SOUSCC45 Technical Program

8:30 - 9:30 - Sciex Breakfast, LAS Lobby
9:30 - 10:15 - Keynote, Dr. Voislav Blagojevic

10:30 - Sessions Start

Analytical

Analytical I	***Paul Piunno, Shaolong Zhu, CB122, 10:30 - 11:50***
Alicia Mell	Risk Assessment of Smoke Exposure of Firefighters in the 2016 Fort McMurray Wildfire using GC-MS
Qusai Hassan	Lipid Signal Suppression for NMR-based Environmental Metabolomics In Vivo
Lisa Szymkowicz	Phospholipid-based model membrane system for hydrogen-deuterium exchange mass spectrometry of membrane proteins
Keuna Jeon	Optimizating Metallic Nanoplates for Plasmon-Enhanced Spectroscopies.
Analytical II	***Derek Jackson, Kerene Brown, CB129, 10:30 - 12:10***
Tianxiao Ma	Investigation of Building and Testing Electrochemical Toll-like Receptor Sensor
Santiago Giron	An Environmentally Responsive Nucleoside Analog for Observing DNA Aptamer-Protein Interactions
Christian Ieritano	Characterization of a Wasp Venom Component with Selective Anticancer Activity via Gas-Phase Microsolvation with Differential Mobility Spectrometry
Trina Dang	The New Aldetective: Using CEST-MRI to Detect Endogenous Biological Aldehydes
Lisa Labine	Analysis of Tramadol and Metabolites in Skeletal Remains by UPLC-qToF MS: Effects of the Dose-Death Interval on Drug and Metabolite Levels
Analytical III	***Paul Piunno, Shaolong Zhu, CB122, 1:40 - 3:00***
Natan Veinberg	A Solid-State NMR Study of Hydrated Active Pharmaceutical Ingredients
Martin Badley	Development of Quantitative X-ray Photoelectron Spectroscopy (XPS) Imaging
Yousef Risha	Development and validation of a LC-MS/MS method for quantitative analysis of Vancomycin in Canadian waste water treatment plants' effluent
Xia Zhu	Characterization of CO/CO2 of emissions from on-road vehicles in the Greater Toronto Area
Analytical IV	***Derek Jackson, Kerene Brown, CB129, 1:40 - 3:00***
Aiyun Yang	In-Situ High-Pressure Study of ZIF-67 and CO2 Storage via Infrared Spectroscopy
Hamna Fayyaz	Silica Coated Magnetic Bead Extraction of DNA in a Microfluidic Device: A Module for a Lab-on-a-Chip Device for Rapid Species Identification
Jonathan Adsetts	Proton Transportation Across Ionic Liquid-Soaked Nafion Investigated by Scanning Electrochemical Microscopy
Heather Schwartz-Narbonne	Cleaning up our act: The heterogeneous reaction of gaseous bleach by-products with squalene as a surrogate for skin oil
Analytical V	***Paul Piunno, Shaolong Zhu, CB122, 3:30 - 5:10***
William Zizek	Comprehensive Metabolomic Analysis of Serum from Peanut Allergic Children
Tianyi Wu	Time-resolved fluorescence of a binary dye mixture system: how well can lifetimes and amplitudes of be determined in selected-ion fluorescence experiments
Maria Karcz	Digital Microfluidic Platform for the Detection of Malaria Infection for Point-of-Care Applications
Yardley Cuthbert	Characterizing Hydroxyl-Substituted Polycyclic Aromatic Hydrocarbons
Iden Djavani-Tabrizi	Unimolecular Dissociation Reactions of Amino-Substituted PAHs using Collision-Induced Dissociation Mass Spectrometry (CID-MS) and RRKM Theory

