**29th International Symposium on the Organic Chemistry of Sulfur**

**Scientific Schedule July 14, 2022**

‘v’ denotes virtual presentation

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| Sunday July 17 evening |  |  |
| 6:30 PM |  | |
| **Registration and Opening Mixer** | Summerlee Science Complex Atrium  <https://www.google.ca/maps/search/summerlee+science+centre/@43.5305172,-80.2273362,16.03z> | |
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| Monday July 18 |  |  |
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| prior to 8:50 AM |  |  |
| **Registration** | ROZH Concourse | |
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| 8:50 AM |  |  |
| **Opening Ceremonies** | ROZH 102 |  |
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| **Plenary and Invited lectures** | ROZH 102 |  |
| **Chair: Eric Block** | | |
| 9:20 AM | P1 | **Samir Z. Zard**  Ecole Polytechnique, Palaiseau, France  *Sulfur Chemistry in Action. New Perspectives for Organic Synthesis* |
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| 10:20 AM | Coffee |  |
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| **Chair: Hideki Yorimitsu** | | |
| 10:40 AM | I1v | **Anita Maguire**  University College Cork, Cork, Ireland  *Synthesis and Reactivity of a-Diazosulfones and a-Diazosulfoxides* |
| 11:20 AM | I2 | **J. Caleb Hethcox**  Merck & Co., Inc. Rahway, USA  *Development of a Nickel-Catalyzed C-S Coupling Reaction with Application to the Manufacture of Active Pharmaceutical Ingredients* |
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| 12:00 PM |  | Lunch Creelman Hall |
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| **Industrial chemistry lectures** | ROZH 102 |  |
| **Chair: Rohen Prinsloo** | | |
| 1:20 PM | Ind1 | **Jean-Philippe Chauvin**  Arkema Inc, King of Prussia, USA  *Sustainable Sulfur-Based Solutions at Arkema* |
| 1:50 PM | Ind2 | **Catherine Mineur**  Bruno Bock, Marschacht, Germany  *Bruno Bock Thiochemicals: Production of Organic Divalent Sulfur Chemicals* |
| 2:20 PM | Ind3 | **Jason Kreider and Shawn Childress**  Chevron Phillips Chemical Co., Bartlesville, USA  *Sulfur Chemicals Production and Applications* |
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| 2:50 PM | Coffee |  |
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| **Contributed Oral Communications**  **Session A** | ROZH 102 | (Parallel session with **Contributed Oral Session B)** |
| **Chair: Jason Kreider** | | |
| 3:10 PM | OA1 | **Rohen Prinsloo**  Alberta Sulphur Research Ltd/University of Calgary, Calgary, Canada  *Sulfur Recovery and CS2 Destruction in a Proof-of-Concept Liquid Phase Process on Commercial Alumina and Titania* |
| 3:30 PM | OA2v | **Elvira Spatolisano**  Politecnico di Milano, Milan, Italy  *The HydroClaus Process: A Novel Technology for Valuable Sulfur Production* |
| 3:50 PM | OA3 | **Yang Chen**  McMaster University, Hamilton, Canada  *Oligosulfide Reduction by Hydrosilanes Allows Complete Devulcanization of Used Automobile Tire Rubber* |
| 4:10 PM | OA4 | **Terry Shing-Bong Lou**  Scripps Research, La Jolla, USA  *Ni-Electrocatalytic Sulfinylation of Aryl Halides with SO2* |
| 4:30 PM | OA5 | **Michael Saley**  University of Guelph, Guelph, Canada  *Reduction of N-Arylsulfonylphthalimides* |
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| **Contributed Oral Communications**  **Session B** | ROZH 105 | (Parallel session with **Contributed Oral Session A)** |
| **Chair: Marc MacKinnon** | | |
| 3:10 PM | OB1v | **Stéphane Perrio**  ENSICaen–Unicaen, Caen, France  *Synthesis of Cyclopentene-derived Spirooxindoles Enabled by an Organocatalytic Sulfinate Ammonium Ion-Pairing Approach* |
