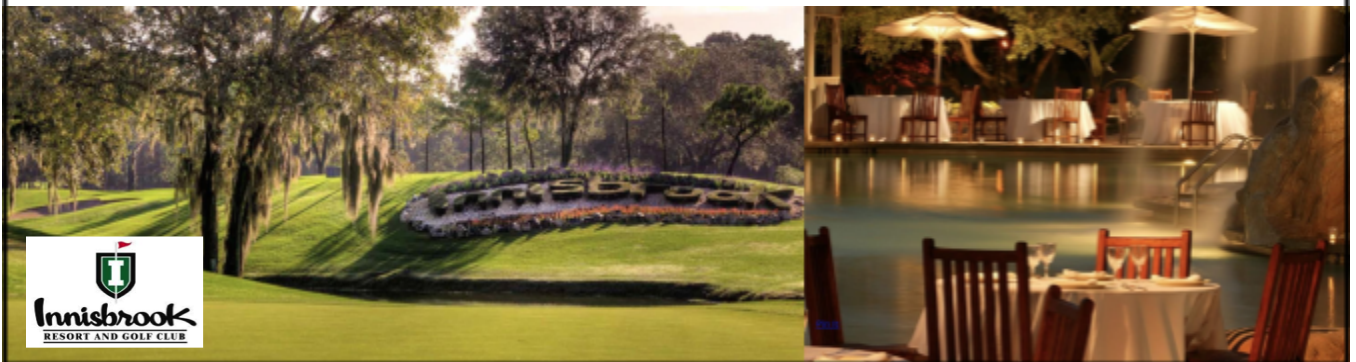


# FAME 2025

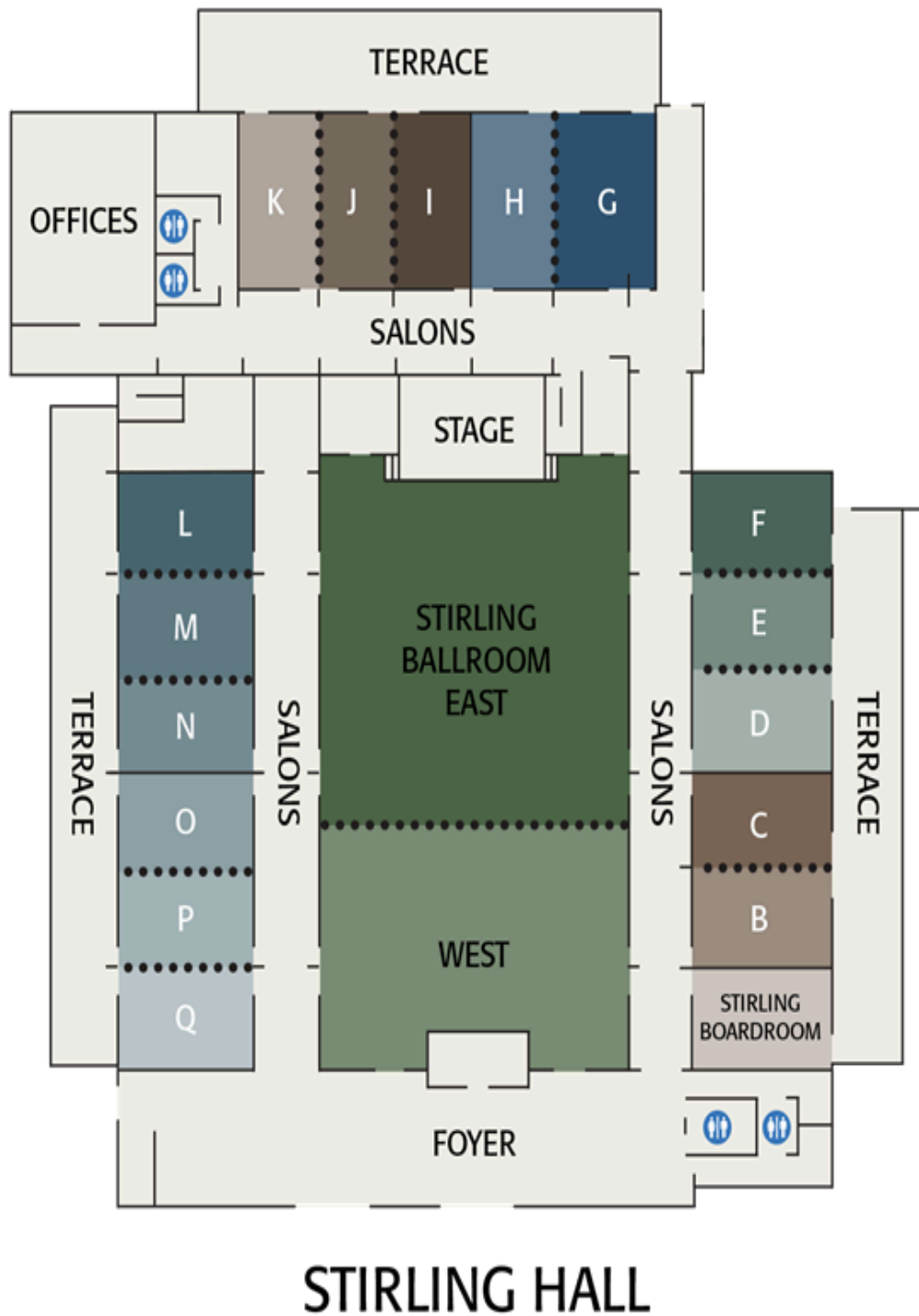


## 101<sup>st</sup> Florida Annual Meeting and Exposition

### PROGRAM OF ACTIVITIES



Please note that Innisbrook is a CASHLESS resort and will only take credit card or debit cards for payment. A credit card is required for incidentals at check-in.



**ACS** Local Section  
Florida

FLACS  
FLORIDA ANNUAL MEETING & EXPOSITION

**OFFICIAL PROGRAM**

2025 FLORIDA SECTION OFFICERS.....	4
FROM THE FLACS CHAIR.....	6
FROM THE FLACS CHAIR ELECT.....	7
SPONSORS AND CONTRIBUTORS.....	8
2025 FLORIDA AWARD.....	10
PAST FLORIDA AWARD WINNERS.....	11
2025 FLORIDA SHOWCASE SYMPOSIUM SPEAKERS.....	14
SYMPOSIUM ORGANIZERS.....	16
FAME 2025 COMMITTEE.....	16
MEETING AT A GLANCE.....	17
TECHNICAL PROGRAM.....	19
Friday Afternoon (2:00 PM – 8:00 PM).....	19
Saturday Morning (8:30 AM – 12:00 PM).....	19
Saturday Afternoon (1:00 PM – 9:00 PM).....	25
POSTERS.....	27
EVENT MAP.....	35

## FLACS

### Publication of the Florida Section of the American Chemical Society

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University of Florida  
Gainesville, FL 32611

##### **Secretary**

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Department of Chemistry  
