FAME 2025

101st Florida Annual Meeting and Exposition

PROGRAM OF ACTIVITIES

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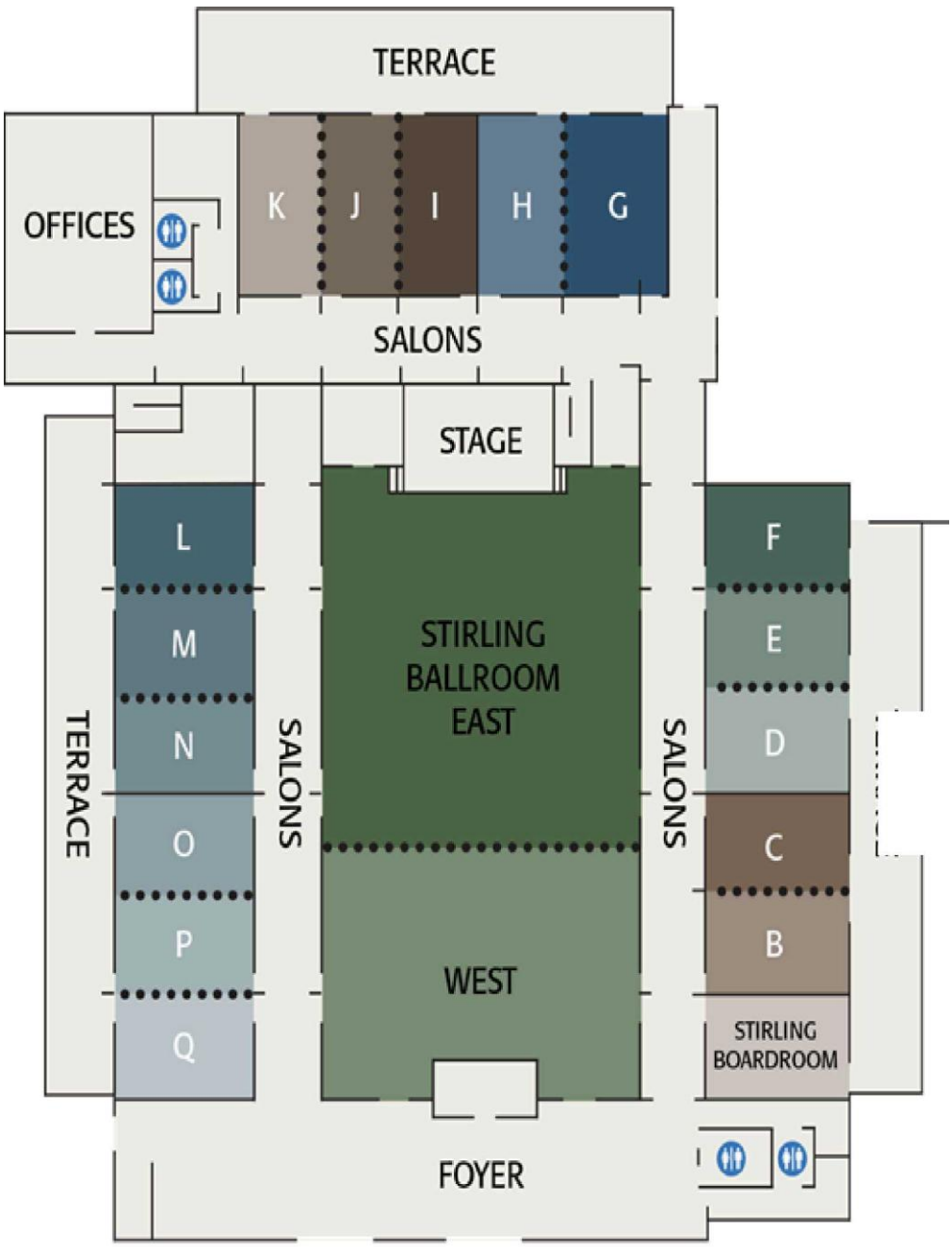

STIRLING HALL

ACS Local Section Florida

FLORIDA ANNUAL MEETING & EXPOSITION

OFFICIAL PROGRAM

FLACS

Publication of the Florida Section of the American Chemical Society

2025 FLORIDA SECTION OFFICERS

FROM THE FLACS CHAIR

On behalf of the Florida Section of the American Chemical Society (FLACS), welcome to the 101st Florida Annual Meeting and Exposition (FAME). It is very exciting to serve as Chair and celebrate the Centennial year for FLACS and FAME! I hope you enjoy the newly arranged meeting with our inaugural plenary lecture from Dr. Wayne Jones, president of the ACS Board and our Showcase Symposium highlighting the terrific research performed in our local section.

At this year's meeting, we are pleased to present our 2024 Florida award winner, Dr. Hans-Conrad zur Loye from the University of South Carolina who will present on Saturday. He is an extraordinary inorganic chemist in his field and we are excited to have him speak, along with his distinguished invited speakers. I hope you will join us at his talk. Thank you to the Florida Award Selection Committee.

