



## ACS Spring 2023

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

### Wednesday, March 29, 2023

08:00AM - 11:00AM	- Nanoscience: Applications of Nanomaterials: Room: Room 212	Jorge L Colon , Ph.D. Professor Zaid Haddadin Brian Trewyn
08:00AM - 08:20AM	3816760 - Nanoscale coordination polymers deliver immuno modulators for cancer immunology Room: Room 212	Xiaomin Jiang
08:00AM - 11:00AM	- Coordination Chemistry: Ligand Design, Synthesis, and Reactivity: Room: Room 208	Dr. Rebecca E Black Assistant Professor of Chemistry Marsha Massey Anna Svetlanova-Larsen Christian Wallen
08:00AM - 08:20AM	3813268 - Modular synthesis of metal-sulfonamidate complexes for activation of industrially-relevant small protic molecules Room: Room 208	Morgan Hern Rebecca Foley Carter Rodgers Christian Wallen
08:00AM - 11:20AM	- Coordination Chemistry: Catalysis and Applications: Room: Room 205	Daniel Bim C. Michael McGuirk William McNamara Anna Svetlanova-Larsen
08:00AM - 08:20AM	3816689 - Multivariate flexible framework with near total usable hydrogen capacity through a reduced pressure swing process at 77 K Room: Room 205	C. Michael McGuirk
08:00AM - 11:00AM	- Coordination Chemistry: Electronic Structure, Magnetism, and Spectroscopy: Room: Sagamore Ballroom 3	Brendon McNicholas Austin Scharf Michael Shatruk Anna Svetlanova-Larsen

**Wednesday, March 29, 2023**

08:00AM - 08:20AM	3801692 - Variational and perturbative treatments of spin-orbit coupling in late-row element-containing octahedral complexes Room: Sagamore Ballroom 3	Chad Hoyer Lixin Lu Hang Hu Kirill Shumilov Shichao Sun Stefan Knecht Xiaosong Li
08:00AM - 11:25AM	- Coordination Chemistry: Lanthanide and Actinide Chemistry: Room: Room 206	Bianca Ramirez Jerome R. Robinson Assistant Professor of Chemistry Eric Villa Bess Vlasisavljevich
08:00AM - 08:05AM	- Introductory Remarks Room: Room 206	
08:00AM - 10:00AM	- Organometallic Chemistry: Structure & Bonding Room: Room 209	Michael Jensen Nora Radu Joseph Sadighi
08:00AM - 08:20AM	3810410 - Unexpected bond reshaping of the pincer anionic carbodicyclobutene in transition metal coordination Room: Room 209	Cheng-Han Yu Wen-Ching Chen Glenn Yap Gernot Frenking Lili Zhao Professor Tiow-Gan Ong
08:00AM - 11:00AM	- Undergraduate Research at the Frontiers of Inorganic Chemistry: Room: Room 236	Chip Nataro Marshall R. Metzgar Professor
08:00AM - 08:20AM	3822636 - First-principles calculations as a noninvasive probe of vermilion and cinnabar surfaces in art conservation science Room: Room 236	amalthea trobare Aria Tauraso Lilly Kidd Jessica Heimann SCIART Postdoctoral Fellow Zeev Rosenzweig Joseph Bennett
08:00AM - 10:20AM	- Bioinorganic Chemistry from Cell to Organism: Room: Room 237	Craig Bayse Shawn Burdette Rebeca Fernandez Dr Stephen A Koch Professor of Chemistry
08:00AM - 08:20AM	3807823 - Amyloid precursor protein E2 domain possesses peroxynitrite scavenging activity Room: Room 237	Andrew Poore Eli Zuercher Gabriel Bury Cuong Nguyen Yulia Pushkar Shiliang Tian
08:00AM - 10:40AM	- Nanoscience: Synthesis, Characterization and Properties of Nanomaterials and Their Hierarchical Structures: Room: Room 238	Claire Block Benjamin Coleman Brian Trewyn

**Wednesday, March 29, 2023**

08:00AM - 08:20AM	3819799 - Synthesis of faceted metal oxides with unique surface properties in catalysis and carbon capture Room: Room 238	Ryan Richards
08:05AM - 08:25AM	3827113 - New methods for the synthesis of soluble actinide halide complexes Room: Room 206	James Moore Hope Sartain David Morris Brian Scott Dr. Jaqueline L Kiplinger Laboratory Fellow
08:20AM - 08:40AM	3816953 - Tuberculosis vaccine delivery via stabilization in a supramolecular metal coordination complex Room: Room 212	Sneha Kumari Jonathan Garcia Priyanka Basak Ryenne Ehrman Orikeda Trashi Ikeda Trashi Thomas Howlett Yalini Wijesundara Shailendra Koirala Gabriele Meloni Jeremiah Gassensmith
08:20AM - 08:40AM	3819888 - Phosphine oxidation assisted by a tetradentate bis(amido)bis(phosphine) iron(II) complex Room: Room 208	Jeremiah E Stevens Ph.D. Candidate Gillian Hatzis Maria Seith Christine Thomas
08:20AM - 08:40AM	3814977 - Hydrogen evolution reaction enhancements via cobalt complexation with a softer polypyridyl ligand in neutral water Room: Room 205	Dan McCool Ping Wang Guangchao Liang Bruno Donnadieu Charles Webster Xuan Zhao
08:20AM - 08:40AM	3825380 - Illuminating ligand field contributions to molecular qubit spin relaxation via T1 anisotropy Room: Sagamore Ballroom 3	Nathanael Kazmierczak Ryan Hadt
08:20AM - 08:40AM	3823591 - Length vs. strength of three-center M–H–B bonding in heteroleptic scorpionate complexes Room: Room 209	Vahdat Jahed Ahmed Aboelenen Michael Jensen
08:20AM - 08:40AM	3827409 - Withdrawn Room: Room 236	
08:20AM - 08:40AM	3823344 - Ternary complexes as zinc photocages Room: Room 237	Shawn Burdette Erin Hickey Chelsea Barr Austin Shigemoto