| 3:30 PM | OB2 | **Damian Antoniak**  University of Warsaw, Warsaw, Poland  *Novel Transformations of Nitroarenes Using Sulfur and Selenium Stabilized Carbanions* |
| 3:50 PM | OB3v | **Noah Bissonnette**  Princeton University, Princeton, New Jersey  *Decatungstate-Catalyzed C(sp3)–H Sulfinylation: Rapid Access to Diverse Organosulfur Functionality* |
| 4:10 PM | OB4v | **Patrick Walsh**  University of Pennsylvania, Philadelphia, USA  *Sulfenate Anions Organocatalysts* |
| 4:30 PM | OB5 | **Adam Riddell**  University of Guelph, Guelph, Canada  *N-Sulfanylimides as the Sulfur Source for Alkyl Allenyl Sulfoxides via [2,3]-Sigmatropic Rearrangement* |
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| 4:50 PM |  |  |
| **In-person Poster Session 1** | ROZH Concourse | |
|  | PA1 **Jeanne L. Bolliger**  Oklahoma State University, Stillwater, USA  *Synthesis of Sulfur Heterocycles by C–H Bond Functionalization of Disulfide Intermediates*  PA2 **Ziad Moussa**  United Arab Emirates University, Al Ain, UAE  *Solvent- and Temperature-Controlled Regioselective Catalytic Synthesis of Potentially Bioactive Imidazolidineiminodithiones*  PA3 **Stephen Lindahl**  Brown University, Providence, USA  *Thiomonosaccharide-based Donor Systems of Reactive Sulfur Species: Chemistry and Applications*  PA4 **Janique Charlebois**  University of Ottawa, Ottawa, Canada  *Kinetic Study of Chloroacetamide Warheads Relating Reaction Rates to Thiol pKa*  PA5 **Kazuya Kanemoto**  Tohoku University, Sendai, Japan  *Acid-Mediated Desulfurilative Sulfonylthiolation of Arenes Using SS-Morpholino Dithiosulfonate*  PA6 **Lana Hiscock**  Wilfred Laurier University, Waterloo, Canada  *Luminescent Thioethers, Sulfoxides, and Sulfones Based on 1,4-Dicyano Substituted Aromatic Heterocycles.*  PA7 **Mukaila Ibrahim**  University of Guelph, Guelph, Canada  *Chelating Thiatriazinyls as Potential New Spin-Bearing Ligands*  PA8 **Scott Sammons**  University of Guelph, Guelph, Canada  *Diastereoselective Alkylations of N-Protected β-Amino Sulfenate Anions*  PA9 **Brenden Fay**  University of Guelph, Guelph, Canada  *Towards the Synthesis of Sulfur-Containing Curcuminoids to Combat Alzheimer’s Disease* | |
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| 7:00 PM |  |  |
| **‘On the town’**  **mixer** |  | **Beertown Public House, 433 Stone Road W** |
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| Tuesday July 19 |  |  |
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| 7:30-8:30 AM |  |  |
| **Virtual Poster session 1** |  |  |
|  | PA10v **Long Yin Lam**  Hong Kong Polytechnic University, Hong Kong SAR, China  *Copper-Catalyzed Green Synthesis of Aryl Thioethers and Sulfonamides*  PA11v **Mihaela Gulea**  University of Strasbourg, Strasbourg, France  *Synthesis of New N/S-Containing Compounds by Pd-Catalyzed Tandem Reactions*  PA12v **Jozef Drabowicz**  Jan Dlugosz University, Czestochowa, Poland  *Attempts to Oxidize Sulfides under Mechanochemical Conditions: Synthetic and Stereochemical Aspects*  and posters PA1 through PA9 | |
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| **Contributed Oral Communications**  **Session A** | ROZH 102 | (Parallel session with **Contributed Oral Session B)** |
| **Chair: J.-P. Chauvin** | | |
| 9:00 AM | OA6v | **Xuefeng Jiang**  East China Normal University, Shanghai, China  *Organosulfur Chemistry* |
| 9:20 AM | OA7v | **Bo Peng**  Zhejiang Normal University, Jinhua City, China  *The Rearrangement of Aryl Sulfoxides with Nitriles* |