Over 150 students, postdoctoral scholars, faculty, companies, and researchers from 17 academic and industrial institutions across Florida and the southeastern United States have chosen to share their work at this meeting. We are thrilled to have more than 20 undergraduate posters, 3 undergraduate students giving oral presentations, and one high school student presenting!

In addition to attending the technical symposia, poster presentations, and exhibition, I encourage you to take advantage of the social events we have planned as a way to network, share ideas, and have fun! Social events include the Friday mixer, which runs concurrently with Poster Sessions on Friday evening. Our final Joint Reception is Saturday and we will have a general member meeting to vote on our updated bylaws, present poster awards, recognize our 50+ year members, and then celebrate 100 years of FAME!

Finally, I would like to thank the FLACS executive committee for their efforts in organizing FAME this year. I would also like to thank our sponsors and exhibitors for their support. This could not happen without our student volunteers who work hard behind the scenes to set up and keep the meeting going. Please enjoy the conference as you learn about all of the exciting research happening in and around Florida!

Kari B. Basso

Chair: Florida Section of American Chemical Society

FROM THE FLACS CHAIR ELECT

It is an amazing experience to serve as the Chair-Elect for the Florida Section of the American Chemical Society (FLACS) and support the organization of the Florida Annual Meeting and Exposition (FAME) 2025 collaboratively. It is my absolute pleasure to welcome all the participants, including speakers, sponsors, and attendees, to attend FAME-2025. Following tradition, this year's FAME will be an excellent opportunity to share, exchange, and discuss chemistries according to the vision and mission of ACS. One of the objectives of FL-ACS and FAME is to promote chemistry for everyone, especially quality education, next-generation research, and the economic growth of Florida through collaborations and innovations.

FLACS has worked throughout the years to discuss cutting-edge chemistry and develop an engaging environment within universities and research groups. This is very important to generate much-needed mentorship and supervision to support every objective of a quality chemistry degree and cutting-edge applied research. To promote these views, FAME connects with the experts and presents a platform where academic professors, industry experts, scholars, and students can meet and discuss various aspects and perspectives of chemistry. Keeping this in view, your presence in the FAME-2025 matters a lot for advancing science and technology for the progress of the nation.

Fortunately, again, we manage an outstanding program that has quality lectures, academic workshops, poster sessions, and interactive discussions that belong to various advanced fields of chemistry. All this happened only due to the very coordinated efforts and unconditional support of Chair FLACS, Past Chair FLACS, Chair-Elect Designate FLACS, FLACS executive committee, FAME-2025 session chairs, and FAME-2025 volunteers.

I am sure these few days will be very productive and engaging. Therefore, I encourage you all to maximize the benefits via interacting with peers and experts to build a network that can be useful for your success. Once again, thank you for supporting FAME-2025 by your presence, involvement, and support.

Sincerely,

Ajeet Kaushik, Ph.D.
Chair-Elect: Florida Section of American Chemical Society.

SPONSORS AND CONTRIBUTORS

We are pleased to acknowledge the following individuals, companies, and institutions that helped to sponsor Symposia and Exhibit at FAME 2025:

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Sponsor of the Ice Cream Social:

Website: https://www.macmillanlearning.com/

Additional Sponsors:


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Dates: October 26-29, 2025

Venue: DoubleTree by Hilton Orlando at SeaWorld

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Orlando, FL 32821

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2025 FLORIDA AWARD

Hans-Conrad (Hanno) zur Loye

University of South Carolina

Columbia, SC

The Florida Award selection committee honors Dr. Hans-Conrad zur Loye, David W. Robinson Palmetto Professor and Carolina Distinguished Professor at the University of South Carolina, for his contributions to inorganic materials chemistry and impact in both teaching and service to the chemistry community. Dr. zur Loye received his B.Sc. from Brown University in 1983 and his Ph.D. in Chemistry from UC Berkeley in 1988 under Prof. Angela Stacy. He was a postdoctoral fellow at Northwestern University and began as an assistant professor at MIT in 1989. In 1996, he joined the University of South Carolina, where he directs the DOE EFRC Center for Hierarchical Waste Form Materials, focusing on crystal growth of oxides and fluorides for actinide sequestration, and holds a joint appointment at Savannah River National Laboratory.

Dr. zur Loye has authored over 500 publications. His accolades include the Exxon Award in Solid State Chemistry (1994), USC Educational Foundation Award for Research (2006), IPMI Henry J. Albert Award (2009), and AAAS Fellow (2009). Active in the ACS, he chaired the Solid State Chemistry subdivision of the Division of Inorganic Chemistry, organized symposia at ACS meetings, and served as Technical Sessions Chair at the 2016 SERMACS. He was named ACS "Outstanding Chemist" (2010) and ACS Fellow (2011). He received the Southern Chemist Award (2011), USC Trustee Professorship Award (2012), Charles H. Stone Award (2017), and South Carolina Governor's Award for Excellence in Scientific Research (2016). Dr. zur Loye was an Associate Editor for the Journal of Solid State Chemistry from 1997–2022 and past editor for the Journal of Alloys and Compounds. He is a member and past President of the South Carolina Academy of Science.