**Wednesday, March 29, 2023**

08:20AM - 08:40AM	3819794 - Comparative study of graphene oxide synthesized via improved and simplified Hummer's methods: Effects of surface areas and particle sizes of graphene nanoplatelets and graphite flakes as precursors Room: Room 238	Dr. Dineshkumar Sengottuvelu Post Doctoral Associate Oubayda Sras Rami Al-Shughayer Grace Rushing Hunain Alkhateb Sasan Nouranian Ahmed Al-Ostaz
08:25AM - 08:45AM	3825507 - Formulation and water content of thorium triflate Room: Room 206	Fynnegan Cooper Emily Mikeska Julia Martin Ronald Grimm James Blakemore
08:40AM - 09:00AM	3816960 - Biofriendly synthesis of manganese-doped ZIF with reduced cytotoxicity and enhanced immunogenicity Room: Room 212	Thomas Howlett Ryane Ehrman Sneha Kumari Yalini Wijesundara Orikeda Trashi Fabian Castro Herbert Jeremiah Gassensmith
08:40AM - 09:00AM	3828963 - Preparation of bifunctional 8-hydroxyquinoline-7carboxamide chelators based on the TAME (TAME=1,1,1-tris(aminomethyl)ethane) framework for bioconjugation and organelle targeting Room: Room 208	Roy Planalp
08:40AM - 09:00AM	3819450 - Catalytic hydrogenation and hydroboration of terminal alkenes by a pincer-ligated cobalt (II) complex Room: Room 205	Matthew Fitzsimmons Azamat Yessengazin Gillian Hatzis Christine Thomas
08:40AM - 09:00AM	3817613 - Theoretical characterization of Mössbauer parameters of synthetic and enzymatic nonheme diiron complexes Room: Sagamore Ballroom 3	Atiya Banerjee Dr. Mehmed Zahid Ertem Chemist John Shanklin Qun Liu
08:40AM - 09:00AM	3826738 - Unusual metal-metal and metal-element bonds in low-valent dinickel complexes Room: Room 209	Joseph Sadighi Neil Dodd Mina Song John Bacsá Thomas Gray
08:40AM - 09:00AM	3818039 - Using carbodiphosphorane catalysts to facilitate the hydroboration of isocyanates Room: Room 236	Ben Janda Allegra Liberman-Martin
08:40AM - 09:00AM	3825842 - Speciation studies and anticancer activities of chiral Au(III)DuPhos complexes Room: Room 237	Adedamola Arojoye Jong Kim Chibuzor Olelewe Sean Parkin Samuel Awuah

**Wednesday, March 29, 2023**

08:40AM - 09:00AM	3820385 - Solution-phase synthesis of goniopolar PdSe2 nanomaterials Room: Room 238	Cullen Irvine Joshua Goldberger
08:45AM - 09:05AM	3817160 - Solid state structures towards understanding the role M(IV) (M=U, Th, Zr, Hf)-TcO4 connectivity in Tc mobility in nuclear fuel reprocessing and the environment Room: Room 206	Mohammad Shohel Jenna Bustos May Nyman
09:00AM - 09:20AM	3814541 - Leveraging symmetry-violated nano-optical metasurfaces for the far field detection of protein-composed chiral media Room: Room 212	Zaid Haddadin Jiuk Byun Dae Yong Kim Anna My Nguyen Lisa Poulikakos
09:00AM - 09:20AM	3821872 - Investigating microwave synthesis for coupling benzimidazole with pyridines to form NHC ligand precursors Room: Room 208	Marsha Massey Alec Filson Lamon Wade Alexa Ramick Rebecca Rodriguez-Palacio Haley Cox Elisabeth Hicklin Noah Taylor Nicholas Steinmetz Andrew Igbokidi
09:00AM - 09:20AM	3820514 - Intramolecular vinylidene addition to alkyne by zinc transmetalation Room: Room 205	Sourish Biswas Abigail Soliven Christopher Uyeda
09:00AM - 09:20AM	3823859 - Coordination compounds of copper(II) and vanadium(V) as optical probes for the measurement of homocysteine and sarin simulant Room: Sagamore Ballroom 3	SNEHASISH DEBNATH Pabitra B. Chatterjee
09:00AM - 09:20AM	3824515 - Impact of Lewis acid-base adduct formation on the durability and reactivity of a ruthenium formyl complex Room: Room 209	Jake Sirlin Andressa Müller Renato Sampaio Gerald Meyer Javier Concepcion
09:00AM - 09:20AM	3827357 - Relating the structures and aqueous solution reactivities of two Anderson-type polyoxometalate ions Room: Room 236	Eric Villa
09:00AM - 09:20AM	- Intermission Room: Room 237	
09:00AM - 09:20AM	- Intermission Room: Room 238	

