



## ACS Spring 2023

Sunday, March 26, 2023 - Thursday, March 30, 2023

### Tuesday, March 28, 2023

08:00AM - 11:40AM	- Remembering the Legacy of Synthetic Aza Macrocycles: Room: Room 209	Kristin Bowman-James Professor Prof. Timothy J. Hubin , PhD Prof. of Chemistry Thomas Meade Rebecca Roesner Kenneth Takeuchi
08:00AM - 08:10AM	- Introductory Remarks Room: Room 209	
08:00AM - 11:00AM	- Undergraduate Research at the Frontiers of Inorganic Chemistry: Room: Room 236	Chip Nataro Marshall R. Metzgar Professor Meghan Porter
08:00AM - 08:05AM	- Introductory Remarks Room: Room 236	
08:00AM - 11:10AM	- Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Justin Wilson: Room: Sagamore Ballroom 3	Dr. Eszter Boros Assistant Professor Timothy C. Johnstone
08:00AM - 08:10AM	- Introductory Remarks Room: Sagamore Ballroom 3	
08:00AM - 11:00AM	- Physical Inorganic Tutorials: Room: Room 210	Ryan O'Donnell Jeffrey Rack
08:00AM - 08:45AM	3822131 - Fundamentals of energy and electron transfer processes: Theory and practice Room: Room 210	James McCusker
08:00AM - 11:00AM	- Bioinorganic Chemistry, Energy, and the Environment: Room: Room 237	Deborah Bebout Nathan Boland Dr Stephen A Koch Professor of Chemistrty Heather Lucas

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08:00AM - 08:20AM	3827877 - Evidence of catalysis of multidentate ligand exchange by small organic ligands Room: Room 237	Nathan Boland Liza Briody-Pavlik Andrew Wildman Haven Dick-Neal Zhihong Huang Rebecca Hoffman Kaylie McCracken
08:00AM - 10:55AM	- Sustainable Energy and Environment: Chemical Transformations and Catalytic Conversions Room: Room 208	Matthew Chambers Guanqun Han Claus Lugmair
08:00AM - 08:20AM	3819424 - Diversifying hydrocarbon functionalization selectivity mediated by metal oxo complexes Room: Room 208	Siddhiaratchi Dinushini Siddhiaratchi Courtney Baumberger Saeed Fosshat PhD Candidate Frank Fronczek Matthew Chambers
08:00AM - 12:00PM	- 2023 Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Robert J. Gilliard, Jr.: Room: Room 206	Roman Dobrovetsky Todd Hudnall Caleb Martin
08:00AM - 08:05AM	- Introductory Remarks Room: Room 206	
08:00AM - 11:40AM	- Organometallic Chemistry: New Design Concepts & Reactivity Patterns Room: Room 212	Joshua Buss Nora Radu Keith Searles Jingyun Ye
08:00AM - 08:20AM	3810488 - Withdrawn Room: Room 212	
08:00AM - 11:55AM	- 2023 Alfred Bader Award in Bioinorganic Chemistry: Symposium in Honor of R. David Britt: Room: Room 205	R Britt Alison Butler Professor Daniel Suess
08:00AM - 08:05AM	- Introductory Remarks Room: Room 205	
08:05AM - 08:25AM	3826373 - Synthesis and reactivity of an iron tricarbonyl complex containing redox-active iminopyridine ligand Room: Room 236	lauren peck Maria Carroll
08:05AM - 08:25AM	3817393 - Chemistry of novel geometrically constrained PIII cations Room: Room 206	Roman Dobrovetsky
08:05AM - 08:30AM	3814866 - Withdrawn Room: Room 205	