Award and Presentation: Saturday, September 13, 5:00 PM (Stirling Ballroom)

Hans-Conrad zur Loye, University of South Carolina

Brent Sumerlin, University of Florida

Michael Therien, Duke University

Igor V. Alabugin, Florida State University

Jeffrey Johnson, University of NC Chapel Hill **Brian C.**

Benicewicz, University of South Carolina

John R. Reynolds, Georgia Institute of Technology

Kevin M. Smith, Louisiana State University

David N. Beratan, Duke University

Richard D. Adams, University of South Carolina

Lisa McElwee-White, University of Florida

Weitao Yang, Duke University

Joseph Schlenoff, Florida State University

Weihong Tan, University of Florida

Frank Millero, University of Miami

Timothy Cross, Florida State University

Kirk S. Schanze, University of Florida

George Christou, University of Florida

Naresh Dalal, Florida State University

Roger M. Leblanc, University of Miami

Charles R. Martin, University of Florida

John G. Dorsey, Florida State University

Kenneth B. Wagener, University of Florida

Alan G. Marshall, Florida State University

Thomas J. Vickers, Florida State University

Rodney J. Bartlett, University of Florida

Mostafa El Sayed, Georgia Institute of Technology

, Florida State

N. Yngve Öhrn, University of Florida

Luis Echegoyen, University of Miami

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Harry P. Shultz, University of Miami

Brian Stevens, University of South Florida

Leo Mandelkern, Florida State University

Theodore A. Ashford, University of South Florida

James D. Winefordner, University of Florida

Wallace Brey, University of Florida

Raymond Sheline, Florida State University

Mary Good, Louisiana State University

Harry Walborsky, Florida State University

Cecil Criss, University of Miami

William Jones, University of Florida

Dean F. Martin, University of South Florida

Sidney Fox, University of Miami

Gregory Choppin, Florida State University

James V. Quagliano, Florida State University

Ray Lawrence, USDA Naval Stores Laboratory

1970: **S. P. McGlynn**, Louisiana State University

1969: **John Baxter**, University of Florida

1968: **Earl Frieden**, Florida State University

1967: **O. K. Rice**, University of North Carolina

1966: **Paul Tarrant**, University of Florida

1965: **Werner Herz**, Florida State University

1964: **C. T. Bahner**, Carson-Newman College

1963: **George Butler**, University of Florida

1962: **Jack Hine**, Georgia Institute of Technology

1961: **Michael Kasha**, Florida State University

1960: **H. H. Sisler**, University of Florida

1959: **J. E. Hawkins**, University of Florida

1958: **Karl Dittmer**, Florida State University

1957: **C. R. Hauser**, Duke University

1956: **George K. Davis**, University of Florida

1955: **H. E. Skipper**, Southern Research Institute

1954: **C. B. Pollard**, University of Florida

1953: **A. E. Wood**, University of Mississippi

1952: **Paul Gross**, Duke University

2025 FLORIDA SHOWCASE SYMPOSIUM SPEAKERS

The Florida Showcase Symposium showcases senior members of the Florida local section and the breadth and quality of their research or educational activities. We are pleased to reestablish this honorary showcase after a break initiated by the COVID pandemic. Thank you to Dr. Christou for bringing back the Showcase Symposium to



Daniel Seidel (UF) Joe Schlenoff (FSU) Dmitry Kolpashchikov (UCF)

FAME!

Professor Daniel Seidel received his Diplom from the Friedrich-Schiller Universität at Jena, Germany, in 1998, after having completed his final year of the program at UT Austin as a fellow of the Trans-Atlantic Student Exchange program. He returned to Austin to perform his graduate studies in the lab of Prof. Jonathan L. Sessler, obtaining his Ph.D. in 2002 for the development of new methods for the synthesis of expanded porphyrin analogues. From 2002 to 2005, Professor Seidel was an Ernst Schering Postdoctoral Fellow in the group of Prof. David A. Evans at Harvard University, focusing on the development of new metal catalysts for catalytic enantioselective transformations. He started his independent career at Rutgers University in August of 2005. In 2017, his group moved to the University of Florida where he is currently the Katritzky Term Professor in Heterocyclic Chemistry. His research interests focus on the development of new synthetic methodologies, in particular in the areas of C–H bond functionalization, heterocycle synthesis, and asymmetric catalysis.

Professor Joe Schlenoff is Robert O. Lawton Professor of Chemistry and Mandelkern Professor of Polymer Science at Florida State University. After a brief stint at Polaroid Corporation (Cambridge, MA), he completed a Ph.D. at the University of Massachusetts, Amherst, in 1987. He joined the faculty of FSU in 1988. Professor Schlenoff holds *ca*. 43 U.S. patents. He was Chair of the Department of Chemistry and Biochemistry at FSU from 2007 to 2011 and oversaw the construction of FSU's new $72M Chemistry building. He held the Gutenberg Chair at the University of Strasbourg in 2011, won the Florida Award of the American Chemical Society in 2013, was a U.S. Fulbright Fellow in France in 2019, is a Fellow of the PMSE Division of the American Chemical Society and the National Academy of Inventors. From 2014 to 2020 he was Senior Associate Editor of *Langmuir*, the ACS journal of colloid and surface science.