| 9:40 AM | OA8v | **Jiajing Tan**  Beijing University of Chemical Technology, Beijing, China  *When Aryne Chemistry Meets Organosulfur Compounds* |
| 10:00 AM | OA9v | **Cong Ma**  Hong Kong Polytechnic University, The Chinese University of Hong Kong, Hong Kong SAR, China  *Thioether-Based Inhibitors of the Protein-Protein Interaction Between Bacterial RNA Polymerase and Sigma Factor as First-In-Class Antimicrobial Drug Candidates* |
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| **Contributed Oral Communications**  **Session B** | ROZH 105 | (Parallel session with **Contributed Oral Session A)** |
| **Chair: Catherine Mineur** | | |
| 9:00 AM | OB6v | **Akio Kamimura**  Yamaguchi University, Ube, Japan  *Preparation and Physical Properties of Sulfur-derivatives of 2-Sulfanylhydroquinone Dimer* |
| 9:20 AM | OB7 | **Derek Schipper**  University of Waterloo, Waterloo, Canada  *Dehydration Polymerization and N-Oxide S-O Chalcogen Bonding for Conjugated Organic Materials* |
| 9:40 AM | OB8 | **Michela Lupi**  University of Florence, Florence, Italy  *Synthesis and Chiroptical Properties of Polymers Bearing Enantiopure Thia-Bridged Triarylamine[4]Helicene Pending Units* |
| 10:00 AM | OB9v | **Tanmay Chatterjee**  Birla Institute of Technology and Science, Pilani (BITS Pilani),, Hyderabad, India  *Development of Iodine-Catalyzed, Sustainable Sulfenylative Annulation Strategies with 2-Alkynyl Biaryls to Access 9-Sulfenylphenanthrenes and Polycyclic Heteroaromatics* |
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| 10:20 AM | Coffee |  |
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| **Plenary and Invited lectures** | ROZH 102 |  |
| **Chair: Ken Maly** | | |
| 10:40 AM | I3v | **Françoise Colobert**  University of Strasbourg, Strasbourg, France  *Atropisomerism: a gate to modern drugs* |
| 11:20 AM | I4 | **Stefano Menichetti**  University of Florence, Florence, Italy  *Thia-Bridged Triarylamine[4]Helicenes: Sulfur Synergism for Stereoselective Synthesis and Smart Materials* |
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| 12:00 PM | Lunch |  |
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| **Chair: Jakob Magolan** | | |
| 1:20 PM | P2 | **Derek Pratt**  University of Ottawa, Ottawa, Canada  *Radical Reactions of Hydropersulfides and Polysulfides: Applications in Synthesis, Industrial Chemistry and Relevance in Biology* |
| 2:20 PM | I5 | **Marcel Mayor**  University of Basel, Basel, Switzerland  *Sulfur: Interconnecting Functional Molecules and Solid-State Electrodes* |
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| 3:00 PM | Coffee |  |
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| **Contributed Oral Communications**  **Session A** | ROZH 102 | (Parallel session with **Contributed Oral Session B)** |
| **Chair: France-Isabelle Auzanneau** | | |
| 3:20 PM | OA10 | **Guangdong Yang**  Laurentian University,Sudbury, Canada  *Hydrogen Sulfide Signaling and Muscle Health* |
| 3:40 PM | OA11v | **Timothé Maujean**  Université de Strasbourg, Strasbourg, France  *Catalyst-free Thia-Diels-Alder Click Reaction for the Labelling of Peptides* |
| 4:00 PM | OA12v | **Shawn Collins**  Université de Montréal, Montréal, Canada  *Syntheses of Alkynyl Sulfides* |
| 4:20 PM | OA13 | **Jiechun Zhu**  Laurentian University, Sudbury, Canada  *Hydrogen Sulfide Reverses TNFα-induced MMP Hyperactivity and Elastin Degradation in Smooth Muscle Cells* |
| 4:40 PM | OA14 | **Sarah Watt**  University of Ottawa, Ottawa, Canada  *Acrylamide Active Site Warheads: A Mechanistic Study of Thiol Addition to N-Phenyl Acrylamide, Relating Reactivity to Thiol pKa* |