Biological / Medicinal

Biol / Med I	***Bulent Mutus, Irina Oganesian, CB121, 10:30 - 11:50***
Michaela Fernandes	Structure Activity Relationship (SAR) Study of a PAR4 Peptide Agonist
Rhys Powers	Involvement of B-/Z-DNA transition in the genetic flow of information
Yen Janette	Bioorthogonal click chemistry in the development of molecular imaging using aptamers
Jeremt Pak Hei	Helicobacter pylori NikR Mutant Characterizations for 19F NMR Structural Analysis
Biol / Med II	***Gerald Audette, Ruth Knox, CB115, 10:30 - 11:50***
Amanda Tajik	Analysis of a stable bifunctional linker (N-methyl-O-(propyl-3-thiol) hydroxylamine) for carbohydrate-protein conjugation in vaccine development
Yanrui Zhu	Determining the thermodynamic binding characteristics of a ATP-binding DNA aptamer with ATP and other ATP analogues
Yun Jun Rho	Study of Slr1p in Schizosaccharomyces pombe lacking protein kinase
Richard Pulgarin	Conformational Dynamics of Glutathione S-Transferase on Benzo[a]pyrene Diol Epoxide via Hydrogen Deuterium Exchange Mass Spectrometry

Bio/Med III	***Bulent Mutus, Irina Oganesian, CB121, 1:40 - 3:00***
Emily Boehmer	The intracellular localization of three isolates of cytochrome b5 during encystation of Giardia intestinalis
Alexander Eddenden	Synthesis of glycan constructs on polypeptides by a site-specific chemoenzymatic method using bacterial glycosyltransferases
Alexa DiCecco	Examining Allostery of S-Nitrosoglutathione Reductase through Mutation of the First Twenty Amino Acids
Mitchell DiPasquale	Determination of the Role of CXXC Motifs in Cystathionine – ð ¸ – Lyase
Bio/Med IV	***Gerald Audette, Ruth Knox, CB115, 1:40 - 3:00***
Xiaojing Huang	Characterizing lipocalin 2 conformational changes upon siderophore and iron binding using mass spectrometry
Eliza McColl	Probing the Heme Active Site of the Flavohemoglobin Enzyme in Giardia intestinalis
Nadia Sharma	Structural Characterization of Bioapatite in Mice Carrying the I130T Mutation of Connexin43
Alexander Dewar	Changes in flavohemoglobin expression on exposure of Giardia intestinalis to nitrosative stress
Bio/Med V	***Derek Jackson, Kerene Brown, CB129, 3:30 - 4:50***
Nicholas Bragagnolo	Characterizing the Activity of a Novel Antiviral Protein Isoform from Phytolacca americana
Caitlyn Bourque	Cystathionine-gamma lyase/H2S system protects against LPS-induced inflammation in endothelial cells.
Zeenat Ladak	Anti-cancer drug resistance: Extrusion of anti-cancer drugs by multidrug resistant ABC transporters
Jesse Ropat	Selective Targeting of Cancer Cells by Exploiting Oxidative Stress Vulnerabilities with Novel Synthetic Curcumin Analogues
Bio/Med VI	***Bulent Mutus, Irina Oganesian, CB121, 3:30 - 4:50***
Carmen Kiltz	Formation of nanoscale zero-valent iron (nZVI) using common weeds for the degradation of trichloroethylene
Frank betancourt	Identification of acyl-homoserine lactones and quantification of C-DI-GMP in pseudomonas fluorescens
Nicholas Hodkinson	Development of a High-Throughput Assay to Identify Novel [NiFe]-Hydrogenase Maturation Proteins in Escherichia coli
Ian Fernandes	Characterization of a Prediction Bifunctional Protein from Treponema denticola
Bio/Med VII	***Gerald Audette, Ruth Knox, CB115, 3:30 - 4:50***
Emily Tran	Determining the structure of a putative β-helix motif of the Toc159 M-domain
Margot Treidlinger	Phospho-ubiquitin variants increase auto-ubiquitination activity of parkin E3 ligase
Daniel Levin	Creation of Microfluidic Devices for the Characterization of Macrophage Adhesion to Structured Silicon Dioxide Surfaces
Jacob Pierscianowski	Application of Oxime-Based Inhibitors of C-O Bond Cleaving α-Carboxyketose Synthases as Neutral Phosphate Group Mimics in P-O Bond Cleaving Phosphatase