Professor Dmitry M. Kolpashchikov is a Chemistry Professor at the University of Central Florida. He received

Ph.D. in bioorganic chemistry in 1999 from the Institute of Bioorganic Chemistry, Novosibirsk, Russia. This was followed by his postdoctoral training at the National Institute of Genetics, Japan, and at Columbia University in the City of New York. His interests include biochemistry of nucleic acids, hybridization probes, DNA nanotechnology and molecular diagnostics.

Presentations: Saturday, September 13, 1:00 PM – 3:00 PM (Stirling Ballroom)

SYMPOSIUM ORGANIZERS

The FLACS executive committee would like to acknowledge the symposium organizers without whom this program would not have come together.

Physical & Biophysical Chemistry
Dr. Benjamin P. Williams
University of North Florida

Inorganic Chemistry Dr. Keith Searles University of Florida

Biochemistry & Chemical Biology
Dr. Edward Kalkreuter
Florida State University

Chemical Education
Melanie Veige University of Florida

Computational Chemistry Dr. Lee Woodcock
University of South Florida

Analytical & Environmental Chemistry
Dr. Melanie Beazley
University of Central Florida

Organic Chemistry
Melisa Gonzalez
ORCA, University of Florida

POLY/PMSE & Materials Chemistry
Cole Stearns
University of Florida

Additive Manufacturing
Dr. Stanley Seelig
FL-ACS Senior Chemistry Committee Chair

Florida Showcase Symposium
Dr. George Christou
University of Florida

FAME 2025 COMMITTEE

- Kari Basso, University of Florida
- Ajeet Kaushik, Florida Polytechnic University
- Stefanie Habenicht, University of Florida
- Stanley Seelig, Seelig and Associates
- Sumesh Babu Krishnan, Florida State University
- Divya Radhakrishnan, University of Florida
- Carmen Gauthier, Florida Southern University, retired
- Denisia Popolan-Vaida, University of Central Florida
- Michael Mury, Polk County Schools
- Zois Syrgiannis, Nanoneurosciences
- Pranshu Puri, University of Florida

MEETING AT A GLANCE

Friday Afternoon September 12, 2025		
Time	**Session/Event**	**Location**
1:00 PM – 4:00 PM	Registration and check-in	Stirling Hall Foyer
	Poster set-up	Stirling Ballroom
2:00 PM – 4:00 PM	Career Workshop: Dr. Nicholas Conti	Stirling O-P
4:30 PM – 5:30 PM	Plenary Lecture: Dr. Wayne Jones, Chair of the Board of Directors of the American Chemical Society	Stirling Ballroom
6:00 PM – 8:00 PM	Poster Session / Welcome Mixer appetizers and cash bar	Stirling Ballroom
Dinner on your own		

Saturday Morning September 13, 2025		
Time	**Session/Event**	**Location**
7:45 AM – 8:30 AM	Late registration, grab-and-go breakfast and coffee	Stirling Hall Foyer
8:30 AM – 12:00 PM	Oral Sessions:	
	Biochemistry & Chemical Biology / Computational Chemistry	*Stirling B*
	POLY / PMSE & Materials Chemistry	*Stirling C*
	Physical & Biophysical Chemistry	*Stirling D*
	Chemistry Education	*Stirling E*
	Analytical Chemistry & Additive Manufact.	*Stirling F*
	Organic Chemistry	*Stirling N*

Saturday Morning September 13, 2025		
Time	**Session/Event**	**Location**
	Inorganic Chemistry	*Stirling O-P*
	Florida Award Special Session	*Stirling Q*
12:00 PM – 1:00 PM	Lunch on your own	

Saturday Afternoon September 13, 2025		
Time	**Session/Event**	**Location**
1:00PM – 3:00 PM	Showcase Symposium	Stirling Ballroom
3:00 PM – 4:30 PM	Oral Sessions:	
	Biochemistry & Chemical Biology / Computational Chemistry	*Stirling B*
	Physical & Biophysical Chemistry	*Stirling D*
	Inorganic Chemistry	*Stirling O-P*
4:30 PM - 5:00 PM	Ice Cream Social	Stirling Ballroom
5:00 PM – 6:00 PM	Florida Award Lecture: Dr. Hans-Conrad zur Loye, University of South Carolina	Stirling Ballroom
6:15 PM – 7:00 PM	FL-ACS General Meeting All-member vote on new bylaws Senior Chemist 50+ Recognition Sponsorship Recognition Presentation Awards	Stirling Ballroom
7:00 PM – 9:00 PM	Joint reception: 100-year celebration Buffet dinner and desert, cash bar	Terrace

TECHNICAL PROGRAM

Friday Afternoon (2:00 PM – 8:00 PM)
September 12, 2025

Friday Program		
Time	**Event**	**Location**
2:00 PM – 4:00 PM	Career Workshop: Dr. Nicholas Conti	Stirling O-P
4:30 PM – 5:30 PM	Plenary Lecture: Dr. Wayne Jones, Chair, Board of Directors of the American Chemical Society	Stirling Ballroom
6:00 PM – 8:00 PM	Poster Session	Stirling Ballroom