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Gainesville, FL 32611

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Florida A&M University  
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Bartow, FL 33830

Dr. Stanley Seelig  
Seelig and Associates  
FL-ACS Senior Chemistry  
Committee Chair

The Florida Section of the American Chemical Society is not responsible for statements or opinions expressed in this publication.

## FROM THE FLACS CHAIR



On behalf of the Florida Section of the American Chemical Society (FLACS), welcome to the 101<sup>st</sup> 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.**



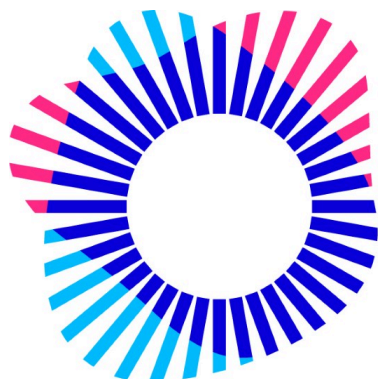
## SPONSORS AND CONTRIBUTORS

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

### Sponsors of the Poster Session and Joint Reception:



### Sponsor of the Ice Cream Social:



# Macmillan Learning

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

### Additional Sponsors:







# SERMACS 2025

## CHEMISTRY IN THE SUNSHINE

**Dates:** October 26-29, 2025

**Venue:** DoubleTree by Hilton Orlando at SeaWorld  
10100 International Drive  
Orlando, FL 32821  
[www.dtresortorlando.com](http://www.dtresortorlando.com)