**Wednesday, March 29, 2023**

09:05AM - 09:25AM	3819042 - Immobilization of molecular uranium complexes on carbon electrodes Room: Room 206	T. Davis Curry Julia Martin Emily Mikeska Ronald Grimm James Blakemore
09:20AM - 09:40AM	- Intermission Room: Room 212	
09:20AM - 09:40AM	3801774 - Cyclen-based N,N-alkylated spirocyclic chelates for late first-row transition metals Room: Room 208	Alexander M Brown Graduate Student Casey Chan Kayden Obsitnik Jana Butman Natasha Vargo Jerome R. Robinson Assistant Professor of Chemistry
09:20AM - 09:40AM	3820832 - 4H <sup>+</sup> /4e <sup>-</sup> electron-coupled-proton buffers based on mononuclear Cu complexes Room: Room 205	Tong Wu Isaac Garcia-Bosch
09:20AM - 09:40AM	3828525 - Investigation of quantum clock transitions in high-symmetry lanthanide complexes as molecular electron spin qubits Room: Sagamore Ballroom 3	Miguel Gakiya-Teruya Robert Stewart Stephen Hill Michael Shatruk
09:20AM - 09:40AM	3826129 - Synthesis and characterization of low-valent uranium complexes supported by aryl-substituted silylamide ligands Room: Room 209	Dr Erik D Reinhart Postdoctoral Research Associate Aaron Tondreau James Boncella
09:20AM - 09:35AM	- Intermission Room: Room 236	
09:20AM - 09:40AM	3825999 - Iron chelator and fluorophore peptide bioconjugates for the study of cellular iron metabolism Room: Room 237	Leonid Povolotskiy Lia Tesfay Son Nguyen Ann Cowan Emily Andrews Harish Vashisth Suzy Torti Roy Planalp
09:20AM - 09:40AM	3821026 - Tracking down and characterizing a hydride (or hydrogen, or proton?) in the atomically-precise Au <sub>9</sub> (PPh <sub>3</sub> ) <sub>8</sub> <sup>3+</sup> nanocluster Room: Room 238	Hanna Morales Ph.D. Candidate Christopher Johnson Associate Professor
09:25AM - 09:45AM	3827467 - Variational Breit corrections to lanthanide and actinide contraction Room: Room 206	Chad Hoyer Hang Hu Stefan Knecht Xiaosong Li

**Wednesday, March 29, 2023**

09:35AM - 09:55AM	3816481 - Spin-phonon control over electron spin relaxation via vibrational symmetry perturbations in ruffled copper porphyrins Room: Room 236	Nathan Lopez Nathanael Kazmierczak Kaitlin Luedecke Ryan Hadt
09:40AM - 10:00AM	3826468 - Enhanced nanobubble formation: Gold nanoparticle conjugation to Q? virus-like particles Room: Room 212	Perouza Parsamian
09:40AM - 10:00AM	3828628 - C3 -> Cs: Breaking the symmetry of tren ligands Room: Room 208	Ms Marilyn Naeem Graduate Student David Manke
09:40AM - 10:00AM	3818267 - Supramolecular incarceration and extraction of tetrafluoroberyllate from water by nanojars Room: Room 205	Professor Gellert Mezei Professor Wisam Al Isawi Ph.D. Candidate Matthias Zeller
09:40AM - 10:00AM	3823712 - Broken-symmetry fully self-consistent GW: Analysis of spin contamination, extraction of effective magnetic Hamiltonians, and evaluation of Neel temperatures in solid antiferromagnets Room: Sagamore Ballroom 3	Pavel Pokhilko Dominika Zgid
09:40AM - 10:00AM	3828536 - Hydrolysis of ZIF-8 crystal structure: An in-depth perspective Room: Room 209	Niladri Talukder Yudong Wang Bharath Babu Nunna Eon Soo Lee
09:40AM - 10:00AM	3823418 - Dissecting the metal-associated biological functions of the proinsulin C-peptide hormone Room: Room 237	Rebeca Fernandez Jessica San Juan Nathaniel Harder Marie Heffern
09:40AM - 10:00AM	3822059 - Exploring the complex chemistry and degradation of ascorbic acid in aqueous nanoparticle synthesis Room: Room 238	Debashree Roy Hannah Johnson Natalie Yaw Matthew Hurlock Qiang Zhang Liane Moreau
09:45AM - 10:05AM	- Intermission Room: Room 206	
09:55AM - 10:15AM	3823190 - Polyphenolic prevention of deoxyribose damage using spectroscopic methods Room: Room 236	Krishna Patel Madison Vicente Dr. Julia Brumaghim Professor
10:00AM - 10:20AM	3827274 - Bifunctional near-infrared light responsive gold nanorods for phototherapy of gram-negative Escherichia coli Room: Room 212	Mohammad Azhar Mehfooz Joel Ybe Jeffrey Zaleski
10:00AM - 10:20AM	3813135 - Reactivity, mechanism, and active intermediate of binuclear u-oxo Mo(V) catalyzed sulfur atom transfer reaction Room: Room 208	Ziyi Zhao Eunsuk Kim

**Wednesday, March 29, 2023**

10:00AM - 10:20AM	3820912 - Controlling the reactivity of nickel-bipyridine photoredox catalysts Room: Room 205	Daniel Bim David Cagan Brendon McNicholas Ryan Hadt
10:00AM - 10:20AM	3832547 - Withdrawn Room: Sagamore Ballroom 3	
10:00AM - 10:20AM	3828454 - Metallation of antimicrobial piscidins imbedded in lipid bilayers: Observations from molecular dynamics simulations Room: Room 237	Ana Dreab Craig Bayse
10:00AM - 10:20AM	3825366 - Pore structure control in mesoporous metal oxides synthesized by non-hydrolytic sol-gel method Room: Room 238	Michal Marszewski Livina Itheme
10:05AM - 10:25AM	3825531 - Soft-donor tris-dipicolinamides and tris-dithiopicolinamides derived from tris(2-aminoethyl)amine (tren) for f-element complexation and AnIII/LnIII separation from used nuclear fuel Room: Room 206	David Ayodele Rene Panzer Indranil Chakraborty Christopher Dares Travis Grimes Konstantinos Kavallieratos
10:15AM - 10:35AM	3823851 - Exploring the potential of N,N-disubstituted benzoquinone imines for electrochemical carbon dioxide capture Room: Room 236	Jesus Galeana Alessandra Zito Jenny Yang
10:20AM - 10:40AM	3827920 - Anticancer drug delivery using layered zirconium phosphate nanoparticles Room: Room 212	Jorge L. Colon, Ph.D. Professor Julissa González-Villegas
10:20AM - 10:40AM	3826624 - Ru(II) complexes bearing bulky BIPHEP-type ligands: Synthesis, x-ray diffraction analysis, and performance in alcohol acceptorless dehydrogenation Room: Room 208	Dr. Rebecca E. Black Assistant Professor of Chemistry Imran Alam Matthew Goldberg
10:20AM - 10:40AM	3817791 - Transition metal catalyzed N=N bond rotation Room: Room 205	Chris Rybak Chengyi Fan Christopher Uyeda
10:20AM - 10:40AM	3828359 - Systematic structural variations in transition metal dipyrin complexes: Effects on luminescence Room: Sagamore Ballroom 3	Kevin Hoffman William Dougherty Allison Chang Madeleine Bloomer Theodore Betley Austin Scharf
10:20AM - 10:40AM	3823524 - Structurally dynamic crystalline 1D coordination polymers enabled via the weak-link approach Room: Room 238	Benjamin Coleman Andrea d'Aquino Zachary Kean Yihan Wang Jenny Hedlund Orbeck Charlotte Stern Professor Chad A. Mirkin Professor