Saturday Morning (8:30 AM – 12:00 PM)
September 13, 2025

Biochemistry & Chemical Biology / Computational Chemistry Session A (Stirling B)		
Start time	**Presenter**	**Presentation title**
8:35 AM	Steven Austin	Achieving sustained conformational exploration with CALMS: Continually Adaptive Local Memory Sampling
9:20 AM	Thenehandi N. R. De Silva	MDZip: Neural Compression of Molecular Dynamics Trajectories for Scalable Storage and Ensemble Reconstruction
10:15 AM	Wen Zhu	Identifying a tunnel-gating residue in human asparagine synthetase
11:00 AM	Zain Becerra	How to Improve the Catalytic Efficiencies of Oxalate Decarboxylases

POLY / PMSE and Material Chemistry Session A (Stirling C)		
Start time	**Presenter**	**Presentation title**
8:30 AM	Dibakar Das	Rapid ambipolar near-IR Switching in electrochromic two-dimensional polymer with pore engineering
9:00 AM	Ryan Johnson	Tuning polymer chemistry and architecture to probe small molecule transport in PEG based polymers
9:30 AM	Coffee Break	
10:15 AM	Madeline Howell	Influence of Rare-Earth Imprinting on E-Waste Ion Selectivity in Hydrated Membranes
10:45 AM	Swapnanil Goswami	Tunable acid-catalyzed growth of single-crystalline two-dimensional imine-linked polymers with emergent properties
11:15 AM	Gina Pedro	Synthesis, optimization, and characterization of cyclic polyolefins

Physical and Biophysical Chemistry Session A (Stirling D)		
Start time	**Presenter**	**Presentation title**
9:30 AM	Sanam Pudasaini	Influence of Humidity and Humidity Cycling Parameters on Morphological Signatures of Salt Crystals
10:00 AM	Alex DeCecco	Decoding the Influence of Alkene Structure on the Criegee Intermediate Reaction Networks in the Ozone-Assisted Oxidation of C5 Acyclic and Endocyclic Alkenes
10:30 AM	Yitong Zhai	Unraveling the Low-Temperature Oxidation Chemistry of *n*-Hexanol via Detection of Elusive C_6 Intermediates

Physical and Biophysical Chemistry Session A (Stirling D)		
Start time	**Presenter**	**Presentation title**
11:00 AM	Katlyn Meier	Leveraging biomimetic membrane architectures to study heme binding and protein dimerization in full-length Progesterone Receptor Membrane Component 1

Chemistry Education Session A (Stirling E)		
Start time	**Presenter**	**Presentation title**
8:40 AM	Melanie Veige	Can Gen AI Case Studies Affect Student Interest in General Chemistry Laboratory?
9:00 AM	Fatima Khogali	Evaluating Item Writing Flaws in Undergraduate MCQs: A Comparative Analysis of Publisher- and Instructor-Generated Items
9:20 AM	Martina Summer	Reducing DEW Rates in Non-Majors Organic Chemistry: What Made the Difference?
9:40 AM	Charlotte Disney	Evaluating the effectiveness of a sustainable, hands-on activity to teach experimental error
10:00 AM	Coffee break	
10:30 AM	Stefanie Habenicht	AI-driven innovation in organic chemistry assignment design and grading
10:50 AM	Leah Kessler and Katherine Parr	Outreach Initiatives and Resources by the ACS Student Chapter at the University of Florida
11:10 AM	Amanda Chee-Awai	Engagement and motivation: Perspectives of disabled students in flipped organic chemistry and biochemistry courses
11:30 AM	Nelly Mateeva	Chemistry meets AI: Building the next generation of scientific thinkers

Analytical/Environmental Chemistry & Additive Manufacturing Session A (Stirling F)		
Start time	**Presenter**	**Presentation title**
8:30 AM	Bishnu Regmi	A Highly Sensitive Extraction-Free Spectrophotometric Method for the Detection of Ionic Surfactants Using Hydrophobic Organic Salts
8:50 AM	Zunaira Naeem	Radical-directed dissociation of cuprate lipid ion types
9:10 AM	Kari Basso	Using 4D-Lipidomics on a timsTOF Pro 2 to understand the reproductive cycle non-native Burmese Pythons infesting the Florida Everglades
9:30 AM	Ajeet Kaushik	Electrochemical Sensing of microplastics and PFAS for Environmental Surveillance
9:50 AM	Coffee break	
10:15 AM	Kathleen McCormac-Miller (invited)	USANCA: Preparing the Army to face the Chemical, Biological, Radiological, and Nuclear Threat
10:40 AM	Sarah Parker	Nutrient remediation in Florida soils compared to a commonly used soil amendment
11:00 AM	Melanie Beazley	Environmental contaminants of emerging concern: Understanding new threats to environmental and human health
11:20 AM	Stanley Seeling	Ionic Liquid Surfactants for Innovative Cleaning
11:40 AM	Thomas Mullen	Organosilane nanostructure fabrication on semiconductor substrates using particle lithography