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08:10AM - 08:40AM	3827839 - NexSTEM: A community assets program that fosters the next generation of STEM leaders Room: Room 209	Rebecca Roesner Sheri Glowinski Maggie Evans Pennie Gray
08:10AM - 08:30AM	3806546 - Examining rhenium coordination compounds as cysteine-reactive, bioactive molecules Room: Sagamore Ballroom 3	Seth Cohen
08:20AM - 08:40AM	3816443 - Withdrawn Room: Room 237	
08:20AM - 08:40AM	3819728 - Two-photon-absorbing ruthenium complexes enable near infrared light-driven photocatalysis Room: Room 208	Guanqun Han Yujie Sun
08:20AM - 08:40AM	3803939 - Withdrawn Room: Room 212	
08:25AM - 08:45AM	3812865 - Synthesis and characterization of Schiff-Base ligands and manganese coordination complexes Room: Room 236	Maxwell Rhames Shayon Brown Ann Johnston Isabella Pellegrom Dr. Daniela Arias-Rotondo
08:25AM - 08:45AM	3818118 - Cationic main-group compounds as ligands and transition metal mimics Room: Room 206	Moumita Majumdar
08:30AM - 08:50AM	3805665 - Progress in the development of small-molecule carbon monoxide poisoning antidotes Room: Sagamore Ballroom 3	Daniel Droege A. Parker Timothy C. Johnstone
08:30AM - 08:55AM	3817568 - Where are the electrons in iron-sulfur clusters? Room: Room 205	Daniel Suess
08:40AM - 09:10AM	3822689 - Heterobimetallic f-element complexes supported by a tripodal ligand Room: Room 209	James Blakemore Victor Day Allen Oliver
08:40AM - 09:00AM	3820879 - Switchable artificial metalloproteins to probe conformational control in enzyme function Room: Room 237	Saman Fatima David Boggs Noor Ali Peter Thompson Megan Thielges Jennifer Bridwell-Rabb Dr. Lisa Olshansky
08:40AM - 09:00AM	3825092 - Tuning electrocatalytic CO <sub>2</sub> reduction in CO <sub>2</sub> -expanded electrolytes Room: Room 208	Christian Nilles Matthew Stalcup Hyun-Jin Lee Bala Subramaniam Kevin Leonard James Blakemore

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08:40AM - 09:00AM	3819368 - Cp2Till mediated rearrangement of cyclopropylimines: Models for alkyne carboamination Room: Room 212	jaekwan kim Dominic Egger Connor Frye Evan Beaumier Ian Tonks
08:45AM - 09:05AM	3824891 - Copper(I) CNC pincer complexes: Synthesis, characterization, and opportunities for catalysis Room: Room 236	Austin Rongo Nicole Garcia Katelynn O'Donnell Michael Gau Patrick Carroll Deanna Zubris
08:45AM - 09:30AM	3821586 - Frontiers in NMR spectroscopy Room: Room 210	Martha Morton
08:45AM - 09:05AM	3816538 - Cyaphide ion: A versatile bridging ligand for the synthesis of multi-metallic complexes Room: Room 206	Jose Goicoechea
08:50AM - 09:10AM	3812091 - Manganese carbonyl reactivity with aqueous hydrogen peroxide Room: Sagamore Ballroom 3	Peter Ford Jacob Barrett Madalyn Phan
08:55AM - 09:20AM	3817153 - Mysteries of [FeFe]-hydrogenases: Where no Britt would tread Room: Room 205	Tom Thomas Rauchfuss Professor Yu Zhang
09:00AM - 09:20AM	3828692 - Synthetic approaches to understanding the metal ion miscellany of metallothionein Room: Room 237	Deborah Bebout Haley Brennan Mary Chason Joshua Sacks Pie Wang Steven Berry Ray Butcher Lukasz Wojtas Robert Pike
09:00AM - 09:20AM	3825458 - Biomass upconversion with functionalized metal-organic frameworks Room: Room 208	Kaushalya Korathotage Eric Bloch
09:00AM - 09:20AM	3821008 - C-H activation at extremes: High- and low-valent multimetallic approaches to C-H bond manipulation Room: Room 212	Hayley Lillo Michela Maiola Joshua Buss
09:05AM - 09:25AM	3817045 - Examination of the donor capabilities of 3,4,5-trifluorophenyl- and 3,5-bis(trifluoromethyl)phenyltris(pyrazol-1-yl)borate ligands Room: Room 236	Paul Fischer Charley Roe Jasmine Stephenson Victor Young, Jr.
09:05AM - 09:25AM	3818962 - Catalytic olefin phosphiranation Room: Room 206	Tiansi Xin Martin-Louis Riu Michael Geeson Christopher Cummins