**Wednesday, March 29, 2023**

10:25AM - 10:45AM	3827115 - Reduction chemistry of a new class of low-valent thorium arene complexes Room: Room 206	Bianca Ramirez Nicolas Emmanuel Brian Scott David Morris Thibault Cantat Dr. Jaqueline L. Kiplinger Laboratory Fellow
10:35AM - 10:55AM	3822140 - Analysis of Mössbauer spectra of bacterial fur and IscA proteins in whole cells Room: Room 236	Dr. Codrina Popescu Professor Jada Tran Chelsey Fontenot Sumayah Elmi Huangen Ding
10:40AM - 11:00AM	3820899 - Synthesis and characterization of metal ferrite nanoparticles, their efficacy against Xanthomonas pathogens, and the effects of surface morphology on particle behavior in solution Room: Room 212	Morad Sehlaoui Tarek Trad
10:40AM - 11:00AM	3821738 - Charge transfer MIL2 /TCNQ compounds (M = Pt, Pd): Topotactic co-polymerization of TCNQ with a transition-metal complex and MIV-C bond formation Room: Room 208	Prof. Lawrence R. Falvello Professor of Chemistry Isabel Mayoral Slavomíra Šterbinská Milagros Tomas
10:40AM - 11:00AM	3823233 - Molecular electrocatalysis for alkyne semihydrogenation Room: Room 205	Mi-Young Lee Gabriel Durin Christian Kahl Thomas Weyhermüller Nicolas Kaeffer Walter Leitner
10:40AM - 11:00AM	3823060 - Withdrawn Room: Sagamore Ballroom 3	
10:45AM - 11:05AM	3802606 - Electronic structure of uranium–arene complexes Room: Room 206	Bess Vlasisavljevich Rina Bhowmick Riffat Parveen Jesse Murillo Skye Fortier
10:55AM - 11:00AM	- Concluding Remarks Room: Room 236	
11:00AM - 11:20AM	3825282 - Surface immobilization of iron catalysts on semiconductor surfaces for the hydrogen evolution reaction Room: Room 205	William McNamara
11:05AM - 11:25AM	3827385 - Periodic trends of templated lanthanide thiosulfate compounds: Facile control of dimensionality Room: Room 206	Eric Villa

**Wednesday, March 29, 2023**

02:00PM - 04:40PM	- Nanoscience: Applications of Nanomaterials: Room: Room 212	Zachary Jones Brian Trewyn Dr. Scott A. Williams Professor, Inorganic Chemistry
02:00PM - 02:20PM	3801491 - Monolayer P-type doping in silicon using gallium and boron coordinate complexes Room: Room 212	Dr. Scott A. Williams Professor, Inorganic Chemistry
02:00PM - 05:20PM	- Coordination Chemistry: Ligand Design, Synthesis, and Reactivity: Room: Room 208	Ilja Popovs SELVAM RAJU Dr. Michael J. Shaw, Ph.D. Distinguished Research Professor Anna Svetlanova-Larsen
02:00PM - 02:20PM	3828642 - Preorganization in multidentate ligands controls extractant strength, but not extraction selectivity in lanthanide series Room: Room 208	Ilja Popovs Subhamay Pramanik Katherine Johnson Santa Jansone Popova
02:00PM - 05:40PM	- Coordination Chemistry: Catalysis and Applications: Room: Room 205	Anna Svetlanova-Larsen Claire Tessier Santiago Toledo
02:00PM - 02:20PM	3821139 - Withdrawn Room: Room 205	
02:00PM - 04:40PM	- Coordination Chemistry: Electronic Structure, Magnetism, and Spectroscopy: Room: Sagamore Ballroom 3	Claire Besson Victor Nemykin Anna Svetlanova-Larsen Bess Vlasisavljevich
02:00PM - 02:20PM	3824502 - New insights into an old chemistry: Electronic structure and spectroscopy of the low-spin iron(II) phthalocyanines and their reduced forms Room: Sagamore Ballroom 3	Victor Nemykin Karl Kadish Daniel Leznoff Christopher Ziegler
02:00PM - 04:20PM	- Electrochemistry: Room: Room 209	Amy Marschilok Christopher Patridge Muhammad Ameerullah Sahudin
02:00PM - 02:20PM	3824536 - Inspiration from Li-ion to explore cathodes for aqueous Zn-ion batteries Room: Room 209	Christopher Patridge
02:00PM - 05:25PM	- Coordination Chemistry: Lanthanide and Actinide Chemistry: Room: Room 206	Dr. Pere Miro Assistant Professor Ivan Popov Jerome R. Robinson Assistant Professor of Chemistry
02:00PM - 02:05PM	- Introductory Remarks Room: Room 206	