Organic Chemistry Session A Stirling N		
Start time	**Presenter**	**Presentation title**
8:30 AM	Palak Gupta	Chemical Synthesis of Tagged and Natural Phosphatidylinositol Phosphates
9:00 AM	Divya Radhakrishnan	Enantioselective Alkynylation Enables Access to Chiral Cyclic Guanidines from 2-Mercaptopyrimidine
9:30 AM	Coffee Break	
10:15 AM	Aniket Sole	Asymmetric Brønsted Acid Catalyzed Hydroamination Reactions Provide Access to Elusive Pictet-Spengler Products
10:45 AM	Abhishek Kumar	Mechanistic Elucidation of 7-Methoxythiocoumarin Phototriggers via a Water-Soluble Supramolecular Approach
11:15 AM	Dr. Liangyong Mei	Visible-light-mediated Rose Bengal- or $[Ru(bpy)_3]^{2+}$-catalyzed radical [4+2] cycloaddition: an efficient route to tetrahydrocarbazoles

Inorganic Chemistry Session A (Stirling O-P)		
Start time	**Presenter**	**Presentation title**
8:30 AM	Charlotte Bailey	Use of ‘Molecular Nanoparticles’ of Cerium Dioxide as supports for d-block Transition Metals
8:50 AM	Amirhossein Zareihassangheshlaghi	Enhancing Thermoelectric Zintl Phases Through Site Mixing and High-Entropy Design
9:10 AM	Selena Kuenzig	Well-Defined Nb Heterogeneous Catalyst for Hydrocarbon Conversions — Characterized via Solid-State NMR

Inorganic Chemistry Session A (Stirling O-P)		
Start time	**Presenter**	**Presentation title**
9:30 AM	Junyan Liu	Spin-crossover-induced strain to actuate two-dimensional materials
9:50 AM	Ashlyn Hale	Molecular nanoparticles of birnessite-type MnO_2 via reductive aggregation
10:10 AM	Coffee Break	
10:35 AM	Naomi Selejan	Iron(III)-Oxo Clusters of Nuclearity Fe_2, Fe_3, and Fe_{10} from the use of a New Tridentate Chelate: Syntheses, Crystal Structures and Magnetostructural Correlation Analyses
10:55 AM	Md Sahab Uddin	Exploration of interstitial chemistry of $La_2C_2X_n$ (X = H, D) and effects on structure and superconductivity
11:15 AM	Nithun Pandit	Molecular Clusters as Models of the Repeating Unit of the Lanthanide Manganites ($LnMnO_3$) with the Perovskite Structure
11:35 AM	Vishal Chakravorty	Rational ligand design enables unprecedented access to a double-tethered metallacyclobutadiene catalyst for cyclic polymer synthesis

Florida Award Special Session (Stirling Q)		
Start time	**Presenter**	**Presentation title**
10:30 AM	Katie Gardinier	Lessons beyond the lab
11:00 AM	Michael Lufaso	Simple chemical substitutions and complex effects on the structure and physical properties of bismuth-containing mixed-metal oxides

Saturday Afternoon (1:00 PM – 9:00 PM)
September 13, 2025

Florida Showcase Symposium (Stirling Ballroom)		
Time	**Presenter**	**Presentation title**
1:00 PM – 1:40 PM	Daniel Seidel, University of Florida	New Strategies for the C–H Bond Functionalization of Amines
1:40 PM – 2:20 PM	Joe Schlenoff, Florida State University	Polyelectrolyte complexes: a distinctive class of soft matter for applications
2:20 PM – 3:00 PM	Dmitry Kolpashchikov, University of Central Fl.	DNA Nanotechnology for Nucleic Acid Analysis

Biochemistry & Chemical Biology / Computational Chemistry Session B (Stirling B)		
Start time	**Presenter**	**Presentation title**
3:00 PM	Kelly Rein	Comparative Quantitative Proteomic Analysis of High and Low Toxin-Producing Karenia brevis Strains Reveals Differences in Polyketide Synthase Abundance and Redox Status of the Proteome
3:45 PM	Szymon Ciesielski	Exploring the organization of interactions between the J-domain protein and the molecular chaperone Hsp70

Physical and Biophysical Chemistry Session B (Stirling D)		
Start time	**Presenter**	**Presentation title**
3:00 PM	Brynna Jones	Don't let the refractive index get you down: ATR-FTIR for microplastics in aqueous systems
3:30 PM	Bryan Kudisch, presented by Rachel Clark	Ultrafast Photochemical Branching Pathways Dictate the Efficiency of Next-Generation Photocatalysts

Inorganic Chemistry Session B (Stirling O-P)		
Start time	**Presenter**	**Presentation title**
3:00 PM	Daniel Rios	Synthetic Analogues of the Photosynthetic Oxygen-Evolving Complex (OEC) near Photosystem II of Cyanobacteria and Plants
3:20 PM	Tanzina Akter	Phase Transitions of Solvent-Suspended Organic-Inorganic Hybrid Halide Perovskite Particles.
3:40 PM	Titto Sunil John	Binding and reactivity of Carbon Monoxide on Low-valent Diiron centers
4:00 PM	Alexander Diodati	Lanthanide-capped titanium-Oxo complexes as potential spin qubits