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| **Contributed Oral Communications**  **Session B** | ROZH 105 | (Parallel session with **Contributed Oral Session A)** |
| **Chair: Masahiro Miura** | | |
| 3:20 PM | OB10 | **Georg Manolikakes**  TU Kaiserslautern, Germany  *Synthesis of Sulfones and Sulfonamides via Visible-Light Driven Fixation of Sulfur Dioxide* |
| 3:40 PM | OB11 | **Ting Wang**  State University of New York at Albany, Albany, USA  *Synthetic Applications of Light Induced Sulfur Radicals* |
| 4:00 PM | OB12 | **Jonathan Andrews**  University of Oxford, Stevenage, UK  *Sulfinates from Amines: A Radical Approach to Alkyl Sulfonyl Derivatives via Donor-Acceptor Activation of Pyridinium Salts* |
| 4:20 PM | OB13 | **Zijun Wu**  University of Ottawa, Ottawa, Canada  *Radical Disulfuration Strategies Provide Unique Routes to Unsymmetrical Disulfide* |
| 4:40 PM | OB14v | **Elena Pruteanu**  University of Bern, Bern, Switzerland  *Radical Hydroalkylation Modification of Forskolin Complex Scaffold* |
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| 5:00 PM |  |  |
| **In-person Poster Session 2** | ROZH Concourse | |
|  | PB1 **Marc MacKinnon**  University of Regina, Regina, Canada  *Sodium Sulfide on Coal Fly Ash (Na2S/CFA): A New Reagent for the Synthesis of Dithia[3.3]cyclophanes*  PB2 **Matthew Hill**  University of Guelph, Guelph, Canada  *Synthetic Diversity in Sulfur Chemistry: Facile Pathways to Alternate Heteroatom Exchange Products*  PB3 **Jonathan Andrews**  University of Oxford, Oxford, UK  *Rapid Access to Aza-Sulfur Functionality via Decarboxylative Radical Addition to Sulfinylamine Reagents*  PB4 **Hayato Asanuma**  Chuo University, Tokyo, Japan  *Development of Bilateral Disulfurating Platform Molecule for Accessing Diverse Unsymmetrical Disulfides*  PB5 **Adam Riddell**  University of Guelph, Guelph, Canada  *Examining the Role of Proximal Boron Functionalities in the S-Alkylation of Sulfenic Acid Anions*  PB6 **Elizabeth Lach**  McMaster University, Hamilton, Canada  *Use of Hexafluoroisopropyl Sulfamate (HFIPS) for the Synthesis of Sulfamate- and Sulfamide Inhibitors of Metallo-β-Lactamases*  PB7 **Nikki Ritchie**  McMaster University, Hamilton, Canada  *Hydrolysis of Vinyl Sulfides to Aldehydes via Intermediate Cyclic Acetals*  PB8 **Zijun Wu**  University of Ottawa, Ottawa, Canada  *Radical Disulfuration Strategies Provide Unique Routes to Unsymmetrical Disulfide*  PB9 **Matthew Smith**  University of Guelph, Guelph, Canada  *Computational Analysis of the Effect of Axial Chirality and Steric Bulk on Diastereoselective Alkylations of Allenyl Sulfenates* | |
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| Wednesday July 20 |  |  |
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| 7:15-8:15 AM |  |  |
| **Virtual Poster session 2** |  |  |
|  | PB10v **Shotaro Otaka**  Tokyo Institute of Technology, Tokyo, Japan  *Isolable Cysteine Sulfenyl Iodide Stabilized by a Molecular Cradle*  PB11v **Mercedes Zurro**  University of Alcalá, Madrid, Spain  *Tunable Photocatalytic Oxosulfonylation and Chlorosulfonylation of Methylacrylamides. Synthesis of Bicalutamide*  and posters PB1 through PB9 | |
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| **Plenary and Invited lectures** | ROZH 102 |  |
| **Chair: Fabien Gagosz** | | |
| 8:40 AM | P3v | **Jinbo Hu**  Chinese Academy of Sciences, Shanghai, China  *Good Partnership between Sulfur and Fluorine: Sulfur-Based Fluorination, Fluoroalkylation, and Fluoroolefination Reagents for Organic Synthesis* |