**Tuesday, March 28, 2023**

09:10AM - 09:40AM	3820422 - Geometric and electronic influences on the reactivity of Mn complexes with aza macrocyclic ligands and beyond Room: Room 209	Timothy Jackson Professor
09:10AM - 09:30AM	3814639 - Gas reagent delivery for organic and medicinal chemistry Room: Sagamore Ballroom 3	Phillip Milner
09:20AM - 09:40AM	- Intermission Room: Room 237	
09:20AM - 09:35AM	- Intermission Room: Room 208	
09:20AM - 09:40AM	3823636 - Tellurolate as an effective Te-atom transfer reagent to assemble the triad of group 5 metal bis(tellurides) Room: Room 212	Shuruthi Senthil Seongyeon Kwon Pavel Zatsepin Michael Gau Patrick Carroll Mu-Hyun Baik Daniel Mindiola
09:20AM - 09:45AM	3827031 - Mechanism of radical initiation in radical SAM enzymes Room: Room 205	Joan Broderick
09:25AM - 09:40AM	- Intermission Room: Room 236	
09:25AM - 09:45AM	3808542 - One- and two-electron bismuth redox catalysis Room: Room 206	Josep Cornella
09:30AM - 09:50AM	- Intermission Room: Sagamore Ballroom 3	
09:30AM - 10:15AM	3826863 - Nuts and bolts of density functional theory for (not only) inorganic chemists Room: Room 210	Elena Jakubikova Professor
09:35AM - 09:55AM	3826234 - Oxidative transformation of organic geopolymers using chlorite and bromate for sustainable energy production Room: Room 208	Katherine Hull Linh Mai Simon Singh Veronica Bracken
09:40AM - 10:00AM	- Intermission Room: Room 209	
09:40AM - 10:00AM	3819826 - Tuning cobalt(II) phosphine complexes to be axially ambivalent Room: Room 236	Jack Thomas-Colwell Bryan Hunter Michael Hill
09:40AM - 10:00AM	3824761 - Looking past the secondary sphere: Relating dynamics to catalytic activity in nickel-substituted rubredoxin, a model hydrogenase Room: Room 237	Ashlee Wertz Riley Stein Peter Moore Hannah Shafaat

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09:40AM - 10:00AM	3824799 - Small molecule activation with porous salts Room: Room 212	Kyle Korman Eric Bloch
09:45AM - 10:00AM	- Intermission Room: Room 206	
09:45AM - 10:15AM	- Intermission Room: Room 205	
09:50AM - 10:10AM	3826141 - Modulating transcription in development and cancer: Transition metal inhibition of transcription factors Room: Sagamore Ballroom 3	Meghan Dukes Robert Holmgran Thomas Meade
09:55AM - 10:15AM	3826853 - Multidimensional catalyst architectures: Effects of interactions between molecular catalytic units on electrocatalytic CO2 conversion Room: Room 208	Jukai Zhou Weixuan Nie Postdoc Charles McCrory
10:00AM - 10:30AM	3823184 - Electron-rich organometallics featuring redox non- innocent bi- and terazulenic $\pi$ -linkers Room: Room 209	Dr. Mikhail Barybin Professor
10:00AM - 10:20AM	3824555 - Multidentate CMPO ligands for f-element separations Room: Room 236	Eric Werner Shannon Biros
10:00AM - 10:20AM	3825420 - Metal affinity comparison of primordial chelatases CbiXS and CfbA Room: Room 237	Jacob Morris Megan Lavigne Matthew Liptak
10:00AM - 10:20AM	3814409 - Novel organosilicon monomers for functional polysilanes Room: Room 206	Rebekka Klausen
10:00AM - 10:20AM	3825526 - Understanding the reactivity, selectivity and deactivation of frustrated Lewis pairs for alkyne semihydrogenation Room: Room 212	Jingyun Ye Megan McEwen
10:00AM - 12:50PM	- Solid-State Inorganic Chemistry: Materials and Design Room: Virtual Session	Narayan Acharya Gabrielle Harmon Viktor V Poltavets , Ph.D. Assistant Professor Kinithi Wickramaratne
10:00AM - 10:20AM	3816271 - Performances of Zr-Al-Ti thin film metallic glass against corrosion when fabricated in layered architecture with thickness in nanoscale Room: Virtual Session	Mohammed Noor-A-Alam Ishraq Shabib
10:10AM - 10:30AM	3827750 - Ru(II) complexes for dual-activity photoinduced therapy applications: Drug delivery and singlet oxygen production with red light Room: Sagamore Ballroom 3	Claudia Turro
10:15AM - 11:00AM	3825544 - Photoluminescence spectroscopy Room: Room 210	Felix Castellano