**Wednesday, March 29, 2023**

02:00PM - 05:05PM	- Coordination Chemistry: Inorganic Spectroscopy: Room: Room 237	Thomas Gray Tyler Haddock Dr. Codrina Popescu Professor
02:00PM - 02:05PM	- Introductory Remarks Room: Room 237	
02:00PM - 04:40PM	- Medicinal Applications of Bioinorganic Chemistry: Room: Room 236	Kuppuswamy Arumugam Kayla Green Dr. Stephen A. Koch Professor of Chemistry Michael Webb
02:00PM - 02:20PM	3813599 - Fluorogenic inhibitor of the mitochondrial calcium uniporter Room: Room 236	Zhouyang Huang Samantha MacMillan Justin Wilson
02:00PM - 04:40PM	- Nanoscience: Synthesis, Characterization and Properties of Nanomaterials and Their Hierarchical Structures: Room: Room 238	Benjamin Lear Sarah O'Boyle Brian Trewyn
02:00PM - 02:20PM	3824476 - Establishing structure-property relationships in atomically precise Ag-S cluster-chromophore systems Room: Room 238	Grant Stec Jarad Mason
02:05PM - 02:25PM	3825370 - Aqueous speciation and nucleation of tetravalent actinides Room: Room 206	Dr. Pere Miro Assistant Professor Saikot Mazumder Rameswar Bhattacharjee
02:05PM - 02:25PM	3801537 - Determination of the effect of monodentate leaving ligands on Ru (II) polypyridyl complexes for PCT application Room: Room 237	Jessica M. Vandevord Claudia Turro
02:20PM - 02:40PM	3813927 - Functionalized metal-organic frameworks for capture and separation of rare-earth elements Room: Room 212	Ronald Sikma Dr. Jacob Deneff Postdoctoral Researcher, Materials and Nanoscience Keith Fritzsching Dr. Anastasia Ilgen Dorina Sava Gallis
02:20PM - 02:40PM	3825461 - Synthesis and reactivity of manganese porphyrin nitroxido and oximato complexes: Toward manganese-catalyzed C-H amination of hydrocarbon substrates Room: Room 208	Seth Applegate Professor Jamie Neely
02:20PM - 02:40PM	3824450 - Iron-catalyzed intermolecular C-H amination through an isolated imido intermediate Room: Room 205	Ethan Zars Lisa Pick Mrinal Bhunia Michael Gau Patrick Carroll Karsten Meyer Daniel Mindiola

**Wednesday, March 29, 2023**

02:20PM - 02:40PM	3820576 - Orientation- and temperature-dependent spin-lattice relaxation in Cr(IV)-based qubit candidates Room: Sagamore Ballroom 3	Kaitlin Luedecke Nathanael Kazmierczak Elisabeth Gallmeier Ryan Hadt
02:20PM - 02:40PM	3817104 - Reduction of oxygen by a surface-conjugated iron electrocatalyst Room: Room 209	Moumita Ghosh Roman Ezhov Yulia Pushkar Jeremy Smith
02:20PM - 02:40PM	3815629 - Insight into the monooxygenation step of heme degradation by IsdG Room: Room 236	Aarzo Grover Matthew Conger Matthew Liptak
02:20PM - 02:40PM	3824712 - Site selective cation exchange on ternary mixed metal sulfide nanoparticles Room: Room 238	Sarah O'Boyle Raymond Schaak
02:25PM - 02:45PM	3821211 - Electrochemical activation of the uranyl ion Room: Room 206	Riddhi Golwankar Malgorzata Makos Vassiliki-Alexandra Glezakou James Blakemore
02:25PM - 02:45PM	3813602 - Monodentate ligands matter: The impact of acetonitrile and pyridine on the photophysical behavior of Ru(II)-terpyridine complexes Room: Room 237	Marilyn Dunbar Dr. Sean J Steinke Postdoctoral Researcher Eric Piechota Claudia Turro
02:40PM - 03:00PM	3816692 - Dimensional reduction enhances photodynamic therapy of metal-organic nanophotosensitizers Room: Room 212	Taokun Luo
02:40PM - 03:00PM	3827751 - Synthesis of first row transition metal complexes supported by tetraaza and tetraamido macrocyclic ligands: Potential catalysts in nitrene transfer chemistry Room: Room 208	HIMANSHU BHATIA Ingrid Winter Lillian Adams Suraj Sahoo Meenakshi Sharma Graduate Student(Ph.D.) Chemistry Brent Harfmann Pericles Stavropoulos
02:40PM - 03:00PM	3824383 - Withdrawn Room: Room 205	
02:40PM - 03:00PM	3814645 - Ferrocenyl high-spin state uncovered by ultrafast X-ray spectroscopies of a heterobimetallic molecule Room: Sagamore Ballroom 3	Jack Burke Renske van der Veen Josh Vura-Weis
02:40PM - 03:00PM	3817158 - Selective electrochemical reduction of nitrous oxide to dinitrogen with an iron porphyrin catalyst Room: Room 209	Jared Stanley Xinran Wang Jenny Yang