| 9:40 AM | I6 | **Thomas G. Back**  University of Calgary, Calgary, Canada  *Some New Aspects of Redox Chemistry of Sulfur and Selenium Compounds* |
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| 10:20 AM | Coffee |  |
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| **Chair: Georg Manolikakes** | | |
| 10:40 AM | I7v | **James Bull**  Imperial College London, UK  *Synthesis of aza-S(VI) Motifs as Design Options in Drug Discovery* |
| 11:20 AM | I8v | **Noureddine Khiar**  CSIC/University of Seville, Seville, Spain  *Smart Nanomaterials Derived from Amphiphilic Thioglycosides: Design, Synthesis and Bioapplications* |
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| 12:00 PM | Lunch | Boxed lunch for excursioners |
|  |  | Lunch for others at Creelman Hall |
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| 1:00 PM |  | Excursion to Niagara Falls |
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| Thursday July 21 |  |  |
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| **Plenary and Invited lectures** | ROZH 102 |  |
| **Chair: James Gauld** | | |
| 8:40 AM | P4v | **Ruma Banerjee**  University of Michigan, Ann Arbor, USA  *Sulfide Signaling and Complex II Reversal Using Fumarate as A Terminal Electron Acceptor* |
| 9:40 AM | I9v | **Zhengbiao Zhang**  Soochow University, Suzhou, China  *Thiol Chemistry for Precision Polymer Synthesis* |
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| 10:20 AM | Coffee |  |
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| **Chair: Derek Schipper** | | |
| 10:40 AM | I10 | **Daniel B. Werz**  Technical University of Braunschweig, Braunschweig, Germany  *Adventures with Sulfur and Selenium in Cyclopropane and Aryne Chemistry* |
| 11:20 AM | I11 | **Hideki Yorimitsu**  Kyoto University, Kyoto, Japan  *Aromatic Metamorphosis of Thiophenes* |
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| 12:00 PM | Lunch | Creelman Hall |
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| 1:20 PM |  |  |
| **Contributed Oral Communications**  **Session A** | ROZH 102 | (Parallel session with **Contributed Oral Session B)** |
| **Chair: Marcel Mayor** | | |
| 1:20 PM | OA15v | **Hendrik Mengers**  Aachen University, Aachen, Germany  *Measuring Volatile Sulfur-Containing Allicin in the Gas-Phase using SESI-Orbitrap MS* |
| 1:40 PM | OA16 | **Ryan Johnson**  University of Guelph, Guelph, Canada  *Unravelling the Chemosensing Mechanism by the 7-(Diethylamino)Coumarin-Hemicyanine Hybrid: Interplay Between Reactive Oxygen and Sulfur Species* |
| 2:00 PM | OA17 | **Clément Rulmont**  Laboratory of Coordination Chemistry of CNRS, Toulouse, France.  *New Specific Copper (I) Chelators in Alzheimer’s Disease Context* |
| 2:20 PM | OA18 | **Kristian Vasa**  University of Florence, Florence, Italy  *Synthesis of Ditocopheryl Sulfides and Disulfides* |
| 2:40 PM | OA19 | **Kenneth Maly**  Wilfrid Laurier University, Waterloo, Canada  *Synthesis, Self-Assembly, and Photodegradation of Triphenylene and Dibenz[a,c]anthracene Thioimides* |
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| **Contributed Oral Communications**  **Session B** | ROZH 105 | (Parallel session with **Contributed Oral Session A)** |
| **Chair: Derek Pratt** | | |
| 1:20 PM | OB15v | **Boris Maryasin**  University of Vienna, Vienna, Austria  *In Silico Organosulfur Chemistry* |
| 1:40 PM | OB16v | **Jyoti Sharma**  New Jersey Institute of Technology, Newark, USA  *Computational Investigations on the Reactions of Elemental Sulfur with Nucleophiles* |
| 2:00 PM | OB17 | **Eric Nicol**  University of Guelph, Guelph, Canada  *Elimination Reactions of beta-Borosulfoxides: A Computational Investigation of Mechanism and Stability* |