**Tuesday, March 28, 2023**

10:15AM - 10:35AM	3826430 - Electrochemically controlled %CO incorporation of polyketones derived from carbon dioxide and ethylene Room: Room 208	Brandon Jolly
10:15AM - 10:40AM	3808933 - Rewiring radical SAM enzymes Room: Room 205	Troy Stich Luke Humble
10:20AM - 10:40AM	3826411 - Mechanistic investigation into the activation of Si-H and Si-Si bonds by transition metal complexes Room: Room 236	Morgan Puglisi Serge Schreiner
10:20AM - 10:40AM	3826959 - Computational model for the active site of a novel terminal C-H functionalizing membrane monooxygenase Room: Room 237	Atiya Banerjee Dr. Mehmed Zahid Ertem Chemist John Shanklin Qun Liu
10:20AM - 10:40AM	3807480 - Ligands that support metal-to-carbon dative bonding Room: Room 206	Francois Gabbai
10:20AM - 10:40AM	3825783 - Heterogeneous catalysts designed for reduction of aromatic substrates utilizing organometallic precursors Room: Room 212	Keith Searles
10:20AM - 10:40AM	3820755 - Creating solid solutions of metallocenes: Migration of nickelocene into the ferrocene crystal lattice in the absence of a solvent Room: Virtual Session	Gabrielle Harmon John Hoefler Martha Trujillo Vladimir bakhmutov Janet Bluemel
10:30AM - 11:00AM	3828830 - First proof of Thorpe-Ingold steric effects and surprising electronic effects in the Richman-Atkins cyclization of azamacrocyclic ligands Room: Room 209	Megan Sibley Brandon Wackerle Leonardo Duarte Paul Popelier Colin McMillen Modi Wetzler
10:30AM - 10:50AM	3828211 - New tools for imaging biometals: Shining light on cellular magnesium and more Room: Sagamore Ballroom 3	Michael Brady Elsy El Khoury Symara de Melo Silva Daniela Buccella
10:35AM - 10:55AM	3828541 - Small molecule activation coupled with metal carbonyl reduction: Progress towards a molecular CO <sub>2</sub> to methanol cascade Room: Room 208	Allison Smith Jake Sirlin Andressa Müller Renato Sampaio Javier Concepcion Gerald Meyer Alexander Miller
10:40AM - 11:00AM	3828005 - Characterizing the kinetics and thermodynamics of Fe(III)-thiolate reactions near physiological pH Room: Room 236	Levi Ekanger

**Tuesday, March 28, 2023**

10:40AM - 11:00AM	3828979 - Earth-abundant transition metal catalysts for bio-inspired oxidative transformations Room: Room 237	Heather Lucas
10:40AM - 11:00AM	3826260 - Heterocyclic fused carbenium ions as carbon-based Lewis acids Room: Room 206	Aslam Shaikh Jose Veleta Thomas Gianetti
10:40AM - 11:00AM	3825955 - REMP catalysts with unusual ancillary ligands Room: Room 212	Rinku Yadav Alec Esper Dr. Ion Ghiviriga Scientist Khalil Abboud Daniel Lester Christian Ehm Adam Veige
10:40AM - 11:05AM	3819882 - How nature fertilizes the earth: The nitrogenase mechanism, and the roles played by the FeMo-Cofactor CFe6 core and 'capping' Mo and Fe ions Room: Room 205	Brian Hoffman
10:40AM - 11:00AM	3825316 - Electrocatalytic oxygen evolution reaction (OER) and hydrogen evolution reaction (HER) using earth-abundant metal oxide catalyst Room: Virtual Session	Narayan Acharya Surendra Karki Farshid Ramezanipour
10:50AM - 11:10AM	3821537 - Engineering intracellular iron sequestration to target cancer growth Room: Sagamore Ballroom 3	Elisa Tomat
11:00AM - 11:40AM	- Concluding Remarks Room: Room 209	
11:00AM - 11:20AM	3816718 - Multiple reaction pathways for isolable carbenes and NH containing materials Room: Room 206	John Protasiewicz
11:00AM - 11:20AM	3827697 - Withdrawn Room: Room 212	
11:00AM - 11:20AM	3827443 - Synthesis of Na <sub>0.4</sub> WS <sub>2</sub> and stability of the metastable 2M-WS <sub>2</sub> phase Room: Virtual Session	Joseph McBride Sabin Gautam Piumi Samarawickrama Jifa Tian Brian Leonard Associate Professor
11:05AM - 11:30AM	3817046 - Mechanistic and spectroscopic studies of nitrate reductase Room: Room 205	Jarett Wilcoxon
11:20AM - 11:40AM	3817118 - Mesoionic carbenes as powerful organocatalysts Room: Room 206	Guy Bertrand