Florida Award – The Grand Finale (Stirling Ballroom)	
Time	**Event**
5:00 PM – 6:00 PM	Florida Award and Award Lecture: Dr. Hans-Conrad zur Loye, University of South Carolina

Award Ceremony (Stirling Ballroom)	
Time	**Event**
6:15 PM – 7:00 PM	Recognition of 50+ ACS Members, Student Awards, Sponsorship recognition, member vote on FL-ACS bylaws
7:00 PM – 9:00 PM	100-Year Celebration! Food Drinks and FUN!

POSTERS

Instructions for poster presenters:

- **Posters should be no larger than 36”×48”. Poster boards, stands, and clips to mount your poster will be provided.**
- **Poster set up is Friday, September 12, from 1:00 PM – 4:00 PM. Each stand will have a number corresponding to your assigned number in the program. Posters must be removed by Saturday at 6:00 PM.**

Poster Session **Friday, September 12, 2025, 6:00 PM – 8:00 PM**		
No.	**Presenter**	**Title**
Analytical Chemistry		
1	Stephanny Rodriguez Cordero	Investigating physicochemical interactions between DNA and Granular Activated Carbon (GAC) to improve extraction efficiency
2	Kayleigh Coleman	Exploring Si substrate cleaning treatments using spectroscopic ellipsometry and contact angle goniometry
3	Justice Williams	A proteomic study assessing the impact of brevetoxin on zebrafish (*Danio Rerio*) embryo development
Biochemistry / Chemical Biology		
4	Micah Harris	Bioinformatics- and chemical probe-based discovery of an azoxy-crosslinked natural product.
5	Matt Simpson	Marine invertebrates as chemical architects: investigating bioactive secondary metabolites from deep-sea specimens
6	Trang Le	Investigating the dimer formation of J-domain proteins and implications for Hsp70 interaction
7	Lauren Gledhill	Utilizing NMR to uncover the interaction of Class B JDPs with Hsp70
8	Gabriela Serra	Exploring the role of molecular chaperone Hsp70/JDP systems in tardigrades

Poster Session
Friday, September 12, 2025, 6:00 PM – 8:00 PM

No.	Presenter	Title
Biochemistry / Chemical Biology (continued)		
9	Campbell Eckhardt	Machine learning–guided insights into substrate promiscuity of a divergent ATP-grasp ligase
10	Joven Jose	Synthesis of 3,4-dihydroxyphenylacetaldehyde (DOPAL): a toxic dopamine metabolite in Parkinson's disease pathogenesis
11	Priya	Characterizing the biochemical role of an unusual fatty acyl-AMP ligase from a hybrid PKS-NRPS pathway in nematodes
12	Dilip Vinodchandra Prajapati	Comparative metabolomics identifies the roles of acyl-CoA oxidases in the biosynthesis of ascarosides and a complex family of secreted *N*-acylethanolamines
13	Surasree Rakshit	Investigation of the mechanism of action of the Nemamides and Euglenatide B in human osteosarcoma cell line
14	Isabela Perez Gonzalez	Fun-Gal Detectives: discovering nature's antifungal secrets
Chemistry Education		
15	Abigail Held	Teaching responsible use of generative AI to introductory chemistry students
Computational Chemistry		
16	Brittany Stieferman	Computational modeling of activation product separations: Benchmarking Fe and Co systems for ligand optimization
17	Sherry Lin	Withdrawn
18	Hsin-Ying Tsai	Deep-learning based prediction of ketoreductase stereospecificity in polyketides

Poster Session
Friday, September 12, 2025, 6:00 PM – 8:00 PM

No.	Presenter	Title
Inorganic Chemistry		
19	Nithun Pandit	Molecular clusters as models of the repeating unit of the lanthanide manganites ($LnMnO_3$) with the perovskite structure
20	Alexander Diodati	Covalently-linked metalloporphyrin dimers and their magnetic and spectroscopic properties
21	Doyoung Noh	Bridged N_2 in a valence trapped dicobalt complex
22	Amelia Figueroa	'Molecular nanoparticles' of Bi_2O_3 and CeO_2 as supports for Cu^{2+} ions
23	Selena Kuenzig	Well-defined Nb heterogeneous catalyst for hydrocarbon conversions — characterized via solid-state NMR
24	Aiswarya Panangattu	Probing nitrite-to-NO conversion at Synthetic diiron centers
25	Ajay Sawant	Improvement of nitrate synthesis for fertilizers via rotating gliding arcs by addition of a catalyst.
26	Emily Willis	Structural and thermochemical evaluations of uranium-containing compounds
27	Kaithlyne Nguyen	Structural and thermochemical evaluations of molybdenum binding
28	Brittany Stieferman	Computational modeling of activation product separations: benchmarking Fe and Co systems for ligand optimization
29	Naomi Selejan and Vibhasha Samarasinghe	Iron(III)-oxo clusters of nuclearity Fe_2, Fe_3, and Fe_{10} from the use of a new tridentate chelate: syntheses, crystal structures and magnetostructural correlation analyses
30	Jack Schlamkowitz	Spectroscopic properties of covalently-linked metalloporphyrin dimers