Computational

Computational I	***Rene Fournier, Barry Lever, CB120, 10:30 - 11:50***
Roman Korol	Tunneling to Hopping Crossover in Thermopower of the DNA Molecular Junctions
Devan Kernaghan	Predicting Partition Coefficients of Metallic Species Using COSMO-RS Solvation Theory
Angela M. Murcia Rios	Investigating the Rotary Mechanism of ATP Synthase Using Molecular Dynamics Simulations
Johnny Luo	Computational Insights into the Amino Acid Activaton by Class I TrpRS and GluRS and Class II AspRS
Computational II	***Rene Fournier, Barry Lever, CB120, 1:40 - 3:00***
Rachel McCormack	A Computational determination of clustering in water vapour in the presence of charged species
Bonnie Diep	Quantum effects in the dynamics of sugars
Chloe Clark	Quantitative Structure-Property Modelling of Blood-Brain Barrier Partitioning
Deborah Chan	Farming Photons: Computational and Spectroscopic Studies of Phthalocyanines as a Photosensitizer in Dye-Sensitized Solar Cells
Computational III	***Rene Fournier, Barry Lever, CB120, 3:30 - 4:50***
Tatiana Gatsak	A model for orthohydrogen clusters
Mark Zanon	Developing Periodic, Localized Molecular Orbitals
Jesse Vanloon	Clustering by Self Organizing Maps of Conformations for Flexible Protein Domains obtained through Molecular Dynamics Simulations
Tori Lambe	Exploration of Conformational Isomerism of the Antibody SPE7 Using Molecular Dynamics Simulations

Inorganic / Inorg. Materials

Inorganic I	***Stephen Loeb, Louise Dawe, LSB101, 10:30 - 11:50***
Nadia Stephaniuk	Inclusion Chemistry of Thiazyl and Selenazyl Radicals in MIL-53(Al)
Jasveer Dhindsa	Synthesis and Characterization of Push-Pull Polystannanes
Jeanette Adjei	Synthesis & Characterization of Oxazoline Ligands Containing Electron Donating Or Electron Withdrawing
Daniel Cutler	Exploring the Coordination Chemistry of mpmH as a New Ligand in 3d-Cluster Chemistry

Inorganic II	***Chris Kerr, Jim Greene, LSB 107, 10:30 - 11:50***
Scott Timmermans	Intramolecular Energy Transfer in Boron Difluoride 3-Cyanoformazanate Complexes
Daniela Cappello	Phosphonium Block Copolymers with Chiral Anions
Erika Crowley	Glutaraldehyde Cross-linked Enzyme Aggregates Encapsulated in Ordered Mesoporous Silica
Sarah Dale	Synthesis and coordination chemistry of a new arylazo ligand: Toward multifunctional spin-crossover materials
Inorganic III	***Stephen Loeb, Louise Dawe, LSB101, 1:40 - 3:00***
Devon E. Chapple	Metal-Ligand Cooperative Catalysis for the Cyclization of Nitrogen Heterocycles
Alec Sherman	Towards the Development of Cyclopropane Functionalized Gold Nanoparticles for Cycloaddition to Nitrone-Modified Substrates
Menandro Cruz	Investigation of the Dissolution and Self-Assembly of Polyferrocenyldimethylsilane Block Copolymer Micelles
Isaac De Vlugt	Infrared-Driven Charge Transfer in Transition Metal B12H12 Clusters
Inorganic IV	***Jennifer Chen, Jim Greene, LSB 107, 1:40 - 3:00***
Maissa Belcina	The Influence of a Donor on the Addition of Acrylonitrile to a Disilene
Rachel Langford	1,2,3-dithiazolyl-o-naphthoquinone ligands for the development of switchable magnetic materials
Muntaser Farooqe	Cobalt (II/III) Oxazoline Complexes for Electrolyte Applications in Dye Sensitized Solar Cells
Samantha R. Anderson	The Role of Molybdenum in Corrosion Resistant Ni-Cr-Mo Alloys Exposed to Simulated Crevice Environments
Inorganic V	***Stephen Loeb, Louise Dawe, LSB101, 3:30 - 4:30***
Scott Laengert	Sequential Functionalization of a Natural Cross-linker Leads to Designer Silicone Networks
Greg Yousif	The synthesis of acetal-free TF antigens, TACA disaccharides containing no labile glycosidic linkages
Vanessa T. Y. Lee	Synthesis and Acidity Predictions of Unsymmetric Tripodal NPP'2 Iron Hydride Complexes
Inorganic VI	***Jennifer Chen, Jim Greene, LSB107, 3:30 - 4:30***
Doneique Menzies	DNA Functionalization of Gold-Coated Silver Nanoprisms
Declan DeJordy	Design of new molecular magnetic materials utilizing 4-benzimidazole-1,2,3,5-dithiadiazolyl paramagnetic ligands
Kelly Wright	Graphene Synthesis from Graphitic Sources by Ultrasonic Liquid Phase Exfoliation