**Tuesday, March 28, 2023**

11:20AM - 11:40AM	3827020 - Methylation of mercury by Pseudodesulfovibrio mercurii exposed to dissolved and nanoparticulate mercuric sulfide with the presence of selenium Room: Room 212	MD SAYEDUZZAMAN SARKER SARKER Habibollah Fakhraei
11:20AM - 11:30AM	- Intermission Room: Virtual Session	
11:30AM - 11:55AM	3835298 - Discovery and engineering of radical halogenases Room: Room 205	Michelle Chang
11:30AM - 11:50AM	3823475 - Active electrocatalysts based on structurally ordered oxides for oxygen-evolution reaction Room: Virtual Session	Farshid Ramezanipour Surendra Karki Ram Hona
11:40AM - 12:00PM	3818877 - Domesticating the reactivity of non-octet carbon toward plethora of chemistry Room: Room 206	Professor Tiow-Gan Ong
11:50AM - 12:10PM	3822989 - Oxygen-vacancy ordered perovskite oxide as a highly efficient hydrogen evolution electrocatalyst Room: Virtual Session	Kinithi Wickramaratne Farshid Ramezanipour
12:10PM - 12:30PM	3825152 - Quasi-2D oxides as bifunctional electrocatalysts for water splitting Room: Virtual Session	Md. Sofiul Alom Graduate Student Farshid Ramezanipour
12:30PM - 12:50PM	3826278 - Impact of structural symmetry on electrocatalysis for water splitting using two isoelectronic oxides Room: Virtual Session	Chandana Kananke Gamage Farshid Ramezanipour
02:00PM - 06:00PM	- 2023 Alfred Bader Award in Bioinorganic Chemistry: Symposium in Honor of R. David Britt: Room: Room 209	R Britt Alison Butler Professor Daniel Suess
02:00PM - 02:25PM	3817048 - Advancing metallo-protein function through collaborative with R. David Britt Room: Room 209	Michael Marletta
02:00PM - 05:45PM	- 2023 Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Robert J. Gilliard, Jr.: Room: Room 206	Roman Dobrovetsky Todd Hudnall
02:00PM - 02:05PM	- Introductory Remarks Room: Room 206	
02:00PM - 05:30PM	- 2023 ACS Award in the Chemistry of Materials: Symposium in Honor of Reshef Tenne: Room: Room 238	Maya Bar Sadan Sara Skrabalak Mauricio Terrones
02:00PM - 02:30PM	3810473 - Unconventional applications of 2D materials from memory devices to Covid sensors and wearable health Room: Room 238	Deji Akinwande

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02:00PM - 04:20PM	- Organometallic Chemistry: Experimental & Computational Mechanistic Investigation Room: Room 212	Dr. Pere Miro Assistant Professor Brooke Otten Nora Radu
02:00PM - 02:20PM	3802085 - Mechanistic investigation of the rhodium-catalyzed transfer hydroarylation between tertiary alcohols and ketones Room: Room 212	Marius Lutz Sven Roediger Valentina Gasser Bill Morandi Prof.
02:00PM - 05:35PM	- Solid-State Inorganic Chemistry: Materials and Design Room: Room 237	Dr. Georgiy Akopov Assistant Professor Dr. Matthew S. Chambers Postdoctoral Research Associate Viktor V. Poltavets, Ph.D. Assistant Professor Surya Vatti
02:00PM - 02:20PM	3824342 - Fluorescent chemosensor based on tin(IV) halide complexes for multi-halide sensing applications Room: Room 237	Wooseok Ki Andrew Wu Safah Panah Patrick Hillesheim
02:00PM - 04:40PM	- Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Justin Wilson: Room: Sagamore Ballroom 3	Dr. Eszter Boros Assistant Professor Timothy C. Johnstone
02:00PM - 02:20PM	3817077 - Chelation platform development for emerging medical radionuclides at Oak Ridge National Laboratory Room: Sagamore Ballroom 3	Megan Simms Briana Schrage Alexander Ivanov R&D staff scientist Caroline Lara Dr. Nikki A. Thiele
02:00PM - 05:00PM	- Physical Inorganic Tutorials: Room: Room 210	Ryan O'Donnell Jeffrey Rack
02:00PM - 02:45PM	3827892 - Principles of transient absorption spectroscopy: Strategies and pitfalls Room: Room 210	Claudia Turro
02:00PM - 04:20PM	- Sustainable Energy and Environment: Electrochemical Energy Storage and Conversion Room: Room 208	Dr. Allen Appleby, Ph.D., FACS Professor Jorge L. Colon, Ph.D. Professor Sameh Elsaidi Kenneth Takeuchi
02:00PM - 02:20PM	3823654 - Sustainable prevention and remediation of plant nutrients via sorbent-to-fertilizer technology Room: Room 208	Dr. Allen Appleby, Ph.D., FACS Professor Ciara Kelley Patrick Kitzel

