles-Oneil Crites, María González-Béjar, Katherine McGilvray and J. C. Scaiano, University of Ottawa

P18. Cross-Conjugated Shape Persistent Macrocycles
C. Scott Hartley, Amanda E. Ponsot and Katherine M. Digianantonio, Miami University

P19. Lanthanum-Catalyzed Biomimetic Aminoacylation of Ribonucleosides and Nucleotides with Amino-Deprotected Aminoacyl Phosphate Esters
Sohyoung Her and Ronald Kluger, University of Toronto

P20. A Novel Base Induced Cyclization of Various Substituted Benzyl Alkynyl Sulfones
M. Selim Hossain and Adrian L. Schwan, University of Guelph

P21. (1+2)- and (1+4)-Cycloadditions of Heavy Carbene to 1,3-Dienes
Lawrence A. Huck and William J. Leigh, McMaster University

P22. Kinetics of the Formation and Decay of 4-(Benzothiazol-2-yl)phenylnitrenium Ion
Kyoung Joo Jin, Mrinal Chakraborty and Michael Novak, Miami University

P23. Development of Conjugated Copolymers for Carbon Nanotube-Based Solar Cells
Thomas Kraft, Erwin Buncel and Jean-Michel Nunzi, Queen's University

P24. Toward KIE Measurement by Natural Abundance $^2$H-NMR: Acid- and Enzyme-Catalyzed Hydrolysis of β-Methyl Glucoside
N. Lukenda and P. J. Berti, McMaster University
P25. Novel Routes to Well Defined Polymers with Functional Backbones
Kai Luo and Javid Rzayev, University at Buffalo, SUNY

P26. Photochemical Control Over the Growth of Gold Nanoparticles
Katherine McGilvray, Rachel Schwartz-Narbonne and J. C. Scaiano, University of Ottawa

P27. Optimizing the Photocurrent Efficiency of Dye-Sensitized Solar Cells through the Controlled Aggregation of Chalcogenorhodmine Dyes on Titania
Kacie R. Mulhern, Anthony R. Smith, Brandon D. Calitree, Michael K. Gannon, Thomas C. Fitzgibbons, Justin C. Onyeji, Michael R. Detty and David F. Watson, University at Buffalo, SUNY

P28. Mechanistic Insights Into the Copper-Promoted Intramolecular Aminooxygenation of Alkenes
Monissa C. Paderes, Jerome B. Keister and Sherry R. Chemler, University at Buffalo, SUNY

P29. Photochemical Synthesis of Cu and Cu/Ag Nanoparticles
Andrea Pardoe, Natalia Pacioni and Tito Scaiano, University of Ottawa

P30. Two-Photon Acid Generation: A Promising Tool for Subwavelength Lithography
Julie M. Park, Paul S. Billone and J.C. Scaiano, University of Ottawa

P31. Quantitative Aspects of the Theory of Buffer Two-Phase Liquid Systems
Igor Povar, Institute of Chemistry, Academy of Sciences of Moldova

P32. Reactions of Transient Silylenes with Alkenes
Margaret Reid and William Leigh, McMaster University

P33. Recognition of Halide Anions in Dilute Solution by Tridentate Halogen Bond Donor
Mohammed G. Sarwar and Mark S. Taylor, University of Toronto

P34. C8-Heterocyclic-2'-Deoxyguanosine Adducts as Fluorescent Probes
Katherine M. Schlitt and Richard A. Manderville, University of Guelph

P35. Diastereoselective Alkylations of a Protected Cysteinesulfenate
Suneel P. Singh, Marcus J. Verdu and Adrian L. Schwan, University of Guelph

P36. The Diastereoselective Synthesis of Sulfoxides by the Reaction of Sulfenates with Amino Acid Derived Enantiopure Electrophiles
Stefan Charles Soderman and Adrian Schwan, University of Guelph

P37. The Influence of Halogen End-group on the Properties of 2-Phenylpyrimidine Liquid Crystals
Qingxiang Song, Jeffery C. Robert and Robert P. Lemieux, Queen's University
P38. Quenching of Ketyl Radicals By Silver
Kevin G. Stamplecoskie, Michel Grenier and Juan C. Scaiano, University of Ottawa

P39. DFT and Photoelectron Spectroscopy of Chloro-Substituted Phenylnitrene Anions
Daryoush Tahmassebi and Paul G. Wenthold, Indiana University-Purdue University Fort Wayne

P40. Enolization Rates of Cyclic Ketones and the Apparent Insensitivity of the Brønsted Beta-Value to Ring Size
Dishant Tailor and Richard W. Nagorski, Illinois State University

P41. Asymmetric Ring-closing Metathesis using Chiral C$_{1}$-symmetric Ru-based Catalysts
Brice Stenne, Justin Timperio, Travis Dudding and Shawn K. Collins, Brock University

P42. Bis-Tetramers of Hemoglobin as Red Cell Substitutes: Oxygen Binding and Nitrite Reductase Activity
Adelle Vandersteen, Jonathan Foot, Francine Lui and Ronald Kluger, University of Toronto

P43. Two-photon Acid Generation of 9-Bromophenanthrene
Tse-Luen Wee, Julie Park, James M. Blackwell, Bristol Robert and J. C. Scaiano, University of Ottawa

P44. A Catechol Oxidative Pathway for Phenolic C8-Deoxyguanosine Adducts
Aaron Witham and Richard A. Manderville, University of Guelph

P45. Photochemistry of Nitro, Amine, and Amide Substituted Xanthone Acetic Acids and Thioxanthone Acetic Acids
M. Yorke, J. A. Blake and J. C. Scaiano, University of Ottawa