Poster Session
Friday, September 12, 2025, 6:00 PM – 8:00 PM

No.	Presenter	Title
Inorganic Chemistry (continued)		
31	Daniel Rios	Synthetic analogues of the photosynthetic oxygen-evolving complex (OEC) near photosystem II of cyanobacteria and plants
32	Mina Sharabiani	Designing air- and water-stable tin halide complexes with [2.2.2] cryptand for functional materials
33	Magdy Elolimy	Development of functional porous magnetic hybrid metal halides
34	Md Sahab Uddin	Exploration of interstitial chemistry of $La_2C_2X_n$ (X = H, D) and effects on structure and superconductivity
35	Kamal Eldeen Nassar	Transition metal-based metal halide semiconductors for selective CO_2 photoreduction
36	Ali Azmy	Granting higher thermal and environmental stability for metal halide semiconductors through a single atom substitution
37	Alissa Anderson	Microwave-assisted synthesis of water-stable phosphonium-based bismuth halide semiconductors with photo-selective antifungal activity
Organic Chemistry		
38	Minh Tran	Cloud condensation nuclei activity of wildfire-derived organic acid aerosol particles
39	Phillip Gray	Mild and efficient Cs_2CO_3-promoted synthesis of silyl (dithio-)carbonates and silyl (dithio-)carbamates
40	Vishala Maharaj	Photodecarboxylative aminations with diazirines
41	Luke Assaad	Synthesis of peptidomimetic scaffold: bombating BCL-2 cancer complexes

Poster Session
Friday, September 12, 2025, 6:00 PM – 8:00 PM

No.	Presenter	Title
Organic Chemistry (continued)		
42	Connell Jno Baptiste	Practical, mild and efficient synthesis of sulfinamides via transsulfinamidation
43	Daria Galaktionova	Unactivated photoredox C–H amination with diazirines
44	Abraham Daoud	Synthesis and characterization of nucleobase-terminated star-shaped oligothiophenes
45	Melisa Gonzalez	Organic synthesis and chemical biology frontiers: the quest for the true substrate of a fatty acyl-AMP ligase involved in the biosynthesis of the nemamides
46	Alyssa Riker	Stereochemistry in disulfide-bond disrupting agents: synthesis of novel ***cis***-substituted derivatives
47	Rocco Vargas	Synthesis of efavirenz analogs via cycloalkyl side chain modification and ring cyclization
48	Soumili Pal	Terephthalamide-based foldamers as self-assembling cyclophane isosteres
49	Parag Das	Dicyanorhodanine-functionalized aromatic heterocycles as visible-light-driven molecular photoswitches
50	Zaafir Dulloo	Disulfide-bond disrupting agents: fluorinated bioisosteres and fluorescent bioimaging probes
51	Favour Makurvet	Iodine nitrate-mediated iodocyclization of tris-alkynes: a new approach to symmetrically functionalized triphenylenes as ideal precursors to all-benzenoid graphene quantum dots
52	Neelam Tariq	Synthesis of functionalized cryptands for stable hybrid halide perovskite materials
53	Phillip Gray	Mild and efficient Cs_2CO_3-promoted synthesis of silyl (dithio-)carbonates and silyl (dithio-)carbamates

Poster Session
Friday, September 12, 2025, 6:00 PM – 8:00 PM

No.	Presenter	Title
Physical Chemistry		
54	Sebastian Cimino	The influence of defect engineering on the stability of single platinum atoms and clusters on ultrathin cerium oxide films
55	Eric Segrest	Concurrently monitoring ultrafast surface and gas-phase dynamics in solid–gas interfacial reactions and moving towards near-atmospheric pressure systems.
56	Khe Bui	Real-time analysis of aerosol emissions from air fryer Cooking
57	Zachary Clarke	Understanding the reaction networks of Criegee intermediates formed in ozonolysis of C_7 acyclic and endocyclic alkenes
58	Rayhanna Harper	Reactivity and cloud condensation nuclei activity of fresh and aged syringic acid aerosol particles
59	Madgee Pierre Louis	Ozone-assisted oxidation of crotyl alcohol: elucidating the reaction networks of acetaldehyde oxide and glycolaldehyde oxide Criegee intermediates
60	Viraj Wijesekara	Investigating lipid organization and GPCR-lipid interactions in membrane mimetics with NMR spectroscopy
61	Reagan Elia	Metal organic frameworks for carbon dioxide capture from landfill gases
62	Danielle Eniola	Imaging and machine-learning analysis of paracetamol deposit patterns
POLY / PMSE		
63	Gunzaya Otgonjargal	Ultra-Long Supersoft Bottlebrush Polymers via Metal-Free Synthesis
64	Payson Keown	Hydroxyl-yne click chemistry as a facile post-polymerization modification strategy for covalent adaptable networks

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