[sermacs2025.org](http://sermacs2025.org)



[@sermacs2025](https://twitter.com/sermacs2025)



## 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)

## PAST FLORIDA AWARD WINNERS

2025: **Hans-Conrad zur Loye**, University of South Carolina  
2024: **Brent Sumerlin**, University of Florida  
2023: **Michael Therien**, Duke University  
2022: **Igor V. Alabugin**, Florida State University  
2021: **Jeffrey Johnson**, University of NC Chapel Hill  
2020: **Brian C. Benicewicz**, University of South Carolina  
2019: **John R. Reynolds**, Georgia Institute of Technology  
2018: **Kevin M. Smith**, Louisiana State University  
2017: **David N. Beratan**, Duke University  
2016: **Richard D. Adams**, University of South Carolina  
2015: **Lisa McElwee-White**, University of Florida  
2014: **Weitao Yang**, Duke University  
2013: **Joseph Schlenoff**, Florida State University  
2012: **Weihong Tan**, University of Florida  
2011: **Frank Millero**, University of Miami  
2010: **Timothy Cross**, Florida State University  
2009: **Kirk S. Schanze**, University of Florida  
2008: **George Christou**, University of Florida  
2007: **Naresh Dalal**, Florida State University  
2006: **Roger M. Leblanc**, University of Miami  
2005: **Charles R. Martin**, University of Florida  
2004: **John G. Dorsey**, Florida State University  
2003: **Kenneth B. Wagener**, University of Florida  
2002: **Alan G. Marshall**, Florida State University  
2001: **Thomas J. Vickers**, Florida State University  
2000: **Rodney J. Bartlett**, University of Florida  
1999: **Mostafa El Sayed**, Georgia Institute of Technology

1998: **Jack Saltiel**, Florida State University  
1997: **N. Yngve Öhrn**, University of Florida  
1996: **Luis Echegoyen**, University of Miami  
1995: **Alan R. Katritzky**, University of Florida  
1994: **Albert Padwa**, Emory University  
1993: **Norman L. Allinger**, University of Georgia  
1992: **Charles E. Carraher**, Florida Atlantic University  
1991: **George R. Newkome**, University of South Florida  
1990: **R. Bruce King**, University of Georgia  
1989: **William R. Dolbier**, University of Florida  
1988: **Edward K. Mellon**, Florida State University  
1987: **Delos F. DeTar**, Florida State University  
1986: **Harry P. Shultz**, University of Miami  
1985: **Brian Stevens**, University of South Florida  
1984: **Leo Mandelkern**, Florida State University  
1983: **Theodore A. Ashford**, University of South Florida  
1982: **James D. Winefordner**, University of Florida  
1981: **Wallace Brey**, University of Florida  
1980: **Raymond Sheline**, Florida State University  
1979: **Mary Good**, Louisiana State University  
1978: **Harry Walborsky**, Florida State University  
1977: **Cecil Criss**, University of Miami  
1976: **William Jones**, University of Florida  
1975: **Dean F. Martin**, University of South Florida  
1974: **Sidney Fox**, University of Miami  
1973: **Gregory Choppin**, Florida State University  
1972: **James V. Quagliano**, Florida State University  
1971: **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 FAME!