Organic / Org. Materials

Organic I	***Shegufa Mervchant, Andrei Nikolev, LSB103, 10:30 - 11:50***
Joseph Bedard	Synthesizing and Engineering Next Generation Immobilized Antimicrobial Coatings
Carling Renwick	New Hydrogen Bonding Modes of Activation of Donor-Acceptor Cyclopropanes
Vivekkumar Patel	Design, characterization and digestion of oil-in-water emulsions stabilized with Pickering fat crystals
Robert Nanni	Synthesis and Reactivity of Gallium(I)-Crown Ether Compounds
Organic II	***Jayme Stabler, Andy Dicks, LSB105, 10:30 - 11:20***
Cody Gale	Synthetic Routes to Silicone-Modified Soybean Oil Copolymers
Rajeshwar Vasdev	Synthesis and polymerization of a norbornene-functionalized, photo-protected strained alkyne
Brent St.Onge	Relative Stability of Hexacarbonyldicobalt Propargylic Carbocations - Effect of Remote Substitution
Organic III	***Arturo Orellana, Hovig Kouyoumdjian, LSB106, 10:30 - 11:50***
Patrick Cheung	Synthesis of hydrogels polyacrylamide and polyvinylpyrrolidone cross-linked with N-methylenebisacrylamide with novel initiator system
Milosz Brzozowski	Synthesis of a Small Novel Thiol-Specific Fluorescent Probe: N-(1,4-dimercaptobutan-2-yl)-5-(dimethylamino)naphthalene-1-sulfonamide
Mackenzie Thompson	Synthesis and Purification of the Analgesic Neuropeptide Neurotensin and Three Aromatically Substituted Analogues
Weike Liang	Amino Acid Molecular Recognition by Boron Complex
Organic IV	***Shegufa Mervchant, Andrei Nikolev, LSB103, 1:40 - 3:00***
Nicole LeGrow	Synthesis and Self-Assembly of Discotic Triphenylenes bearing Imide Groups.
Kyle Jackman	Designing a Ligand for Long-lifetime Ethylene Polymerization with Polar Co-Monomers
Denise Peda	Synthesis of Conjugated Poly(3-hexylthiophene)-Poly(3-hexylselenophene) Comb Copolymers Using a "Graft-To" Approach
Advait Desai	Solvent Effects on the Stereoselectivity of Aprotic Glycosylations