**Wednesday, March 29, 2023**

02:40PM - 03:00PM	3807720 - Aquation-activated prodrugs of mitochondrial calcium uniporter inhibition Room: Room 236	Nicholas Bigham Zhouyang Huang Jesse Spivey Joshua Woods Samantha MacMillan Justin Wilson
02:40PM - 03:00PM	3823053 - When your metal center is a thousand atoms: Using surface chemistry to control the electronic structure of metallic nanoparticles Room: Room 238	Benjamin Lear
02:45PM - 03:05PM	3828088 - Towards the synthesis of a transplutonium organometallic complex Room: Room 206	Amy Price Nicholas Katzer Dominic Russo Alyssa Gaiser Appie Peterson Jacob Branson Jennifer Wacker S. Olivia Gunther Patrick Smith Jeffrey Long Rebecca Abergel Stefan Minasian Polly Arnold
02:45PM - 03:05PM	3817516 - Probing intermolecular magnetic interactions in a metal complex by inelastic neutron scattering Room: Room 237	Alexandria N. Bone Joseph Prescott Jason Haraldsen Andrey Podlesnyak Ziling Xue
03:00PM - 03:20PM	- Intermission Room: Room 212	
03:00PM - 03:20PM	3823103 - Electrochemical investigations of phenoxide derivatives of ruthenium nitrosyl complexes Room: Room 208	Dr Michael J Shaw , Ph.D. Distinguished Research Professor George Richter-Addo Adam Warhausen Anthony Ramuglia Dustin Pumford Jeremy Zink
03:00PM - 03:20PM	3825530 - Bioinspired transfer hydrogenation using diiridium catalysts at nano molar concentrations Room: Room 205	ABHIPSA SRIMANI Loi Do
03:00PM - 03:20PM	3824766 - Understanding spin-crossover and vibrational spectra with multireference methods Room: Sagamore Ballroom 3	Bess Vlasisavljevich
03:00PM - 03:20PM	3823986 - Non-enzymatic electrochemical dopamine and glucose sensors using multifunctional nanostructured metal chalcogenides Room: Room 209	Harish Singh Manashi Nath

**Wednesday, March 29, 2023**

03:00PM - 03:20PM	- Intermission Room: Room 238	
03:00PM - 04:00PM	- Sustainable Energy and Environment: Electrochemical Energy Storage and Conversion Room: Virtual Session	Farshid Ramezanipour Kenneth Takeuchi
03:00PM - 03:20PM	3823453 - Hydrogen-evolution electrocatalysis enhanced by structural tuning of oxides Room: Virtual Session	Farshid Ramezanipour Surendra Karki Ram Hona
03:05PM - 03:25PM	3821356 - Reactivity and cross-reactivity in electrochemical activation of the uranyl ion Room: Room 206	Emily Mikeska Riddhi Golwankar Malgorzata Makos Victor Day Vassiliki-Alexandra Glezakou James Blakemore
03:05PM - 03:25PM	3827849 - Rh <sub>2</sub> (II,II) single molecule photocatalyst with red light absorption Room: Room 237	Matthew Fortunato Claudia Turro
03:20PM - 03:40PM	3802856 - Monte Carlo simulations reveal new design principles for efficient nanoradiosensitizers based on nanoscale metal-organic frameworks Room: Room 212	Ziwan Xu Taokun Luo Kaiyuan Ni Wenbin Lin
03:20PM - 03:40PM	3827981 - Hypsochromically-shifted emission of metal-organic frameworks generated through post-synthetic modification Room: Room 208	Kyle Smith Kyriakos Stylianou
03:20PM - 03:40PM	3825683 - Using charged metal organic polyhedra as a platform for heterogeneous catalysis Room: Room 205	Joseph Simmons Eric Bloch
03:20PM - 03:40PM	3820429 - Ni(II) metal-organic framework with Haldane topological properties Room: Sagamore Ballroom 3	Pagnareach Tin Graduate Student Michael Jenkins Zheng Gai Jie Xing Rongyin Jin Nils Caci Stefan Wessel Jurek Krzystek Cheng Li Luke Daemen Ziling Xue
03:20PM - 03:40PM	3816722 - Enhancement of electrochemical nitrite reduction by a cobalt macrocycle assisted by buffer Room: Room 209	Sheyda Partovi Jeremy Smith
03:20PM - 03:40PM	- Intermission Room: Room 236	

**Wednesday, March 29, 2023**

03:20PM - 03:40PM	3823488 - Ruthenium complexes that modulate the aggregation and cytotoxicity of the amyloid- $\beta$ peptide Room: Room 236	Johanna T Ehlbeck Graduate Student Michael Webb
03:20PM - 03:40PM	3820340 - Combining seeded growth and cation exchange to direct interface formation in heterostructured metal sulfide nanoparticles Room: Room 238	Joseph Veglak Sarah O'Boyle Connor McCormick Raymond Schaak
03:20PM - 03:40PM	3803992 - Synthesis of 4-(1H-pyrrol-2-yl)pyridine, related compounds, and their application in sulfite sensing Room: Virtual Session	Mallory Thomas Lynn Schmitt Alistair Lees
03:25PM - 03:45PM	- Intermission Room: Room 206	
03:25PM - 03:45PM	3820446 - Ultrafast UV signatures of bulk and surface-like effects in triazole-based Fe(II) spin-crossover nanoparticles Room: Room 237	Tyler Haddock Teresa Delgado Marc Alias-Rodriguez Coen de Graaf Cristian Enachescu Renske van der Veen
03:40PM - 04:00PM	3817182 - Trace methanol recovery from humid gas and purification by the selective desorption of methanol with metal hexacyanocobaltate Room: Room 212	Yuta Shudo Tohru Kawamoto Akira Takahashi
03:40PM - 04:00PM	3825754 - Synthesis and reactivity of bimetallic late transition metal complexes supported by bisdipyrrromethane ligand scaffolds Room: Room 208	Nicole Giorgi Keith Searles
03:40PM - 04:00PM	3824584 - Family of N4O and N3O based transition metal complexes of nickel, cobalt, iron and manganese: Biomimetic models of the on and off-pathway dioxygenation chemistry of a unique metalloenzyme Room: Room 205	Santiago Toledo
03:40PM - 04:00PM	3803518 - Photophysical studies of bismuth based coordination complexes for panchromatic solar light absorption Room: Sagamore Ballroom 3	Harsh Bhatia Bob Schroeder
03:40PM - 04:00PM	3824340 - Electrochemical corrosion of III-nitride-based devices for artificial photosynthesis: Inevitable or useful? Room: Room 209	Artem Shushanian Daisuke Iida Yu Han Kazuhiro Ohkawa
03:40PM - 04:00PM	3826712 - Macrocyclic molecule protects the lens from oxidative damage through multiple antioxidant pathways Room: Room 236	Kayla Green Hongli Wu
03:40PM - 04:00PM	3818849 - Surface deposition of metal-organic frameworks and porous coordination cages Room: Room 238	Christine Montone Eric Bloch