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02:00PM - 04:40PM	- Nanoscience: Synthesis, Characterization and Properties of Nanomaterials and Their Hierarchical Structures: Room: Room 236	Annie Regan Alison Roth Brian Trewyn
02:00PM - 02:20PM	3810942 - From 1D silver nanowires to 3D electrically conductive and mechanically resistant lightweight aerogel architectures Room: Room 236	JP Simonato
02:05PM - 02:25PM	3824618 - New vistas in carbon-sulfur bond forming reactions as part of a green materials economy Room: Room 206	Rhett Smith
02:20PM - 02:40PM	3814969 - Exploring the reaction between gold(I) trinuclear complexes and methyl iodide Room: Room 212	Brooke Otten
02:20PM - 02:40PM	3808031 - Synthesis and crystal growth of luminescent lanthanide iodothiosilicates Ln <sub>3</sub> (SiS <sub>4</sub> ) Room: Room 237	Dr. Georgiy Akopov Assistant Professor Nethmi Hewage Gayatri Viswanathan Roger Lalancette Kirill Kovnir
02:20PM - 02:40PM	3816343 - New approaches for implementing short-lived actinides in medicine Room: Sagamore Ballroom 3	Joshua Woods Alexia Cosby Jennifer Wacker Trevor Arino Rebekah Aldrich Rebecca Abergel
02:20PM - 02:40PM	3821545 - Earth-abundant electrocatalysts for the oxygen evolution reaction (OER) supported on nanostructured layered inorganic nanomaterials Room: Room 208	Jorge L. Colon, Ph.D. Professor
02:20PM - 02:40PM	3814164 - Withdrawn Room: Room 236	
02:25PM - 02:50PM	3825590 - Metallobiochemistry and RNA: The platinum expansion Room: Room 209	Victoria DeRose Hannah Pigg Matthew Yglesias Andres Guerrero Katelyn Alley
02:25PM - 02:45PM	3821101 - Stereochemical outcomes in the mechanochemical environment: The case of main-group allyl complexes Room: Room 206	Timothy Hanusa

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02:30PM - 03:00PM	3812845 - Symmetry progression and possible polar metallicity in NiPS3 under pressure Room: Room 238	Janice Musfeldt Nathan Harms Takahiro Matsuoka Subhasis Samanta Amanda Clune Kevin Smith Amanda Haglund Erxi Feng Huibo Cao Jessie Smith David Mandrus Heung-Sik Kim Zhenxian Liu
02:40PM - 03:00PM	3825403 - Nucleation mechanisms and redox profiles of polyoxovanadate-alkoxides clusters Room: Room 212	Dr. Pere Miro Assistant Professor S M GULAM RABBANI Sable Schulz Katherine Dalton
02:40PM - 03:00PM	3826452 - Molten salt synthesis of nanophosphors with high quantum efficiency Room: Room 237	Yuchen Zhang Yuanbing Mao
02:40PM - 03:00PM	3807294 - From isotopes to accelerators Room: Sagamore Ballroom 3	Dr. Eva Birnbaum , PhD Program Manager
02:40PM - 03:00PM	3826844 - Smartly engineered materials for nuclear waste management Room: Room 208	Sameh Elsaidi
02:40PM - 03:00PM	3814278 - Sustainability and quality: Hydrothermal injection synthesis of magnetic nanomaterials for medicine Room: Room 236	Annie Regan Professor Nguyen TK Thanh , FRSC FInstP FIMMM FRSB Professor Peter Dunne
02:45PM - 03:05PM	3808449 - (Co-)Electrocatalytic molecular systems for the reduction of carbon dioxide Room: Room 206	Charles Machan Shelby Hooe Juan Moreno Amelia G Reid Graduate Student Connor Koellner Megan Moberg
02:45PM - 03:30PM	3826740 - X-ray absorption spectroscopy Room: Room 210	Josh Vura-Weis
02:50PM - 03:15PM	3821017 - Investigating the copper-dependent behavior of proinsulin C-peptide Room: Room 209	Marie Heffern