Organic V	***Jayme Stabler, Andy Dicks, LSB105, 1:40 - 3:00***
Natalie Liang	Cyclen Derived Re(I)/99mTc(I) Tricarbonyl Complexes Towards the Development of Imaging Agents for CXCR4
Piryanka Sasidharan	Development of Gd-free MRI contrast agents by use of Mn(III) porphryins
Ryan Moreira	Facile Oxidative Ring Opening of Benzothiazoles
Sherif Meshref	Metal Fullerene Cluster
Organic VI	***Arturo Orellana, Hovig Kouyoumdjian, LSB106, 1:40 - 3:00***
Mohamad Harb	Ring-Size Effects On Structures And Properties Of Benzo-fused Dithiazolyl Radicals
Michael Maximino	The Synthesis of Hexahydropyridazine Derivatives Through the [4+2] Cycloaddition of Donor-Acceptor Cyclobutanes and cis-Diazenes
Troy Babcock	Synthesis of bis(phosphine) and diaryl germylene to investigate P-H bond activation
Rose Anne Fayoumi	Self-Destructing Polymers: Creating Thermally Sensitive End-Caps
Organic VII	***Shegufa Mervchant, Andrei Nikolev, LSB103, 3:30 - 4:50***
Gillian Hawes	Optimization of the Alignment and Sorting of Single-Walled Carbon Nanotubes
Anthony Antoniani	Novel pentacene derivatives with fused thiophene rings as potential semiconducting materials
Tatiana Rogova	Multicomponent Reactions with Amphoteric α-Borylaldehydes: A Novel Route to Boron-Containing Molecules and Peptide Macrocycles
Matthew Baistrocchi	Synthesis of a Kartogenin Conjugated Poly(ester amide) for the Improved Treatment of Osteoarthritis
Organic VIII	***Jayme Stabler, Andy Dicks, LSB105, 3:30 - 5:10***
Steven Rhodes	Cu-Catalyzed one-pot atom economical synthesis of pyrido[4,3-b]indoles using 2-bromo-3-formylindoles and phenylacetylenes
Selvyn Simoes	Synthesis of Sulfur Containing Triphenylamine Based Dyes for Dye Sensitized Solar Cell Applications
Victoria Marando	Efficient Synthesis of Carborane-Containing Dendrons for Boron Neutron Capture Therapy
Albert Gevorkian	Temperature-Responsive Supramolecular Nanofibrillar Hydrogels for Cell Encapsulation Growth and Release
Jordan Bentley	BODIPY Phos-faux-lipids: Synthesis of a Novel BODIPY Fatty Acid

Physical / Other

Other I	***Al-Amin Dhirani, Rudy Majumdar, PS317, 10:30 - 11:50***
Kyle Vollett	Effect of sugar and processing on the viscosity profiles of palm oils during crystallization
Adrian Argudo	Analysis of confectioner's sugar and cooling rate on palm oil ripening by multiple regression
Melinda Dass	The effect of droplet size and interfacial structure of water-in-oil fat crystal stabilized emulsions on shelf stability
Daniel Trajanoski	Self-Launching of Hyperbolic Phonon Polaritons in Hexagonal Boron Nitride
Other II	***Al-Amin Dhirani, Rudy Majumdar, PS317, 1:40 - 3:00***
Malek El-Aooiti	A study of the crystallization and competitive adsorption to the water-oil interface using axisymmetric drop shape analysis
Brianne Potts	Turning Back Time - Characterization of Nineteenth Century Daguerreotypes in the Twenty First Century
Hayden Foy	Tuning the Optical Properties of Plasmonic Nanostructures
Austin Lindquist	Application of Optimal Control Theory to Solid-State NMR for the Acquisition of Ultra-Wideline NMR Spectra
Other III	***Al-Amin Dhirani, Rudy Majumdar, PS317, 3:30 - 5:10***
Austin Peach	35Cl Solid-State NMR Spectroscopy of Fluoxetine HCl Cocrystals
Jacqueline E. Gemus	Characterization of Mixed Linker Zeolitic Imidizolate Frameworks via Solid-State Nuclear Magnetic Resonance
Michael Leslie	The fate of isocyanic acid (HNCO): investigation into possible sinks within the atmosphere
Jake Burner	Investigation of the unimolecular reactions of nitro-substituted polycyclic aromatic hydrocarbons
Andre Castillo	The Shelf Stability of a 20% water-in-oil Emulsion Influenced by Surfactants, Water Droplet Size and the Presence of a Fat Crystal Network

5:10 - End Sessions

6:00 - 9:00 - Banquet, The Underground

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