Daniel Seidel (UF)



Joe Schlenoff (FSU)



Dmitry Kolpashchikov (UCF)

**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:	
	<i>Biochemistry &amp; Chemical Biology / Computational Chemistry</i>	<i>Stirling B</i>
	<i>POLY / PMSE &amp; Materials Chemistry</i>	<i>Stirling C</i>
	<i>Physical &amp; Biophysical Chemistry</i>	<i>Stirling D</i>
	<i>Chemistry Education</i>	<i>Stirling E</i>
	<i>Analytical Chemistry &amp; Additive Manufact.</i>	<i>Stirling F</i>
	<i>Organic Chemistry</i>	<i>Stirling N</i>

Saturday Morning September 13, 2025		
Time	Session/Event	Location
	<i>Inorganic Chemistry</i>	<i>Stirling O-P</i>
	<i>Florida Award Special Session</i>	<i>Stirling Q</i>
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:	
	<i>Biochemistry &amp; Chemical Biology / Computational Chemistry</i>	<i>Stirling B</i>
	<i>Physical &amp; Biophysical Chemistry</i>	<i>Stirling D</i>
	<i>Inorganic Chemistry</i>	<i>Stirling O-P</i>
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	Thenehandhi 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 <i>n</i> -Hexanol via Detection of Elusive C <sub>6</sub> 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 $[\text{Ru}(\text{bpy})_3]^{2+}$ -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 <sub>2</sub> via reductive aggregation
10:10 AM	Coffee Break	
10:35 AM	Naomi Selejan	Iron(III)-Oxo Clusters of Nuclearity Fe <sub>2</sub> , Fe <sub>3</sub> , and Fe <sub>10</sub> 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 <sub>2</sub> C <sub>2</sub> X <sub>n</sub> (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 <sub>3</sub> ) 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 <i>Karenia brevis</i> 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
<b>Analytical Chemistry</b>		
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 ( <i>Danio Rerio</i> ) embryo development
<b>Biochemistry / Chemical Biology</b>		
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

<b>Poster Session</b> <b>Friday, September 12, 2025, 6:00 PM – 8:00 PM</b>		
<b>No.</b>	<b>Presenter</b>	<b>Title</b>
<b>Biochemistry / Chemical Biology (continued)</b>		
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 <i>N</i> -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
<b>Chemistry Education</b>		
15	Abigail Held	Teaching responsible use of generative AI to introductory chemistry students
<b>Computational Chemistry</b>		
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**

<b>No.</b>	<b>Presenter</b>	<b>Title</b>
<b>Inorganic Chemistry</b>		
19	Nithun Pandit	Molecular clusters as models of the repeating unit of the lanthanide manganites (LnMnO <sub>3</sub> ) with the perovskite structure
20	Alexander Diodati	Covalently-linked metalloporphyrin dimers and their magnetic and spectroscopic properties
21	Doyoung Noh	Bridged N <sub>2</sub> in a valence trapped dicobalt complex
22	Amelia Figueroa	'Molecular nanoparticles' of Bi <sub>2</sub> O <sub>3</sub> and CeO <sub>2</sub> as supports for Cu <sup>2+</sup> 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 <sub>2</sub> , Fe <sub>3</sub> , and Fe <sub>10</sub> 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**

<b>No.</b>	<b>Presenter</b>	<b>Title</b>
<b>Inorganic Chemistry (continued)</b>		
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 $\text{La}_2\text{C}_2\text{X}_n$ ( $\text{X} = \text{H}, \text{D}$ ) and effects on structure and superconductivity
35	Kamal Eldeen Nassar	Transition metal-based metal halide semiconductors for selective $\text{CO}_2$ 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
<b>Organic Chemistry</b>		
38	Minh Tran	Cloud condensation nuclei activity of wildfire-derived organic acid aerosol particles
39	Phillip Gray	Mild and efficient $\text{Cs}_2\text{CO}_3$ -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**

<b>No.</b>	<b>Presenter</b>	<b>Title</b>
<b>Organic Chemistry (continued)</b>		
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 <i>cis</i> -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 <sub>2</sub> CO <sub>3</sub> -promoted synthesis of silyl (dithio-)carbonates and silyl (dithio-)carbamates

<b>Poster Session</b> <b>Friday, September 12, 2025, 6:00 PM – 8:00 PM</b>		
<b>No.</b>	<b>Presenter</b>	<b>Title</b>
<b>Physical Chemistry</b>		
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 <sub>7</sub> 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
<b>POLY / PMSE</b>		
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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