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03:40PM - 04:00PM	3804987 - Functionalized metal-organic frameworks showing emission quenching in the presence of nitroaromatic compounds Room: Virtual Session	Amina Chatz-Giachia PhD Student Anastasia Pournara Manolis Manos Christina Pappa Konstantinos Triantafyllidis Professor Theodore Lazarides
03:45PM - 04:05PM	3821379 - Synthesis and redox behavior of a homobimetallic uranium complex Room: Room 206	Alexander Ervin Riddhi Golwankar James Blakemore
03:45PM - 03:55PM	- Intermission Room: Room 237	
03:55PM - 04:05PM	3822094 - Rational design of Ru(II) polypyridyl complexes with extended $\pi$ -system ligands to achieve long-lived triplet excited states Room: Room 237	Alexia Marques Silva Austin Lanquist Claudia Turro
04:00PM - 04:20PM	3821527 - Droplet microfluidics platform for nanodiamond-based quantum sensing Room: Room 212	Zachary Jones Adrish Sarkar Deepti Tanjore Ashok Ajoy
04:00PM - 04:20PM	3815451 - Synthesis, structure, and properties of donor nitrogen ligand-based copper(II) complexes to access of N-arylation via Chan-Evans-Lam cross-coupling: An effort toward new bioactive agents against <i>S. pneumoniae</i> Room: Room 208	SELVAM RAJU Sean Stokes Joseph Emerson
04:00PM - 04:20PM	3827016 - Nitrene transfer reactions mediated by guanidine supported transition metal (MnII, FeII, CoII) complexes with applications towards (3+2) cycloaddition reactions Room: Room 205	Suraj Sahoo Brent Harfmann Himanshu Bhatia Meenakshi Sharma Graduate Student(Ph.D.) Chemistry Pericles Stavropoulos
04:00PM - 04:20PM	3819422 - Modeling the solvent-dependent dipole of mo-dithiolene systems with implicit solvent calculations Room: Sagamore Ballroom 3	Mr. Kyle J. Colston Graduate Student Jonathan Durham Lauren Patterson Partha Basu
04:00PM - 04:20PM	3804944 - Formation of 3D magnetic nanowire arrays by cooperative lateral growth Room: Room 209	Fei Chen Zihao Yang Ru-Wen Peng Mu Wang
04:00PM - 04:20PM	3827058 - Development of reactivity regulated metalloenediynes for hyperthermic chemotherapeutics Room: Room 236	Erin Metzger Jeffrey Zaleski



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04:00PM - 04:20PM	3826055 - Transforming nanoparticles into nanosheets (3D to 2D): Novel synthesis approach to grow desired facets Room: Room 238	Claire Block
04:05PM - 04:25PM	3828744 - Withdrawn Room: Room 206	
04:05PM - 04:25PM	3823251 - Bimolecular excited state proton transfer and electron transfer of Ru(II) diimine chromophores exhibiting intramolecular reversible energy transfer Room: Room 237	Fengqi Zhang Jared Paul Russell Schmehl
04:20PM - 04:40PM	3824947 - Metal-organic frameworks as templates for reactive mesoporous titania Room: Room 212	Jahidul Hoq Eric Bloch
04:20PM - 04:40PM	3828941 - Bimetallic early transition metal complexes supported by bis-dipyrromethane ligand frameworks Room: Room 208	Rahul Kootanil Haridasan Keith Searles
04:20PM - 04:40PM	3827381 - Nanographene-molybdenum complex as electrocatalyst for selective reduction of CO <sub>2</sub> to formate Room: Room 205	Minyang Yin Scott Bowers Sruthy Kettidathil Chandy Krishnan Raghavachari Liang-Shi Li
04:20PM - 04:40PM	3827067 - Functionalized trispyrazolylborates: A magnetochemical toolbox Room: Sagamore Ballroom 3	Claire Besson Chenyang Ma Christopher Hossack Christopher Cahill
04:20PM - 04:40PM	3836211 - Gold-based next-generation cancer therapeutics Room: Room 236	Kuppuswamy Arumugam Dilsha Samanali Wickramasinghe Wickramasinghe Mudiyanselage Johathan Arambula
04:20PM - 04:40PM	3826604 - Withdrawn Room: Room 238	
04:25PM - 04:45PM	3827782 - Actinide-oxygen multiple bonds from air: Synthesis and characterization of a thorium oxo supported by redox-active ligands Room: Room 206	Suzanne Bart
04:25PM - 04:45PM	3825872 - Spectroscopic and theoretical investigation of Fe-Pt lantern complexes and other related four-coordinate iron(II) systems Room: Room 237	Adam Valaydon-Pillay Hannah Skipper Prof. Linda H Doerrer Professor Sebastian Stoian
04:40PM - 05:00PM	3828951 - Synthesis and characterization of a CuII complex in two geometries Room: Room 208	Paul Griffin Dr. Lisa Olshansky