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03:00PM - 03:30PM	3833454 - Preventing adhesion of bacteria on medical grade polymers using hydrophilic zwitterionic polymer coatings Room: Room 238	Richard Kaner Brian McVerry Ethan Rao Na He
03:00PM - 03:20PM	3825586 - Vanadium alkylidene catalysts for olefin metathesis Room: Room 212	Samuel Fosu Emma Saucerman Wesley Farrell Bess Vlasisavljevich
03:00PM - 03:20PM	3828204 - Bi <sup>3+</sup> -doped phosphate phosphor with broadband NIR emission Room: Room 237	hexi zhang Yuanbing Mao
03:00PM - 03:20PM	3816284 - Metal-mediated, autolytic amide bond cleavage: An emerging strategy to synthesize and activate metallodrugs Room: Sagamore Ballroom 3	Dariusz Smilowicz Shawn Eisenberg Rochelle LaForest Dr. Eszter Boros Assistant Professor
03:00PM - 03:20PM	3828547 - Withdrawn Room: Room 208	
03:00PM - 03:20PM	3816808 - Synthesis and characterization of quaternary lead chalcogenide nanocrystals Room: Room 236	Alison Roth Jemima Lartey Eunbyeol Gi PhD Candidate Silvia Mena Gonzalo Guirado Richard Schaller Emily Smith Javier Vela
03:00PM - 03:40PM	- Electrochemistry: Room: Virtual Session	Amy Marschilok Abbas Vali
03:00PM - 03:20PM	3806753 - Epitaxial electrodeposition of wide bandgap semiconductors Room: Virtual Session	Bin Luo Avishek Banik Eric Bohannon Jay Switzer
03:05PM - 03:25PM	3813922 - Ethylene dimerization and oligomerization using bis(phosphino)boryl supported Ni complexes as homogeneous catalysts Room: Room 206	T Brent Gunnoe Amor Rodríguez Fanji Kong Pablo Rios Conner Hauck Diane Dickie Laurel Habgood
03:15PM - 03:40PM	3822516 - Unusual mechanisms and outcomes in reactions of dioxygen-activating nonheme iron enzymes Room: Room 209	Joseph Bollinger Carsten Krebs Amie Boal Alexey Silakov

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03:20PM - 03:40PM	3827209 - Electronic structure contributions to the ground- and excited-state reactivity of nickel cross-coupling catalysts Room: Room 212	Ryan Hadt
03:20PM - 03:40PM	3825338 - Anti-thermal quenching luminescence of Sc <sub>2</sub> Mo <sub>3</sub> O <sub>12</sub> :Eu <sup>3+</sup> induced by energy transfer and negative thermal expansion properties Room: Room 237	Forough Jahanbazi
03:20PM - 03:40PM	- Intermission Room: Sagamore Ballroom 3	
03:20PM - 03:40PM	3828687 - Inkjet printed gold nanoparticle inks for electrochemical sensors Room: Room 208	Md Tawabur Rahman Jessica Bone Thomas Roussel Judith Jenkins Aron Huckaba
03:20PM - 03:40PM	- Intermission Room: Room 236	
03:20PM - 03:40PM	3827807 - Ground and excited state redox potentials and electrochemical behavior of [Ru(phen) <sub>2</sub> (IP-nT)] <sup>2+</sup> complexes as a function of thiophene chain length Room: Virtual Session	Abbas Vali Houston Cole Graduate Student Wesley McDonald Dr. Elamparuthi Ramasamy, Ph.D. Research Scientist Alisher Talgatov Colin Cameron Sherri McFarland Professor
03:25PM - 03:45PM	3814379 - FLPs and Haber-Bosch chemistry Room: Room 206	Douglas Stephan
03:30PM - 04:00PM	- Intermission Room: Room 238	
03:30PM - 04:15PM	3828472 - Physical inorganic tutorial: Crystallography Room: Room 210	Michael Shatruk
03:40PM - 03:55PM	- Intermission Room: Room 209	
03:40PM - 04:00PM	3820309 - Mechanism of tungsten-catalyzed cyclic polyacetylenes synthesis Room: Room 212	Alec Esper Alvaro Montoya Alexander Angerhofer Christian Ehm Adam Veige
03:40PM - 03:55PM	- Intermission Room: Room 237	
03:40PM - 04:00PM	3813741 - Stability in the precarious field of cancer theranostics Room: Sagamore Ballroom 3	Daniel Thorek

