

2024 SoCal Organometallics Meeting

UC San Diego – September 14, 2024

Meeting hosts: Profs. Josh Figueroa and Valerie Schmidt

Thank you to everyone for contributing to a thriving exchange of organometallic chemistry at the 23rd Southern California Organometallics Meeting (SCOM)! Please find below our schedule including talks, posters, and flash talks. Please note that the Tata Terrace and Kavit Auditorium in Tata Hall are located on the 3rd floor of the building. Information about parking and campus maps are included after poster information. We would encourage attendees to bring refillable water bottles for use throughout the day.

Schedule

Start time	End time	Activity	Location
11am -	11:45am	Lunch	Tata Terrace
11:45 -	11:50am	Opening remarks	Kavit Auditorium – Tata Hall
11:50 -	12:08	Talk 1: Faith Flinkingshelt – UCI <i>"Synthesis and Characterization of [Ni(H₂O)(7- PPh₂NArSO₃)₂](NaBF₄) for Light-Driven Quantum Dot–Catalyst Hydrogen Evolution"</i>	
12:08 -	12:26	Talk 2: Asik Hossain – Caltech <i>"Nickel-Catalyzed Enantioconvergent and Diastereoselective Allenylation of Alkyl Electrophiles: Simultaneous Control of Central and Axial Chirality"</i>	
12:26 -	12:44	Talk 3: Christian Strong – Caltech <i>"Development of Palladium Catalyzed Cyclization Reactions"</i>	
12:44 -	12:53	Flash talk 1: Kevin Liang – UCR <i>"Indole Nucleophile Triggers Mechanistic Divergence in Ni-Photoredox N–Arylation"</i>	
12:53 -	1:02	Flash talk 2: Adya Mahapatra – USC <i>"Electrocatalytic behavior of homogenous transition metal complexes under carbon dioxide"</i>	
1:02 -	1:11	Flash talk 3: Anthony Alfaro – UCSD <i>"Friedel-Crafts Acylation Catalyzed by a Well- Defined Bismuth Pyridine Di(imine) Dication"</i>	
1:11 -	1:20	Flash talk 4: Andrew Baublis – UCLA <i>"Merging Carborane Clusters with Heavy Tetrel Chemistry"</i>	
1:20 -	1:29	Flash talk 5: Mehdi Abdellaoui – UCSD <i>"Mesoionic Carbenes (MIC) as catalytic organic single electron reductants"</i>	
1:30 -	2:45pm	Poster session	Natural Sciences Building atrium

2:45 -	3:03	Talk 4: Claire Zimmerman – UCI "Synthesis and Electrochemical Characterization of Metal Complexes of 9,10-phenanthroline-5,6-dione"	Kavil Auditorium – Tata Hall
3:03 -	3:21	Talk 5: Ritchie Hernandez – UCSD "The rational development of a fluoroborylene on cobalt through utilization and modification of a [CpCoL] motif"	
3:21 -	3:39	Talk 6: Ciara Gillis – UCI "Reactive Capture of CO ₂ with a Molecular Platinum Bis(diphosphine) Electrocatalyst"	
3:39 -	3:57	Talk 7: Olivia Taylor – UCR "Leveraging Asymmetric Catalysis Data for Mechanistic Interrogation of Nickel-Photoredox THF Arylation"	
3:57 -	4:06	Flash Talk 6: Makayla Luevano – UCI "The Exotic Reactivity of Terminal Rare-Earth Metal Alkyl Complexes"	
4:06 -	4:25	Break	Tata Terrace
4:25 -	4:45	Talk 8: Cary Stennett – UCI "Secondary Arene Interactions Stabilize Neutral Bis(thiolate) and Bis(phenolate) Complexes of "Non-Traditional" Lanthanide(II) Ions"	Kavil Auditorium – Tata Hall
4:45 -	5:05	Talk 9: Jan Lorkowski – UCSD "Facile Access to Cyclic (Amino)(Aryl)Carbenes (CAArCs) and Their Metal Complexes"	
5:05 -	5:25	Talk 10: Catherine Romero – Caltech "Intermolecular Proton-Coupled Electron Transfer Reactivity from a Persistent Charge-Transfer State for Reductive Photoelectrocatalysis"	
5:25 -	5:33	Flash talk 7: Jazmine Prana – USC "Lewis-Acid Mediated Reactivity in Single-Molecule Junctions"	
5:33 -	5:41	Flash talk 8: Vicki Rubio – UCLA "Employing Carboranes to Bridge Lewis Acidic Pnictogen Centers"	
5:41 -	5:49	Flash talk 9: Sven Mörsel – USC "π-Extended Dithiolene-based MOFs for Electrocatalytic Hydrogen Evolution"	
5:49 -	5:57	Flash talk 10: Yashna Khakre – USC "Electrocatalytic H ₂ Evolving Activity of Nickel-dithiolene Coordination Polymer"	
5:57 -	6pm	Closing remarks	
6pm -		Dinner and continued posters	Natural Sciences Building atrium & terrace