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04:40PM - 05:00PM	3828502 - Proton-coupled, low-energy pathway for electrocatalytic CO <sub>2</sub> reduction at Re(diimine) complexes with a conjugated pyrazinyl moiety Room: Room 205	Scott Bowers Sruthy Kettidathil Chandy Minyang Yin Lu Liu Krishnan Raghavachari Liang-Shi Li
04:45PM - 05:05PM	3823201 - Chemical bonding in actinide-mono(oxo) molecular complexes Room: Room 206	Ivan Popov Chad Studvick Julie Niklas Henry La Pierre
04:45PM - 05:05PM	3817813 - Photophysical effects of auration on substituted fluorenyl chromophores Room: Room 237	Joseph Mihaly Evan Van Orman Steven Wolf Ethan Holt Kimberley de La Harpe Tod Grusenmeyer Thomas Gray
05:00PM - 05:20PM	3824902 - Probing the influence of the counter ion in the synthesis of CCC-NHC Zr(IV) pincer complexes: Tetraphenylborate Room: Room 208	Evans Fosu Enock Amoateng Bruno Donnadieu T. Keith Hollis
05:00PM - 05:20PM	3827754 - Mechanistic insight into the ring-opening polymerization of [PCI <sub>2</sub> N] <sub>3</sub> in the presence of group 13 Lewis acids Room: Room 205	Yuan Xue Valentin Gogonea Claire Tessier
05:05PM - 05:25PM	3830704 - Formation and importance of fluoro-bridging in rare earth metal-organic frameworks Room: Room 206	Muhammad Abbas Amanda Maceda Kenneth Balkus
05:20PM - 05:40PM	3827599 - Selective and efficient cascade strategy for CO <sub>2</sub> reduction to methanol using renewable organic hydrides Room: Room 205	Andressa Vidal Muller Jake Sirlin Dr. Mehmed Zahid Ertem Chemist Dmitry Polyansky Gerald Meyer David Grills Renato Sampaio Javier Concepcion
08:00PM - 11:55PM	- Virtual Graduate Students Symposium in Asia-Pacific Region on Inorganic Chemistry: Room: Virtual Session	Yu Tang Jun Long Zhang Chunxiao Zheng
08:00PM - 08:05PM	- Introductory Remarks Room: Virtual Session	
08:05PM - 08:15PM	3812712 - Highly boosting circularly polarized luminescence of chiral metal-organic frameworks via introducing substituent groups and guest molecules Room: Virtual Session	Xue-Zhi Wang

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08:15PM - 08:25PM	3814676 - Robust protein-like metallo-amine cage with proton-driven dynamic nature Room: Virtual Session	Yu-Lin Lu Cheng-Yong Su
08:25PM - 08:35PM	3813062 - Covalently bonded graphene-carbon nanotube hybrids Room: Virtual Session	Jian Sheng Yan Li
08:35PM - 08:45PM	3804461 - Enhanced photostability in protonated covalent organic frameworks for singlet oxygen generation Room: Virtual Session	Tian Shi
08:45PM - 08:55PM	- Intermission Room: Virtual Session	
08:55PM - 09:05PM	3814787 - Strong and weak acids co-mediated cooperative assembly strategy for the synthesis of single-crystal meso-MOFs Room: Virtual Session	Zirui Lv Xiaomin Li Dongyuan Zhao
09:05PM - 09:15PM	3816493 - Mechanochemical methods for directional construction of oxygen defects Room: Virtual Session	Min Lu Pinxian Xi Chun-Hua Yan
09:15PM - 09:25PM	3817251 - Direct methane conversion under mild condition with Al-rich Fe-loading ZSM-5 catalyst Room: Virtual Session	Jialiang Li Qiang Zhang Jihong Yu
09:25PM - 09:35PM	3816206 - Secondary coordination sphere design of porous copper-azolate catalysts for electrochemical CO <sub>2</sub> reduction Room: Virtual Session	Haolin Zhu Pei-Qin Liao Xiao-Ming Chen
09:35PM - 09:45PM	3816512 - Solution-processable metal-organic framework: Facile dispersible, luminescence-tunable and applications in multi-response anti-counterfeiting Room: Virtual Session	Lin Geng MeiHui Yu Ze Chang Xian-He Bu
09:45PM - 09:55PM	- Intermission Room: Virtual Session	
09:55PM - 10:05PM	3814032 - Highly nucleated lanthanide clusters: Structure, assembly mechanism and magnetic resonance imaging Room: Virtual Session	HaiLing Wang Ming-Liang Tong
10:05PM - 10:15PM	3814111 - Amplifying photoluminescence of lanthanide-doped nanoparticles by iridium phosphonate complex Room: Virtual Session	Kui Xu Xiaoji Xie Li-Min Zheng
10:15PM - 10:25PM	3814718 - Solvent-induced ordered self-assembly of rare-earth complexes Room: Virtual Session	Lijuan Liang
10:25PM - 10:35PM	3814757 - Designed synthesis of different oxoboron frameworks: Structures and optical property Room: Virtual Session	Chong-An Chen Guo-Yu Yang

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10:35PM - 10:45PM	3811212 - Interfacial modulation of supported ceria nanomaterials for promoting catalytic performance Room: Virtual Session	Xiao-Chen Sun Yawen Zhang
10:45PM - 10:55PM	- Intermission Room: Virtual Session	
10:55PM - 11:05PM	3810413 - Modulating the chiral microenvironment by changing the steric hindrance around the chiral sites in MOFs Room: Virtual Session	Ge Yang Hai-Long Jiang
11:05PM - 11:15PM	3815981 - Catechol-Fe <sup>3+</sup> coordination crosslinked polymer enables swimming devices for versatile motions and smart transportation Room: Virtual Session	Kexin Hou Chenghui Li
11:15PM - 11:25PM	3817306 - Constructing intrapenetrated hierarchical zeolites via protozeolite seeded approach Room: Virtual Session	Yinghao Liu Xingxing Wang Junyan Li Sen Wang Weibin Fan Jihong Yu
11:25PM - 11:35PM	3814145 - Molecular catalyst and ordered heterogeneity for boosting photocatalysis CO <sub>2</sub> reduction Room: Virtual Session	jihong zhang dichang zhong tongbu lu
11:35PM - 11:45PM	3807928 - CeO <sub>2</sub> @montmorillonite nanozyme for Crohn's disease therapy Room: Virtual Session	Xiwen Chen Chaoqun Cheng Yuan Cheng Sheng Zhao Hui Wei
11:45PM - 11:55PM	- Concluding Remarks Room: Virtual Session	