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03:40PM - 04:00PM	3828629 - Computational and experimental design of quinones for electrochemical CO <sub>2</sub> capture and concentration Room: Room 208	Alessandra Zito Jenny Yang
03:40PM - 04:00PM	3818488 - Visible-light responsive arylazopyrazole-tagged phenylalanine based metallogels Room: Room 236	Kesete Ghebreyessus Mikayla Browning
03:45PM - 04:05PM	- Intermission Room: Room 206	
03:55PM - 04:20PM	3814781 - Elucidating metal sequestration by calprotectin Room: Room 209	Elizabeth Nolan
03:55PM - 04:15PM	3828866 - Tetranuclear Cu(I) clusters with tunable emissions based on remote steric control Room: Room 237	Benjamin Washer Yuichiro Watanabe Matthias Zeller Sergei Savikhin Lyudmila Slipchenko Alexander Wei
04:00PM - 04:30PM	3811767 - Solar energy conversion and optoelectronics enabled by the halide perovskites Room: Room 238	Mercouri Kanatzidis
04:00PM - 04:20PM	3828367 - Mechanistic insights into difficult palladium catalyzed triflation of aryl groups Room: Room 212	Joshua Thedford Melanie Sanford
04:00PM - 04:20PM	3822454 - Photoluminescence of high- and mid-valent alkoxide complexes of uranium Room: Sagamore Ballroom 3	Robert Lewis Leyla Valerio William Brennessel Ellen Matson
04:00PM - 04:20PM	3828975 - Two-electron transition metal based redox mediator for dye-sensitized solar cells Room: Room 208	Niharika Dalpati Graduate Student Ravinder Kaur Jared Delcamp Byron Farnum
04:00PM - 04:20PM	3817787 - Speciation of metal-carboxylate precursors under nanocrystal synthesis conditions Room: Room 236	Eunbyeol Gi PhD Candidate Robben Wang Alberto Rojas-Hernandez Javier Vela
04:05PM - 04:25PM	3815539 - Monobridged A <sub>2</sub> H <sub>2</sub> structures: A micro-chapter in the history of main group inorganic chemistry Room: Room 206	Henry Schaefer
04:15PM - 04:35PM	3820509 - Development of defect related NIR emitting phosphors for in vivo bioimaging applications Room: Room 237	Nimai Pathak Abdulelah Alolayan Yuanbing Mao
04:15PM - 05:00PM	3817243 - Cyclic voltammetry basics for the inorganic chemist Room: Room 210	Jillian Dempsey

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04:20PM - 04:45PM	3822977 - Engineered artificial metalloproteins Room: Room 209	Andrew Borovik
04:20PM - 04:40PM	3815555 - Chelation of heavy s-, p-, and f-block metal ions: Fundamental studies and applications Room: Sagamore Ballroom 3	Justin Wilson
04:20PM - 04:40PM	3819456 - Colloidal synthesis, energy gap tuning, and carrier dynamics of Ge-Si-Sn nanoalloys with visible to near IR photoluminescence Room: Room 236	Drew Spera Griffin Spence David Pate Corentin Villot Umit Ozigur Ka Un Lao Indika Arachchige
04:25PM - 04:45PM	3817018 - Alkali metal heavyweights: Potential big hitters in homogeneous catalysis Room: Room 206	Prof. Robert E. Mulvey Professor of Inorganic Chemistry
04:30PM - 05:00PM	3833436 - Enhanced optical response by atomic metal- semiconductor interfaces Room: Room 238	Doron Naveh
04:35PM - 04:55PM	3821308 - Energy landscape of $\text{Li}_x\text{La}_{2/3-x/3}\text{TiO}_3$ (LLTO) synthesis explored via various precursors Room: Room 237	Dr. Matthew S. Chambers Postdoctoral Research Associate Jiadong Chen Robert Sacci Rebecca McAuliffe Wenhao Sun Gabriel Veith
04:45PM - 05:10PM	3825204 - Electron paramagnetic resonance (EPR) for elucidation of the mechanism of water oxidation catalysts Room: Room 209	Bryan Hunter
04:45PM - 05:05PM	3823262 - Synthesis and chemistry of transition metal complexes containing heavier main group atoms Room: Room 206	T. Don Tilley
04:55PM - 05:15PM	3801356 - Ordered mesoporous carbon@TiO <sub>2</sub> composite with direct interface as an efficient photocatalyst Room: Room 237	Surya Vatti Catherine Schrader Dr. Mariam Ismail Assistant Professor of Chemistry
05:00PM - 05:30PM	3810694 - Semiconductors and metals at the atomic limit Room: Room 238	Joshua Robinson
05:05PM - 05:25PM	3815509 - Redox non-innocent cyclopentadienyl ligands as electron reservoirs for sandwich complexes Room: Room 206	Eunsung Lee



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05:10PM - 05:35PM	3816002 - Structure-function studies of the O <sub>2</sub> -evolving complex in photosystem II from <i>Synechocystis</i> sp. PCC 6803 Room: Room 209	Gary Brudvig David Flesher Christopher Gisriel Jimin Wang Richard Debus
05:15PM - 05:35PM	3820716 - Hybrid bronzes Room: Room 237	Wedage Dayaratne Raul Torres-Cadena Bennett Schmitt Suchen Wan Nicole Musielak Emma Westrick Dr. Adam Jaffe Assistant Professor
05:25PM - 05:45PM	3808463 - Exploring the photochemistry of diamidocarbenes toward alkanes, silanes, and heteroarenes Room: Room 206	Todd Hudnall Tharushi Perera Liam Taylor
05:35PM - 06:00PM	3819474 - Proton transfer network at the subunit interface of ribonucleotide reductase supports radical transport Room: Room 209	Chang Cui David Song JoAnne Stubbe Professor Daniel G. Nocera Patterson Rockwood Professor of Energy