Poster Presentations

Clarissa Olivar	USC	<i>Composite Recycling with Biocatalytic Thermoset Reforming</i>
Adam Grippo	UCSD	<i>"Low-Valent Organometallic Coordination Networks: Applications of Multitopic Isocyanides"</i>
Ahmadreza Rajabi	UC Irvine	<i>Synthesis, Structure, and Density Functional Theory Analysis of Low-Valent Rare-Earth Molecular Complexes</i>
Angie Lopez	UC Riverside	<i>Indole nucleophile triggers mechanistic divergence in Ni-photoredox N-Arylation</i>
Athena Thai	CSU Long Beach	<i>Development of a Ni-Catalyzed Cross-Coupling Strategy for the Total Synthesis of Dihydrobenzofuran Natural Products</i>
Ayon Das	USC	<i>Exploring metal complexes for the hydrodechlorination of poly (vinyl chloride)</i>
Cynthia Avedian	USC	<i>Self-Assembly of Ferrocene Functionalized Triazatriangulenium Platforms</i>
Colomba Sanchez-Marsetti	UC Riverside	<i>Synthesis and Characterization of an Iminophosphorane Functionalized 9,10-Diboraanthracene and its Nickel (0) Complexes</i>
Cary Stennett	UC Irvine	<i>Divalent Lanthanide(II) Chalcogenolate Complexes: A Comparative Structural and Spectroscopic Study</i>
Sean Dunphy	UCSD	<i>Efficient Aminosilane Synthesis by a Well-Defined Nickel Precatalyst</i>
Emily Mendel	University of San Diego	<i>Homologation of Ketones to Aldehydes via gem-Diboronates</i>
Edward Vaughn	UCSB	<i>"Synthesis and Simulation of a Fluorescent Two-coordinate Gold Complex"</i>
Madison Fette & Ding-Yuan Lim	USC	<i>Self-Releasing Polymers Enabling Closed Loop Recycling of Composite Materials</i>
Grace Wang	UC Riverside	<i>Rhodamines as Molecular Conductance Switches</i>
Isabel Serrano	CSU San Marcos	<i>Poster; Carbon-Phosphorus Bond Coupling of Dialkyl Phosphites with Arylboronate Esters</i>
Jacob Seo	UC Riverside	<i>Radical Dimerization of Sterically Hindered Saturated Silicon Clusters</i>
Luke Zhou	Caltech	<i>Investigating the interaction between the Hantzsch ester and Sm(III) in the photodriven generation of Sm(II)</i>
Landley Zeng	UC Riverside	<i>Straightforward Synthesis of Tungsten Monoethylene Complexes Using Perfluoro-tert-butanol</i>
Michael Pung	UCLA	<i>understanding of PCET behavior of Os complexes by varying identity of ligands</i>
Milan Maji	UC Riverside	<i>Thermal Ring-Contraction of a Tungstacyclopentane to Form Metathesis Active Alkylidenes</i>
Moriah McLellan	USD	<i>Synthesis of Aryl Phosphonates through Direct Coupling of Arylboronate Esters with Dialkyl Phosphites</i>
Phillip Farias	UC Riverside	<i>Arene C-H Activation via a Dianionic Nickel Complex of an Unsymmetric Diboraanthracene Ligand</i>
Qijia (Jason) Zhou	UCLA	<i>"Site Controlled Polymerization by Ferrocene Supported Redox Switchable Catalyst"</i>
Julius Semanya	USC	<i>"New Chemical Reactivity Catalyzed by Iron"</i>

Shuai Wang	UCSD	<i>'Accessing Highly Reduced Cr Metallates via a Rare Medium Spin Cr(I) Species'</i>
Stefan Weber	Caltech	<i>"Iron complexes supported by a double dearomatized PNP ligand"</i>
Tanner Gasteazoro	Harvey Mudd College	<i>Synthesis of chiral at-metal titanium complexes</i>
Ashley Nguyen	USC	<i>Tunability of Nickel Benzenehexathiolate (NiBHT) Electrocatalysts for Hydrogen Evolution Reaction (HER).</i>
Zachary Hill	CSULB	<i>Investigating the Reactivity of α-Boryl Radicals in Asymmetric Ni-Catalyzed Cross-Coupling Reactions</i>
Emily Boyd	Caltech	<i>Reductive Samarium Electrocatalysis</i>
Andrew Rander	USC	<i>"Ethanol as a Hydrogen Carrier with a Value-Added Co-Product"</i>
Lydia Weddle	UCSD	<i>Hydricity as a Guide in H₂ Evolution, Formic Acid Decomposition, and Transfer Hydrogenation: A Case Study with Ir(Cp*)(2-phenylpyridine)H</i>
Adam Lee	UCSD	<i>H₂/D₂ Exchange by a μ³-SnH, μ³-H capped trinuclear Nickel Cluster</i>
Hootan Roshandel	UCLA	<i>Toward liquid cell quantum sensing: Ytterbium complexes with ultra-narrow absorption</i>