| 2:20 PM | OB18 | **Dmitry Saraev**  University of Ottawa, Ottawa, Canada  *A General Model for Studying Thiol Oxidation in Aqueous Buffer* |
| 2:40 PM | OB19 | **Oliver Turque**  Brooklyn College, City University of New York, New York, USA  *A Twist on Disulfide S–S Bond Rotation Facilitated by Singlet Oxygen On- and Off-loading* |
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| 3:00 PM | Coffee |  |
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| **Contributed Oral Communications**  **Session A** | ROZH 102 | (Parallel session with **Contributed Oral Session B)** |
| **Chair: Ting Wang** | | |
| 3:20 PM | OA20v | **Christian Knittl-Frank**  University of Vienna, Vienna, Austria  *Gold(I)-Catalyzed Cycloisomerization of Sulfur Ylides to Dihydrobenzothiepines* |
| 3:40 PM | OA21 | **Jeanne L. Bolliger**  Oklahoma State University, Stillwater, USA  *Oxidative Cyclization Leading to Charged Sulfur-Containing Tricyclic Heteroarenes* |
| 4:00 PM | OA22v | **Eoghan McGarrigle**  University College Dublin, Dublin, Ireland  *Synthesis of Pyridylsulfonium Salts and their Application in Sulfur-Mediated bis-Heteroaryl Synthesis* |
| 4:20 PM | OA23 | **Meghan Fragis**  McMaster University, Hamilton, Canada  *Improved Route to Thioalkyl Phosphonium Salts Enables Application of Vinyl Sulfides as Masked Aldehydes and Ketones in Fischer Indole Synthesis* |
| 4:40 PM | OA24 | **Adrian L. Schwan**  University of Guelph, Guelph, Canada  *Non-bonding Interactions can Direct Selective Sulfenate Alkylation Chemistry* |
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| **Contributed Oral Communications**  **Session B** | ROZH 105 | (Parallel session with **Contributed Oral Session A)** |
| **Chair: Tom Back** | | |
| 3:20 PM | OB20v | **Roberto Tinelli**  University of Vienna, Vienna, Austria  *Direct Synthesis of α-Amino Acid Derivatives via Hydrative Amination of Alkynes* |
| 3:40 PM | OB21 | **Fabien Gagosz**  University of Ottawa, Ottawa, Canada  *Revisiting (3+2) Cycloadditions – Application to Thiophene Synthesis* |
| 4:00 PM | OB22v | **Michael Andresini**  University of Bari Aldo Moro, Bari, Italy  *Synthesis and Transformations of Sulfinamidines and Sulfinimidate Esters* |
| 4:20 PM | OB23 | **Masahiro Miura**  Osaka University, Osaka, Japan  *Utilization of Sulfur Function in Directed Catalytic C-H Transformation* |
| 4:40 PM | OB24v | **Damiano Tanini**  University of Florence, Florence, Italy  *Chalcogen-Catalysed on Water Oxidation of Anilines* |
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| 6:30 PM | University Club, University Centre: **Gala Banquet** | |
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| Friday July 22 |  |  |
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| **Plenary and Invited lectures** | ROZH 102 |  |
| **Chair: Jeanne Bolliger** | | |
| 9:00 AM | P5v | **Emanuela Licandro**  University of Milan, Milan, Italy  *Thiahelicenes: A Continuing Source of Inspiration* |
| 10:00 AM | I12v | **Mario Leclerc**  Université Laval, Québec, Canada  *Green Monomers and Polymers for Green Energy* |
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| 10:40 AM | Coffee |  |
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| **Chair: Stefano Menichetti** | | |
| 11:00 AM | P6 | **Kei Goto**  Tokyo Institute of Technology, Tokyo, Japan  *Design and Application of Molecular Cavities for Modeling Cysteine-derived Reactive Intermediates* |
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| 12:00 PM |  |  |
| **Closing Ceremonies** | ROZH 102 |  |