

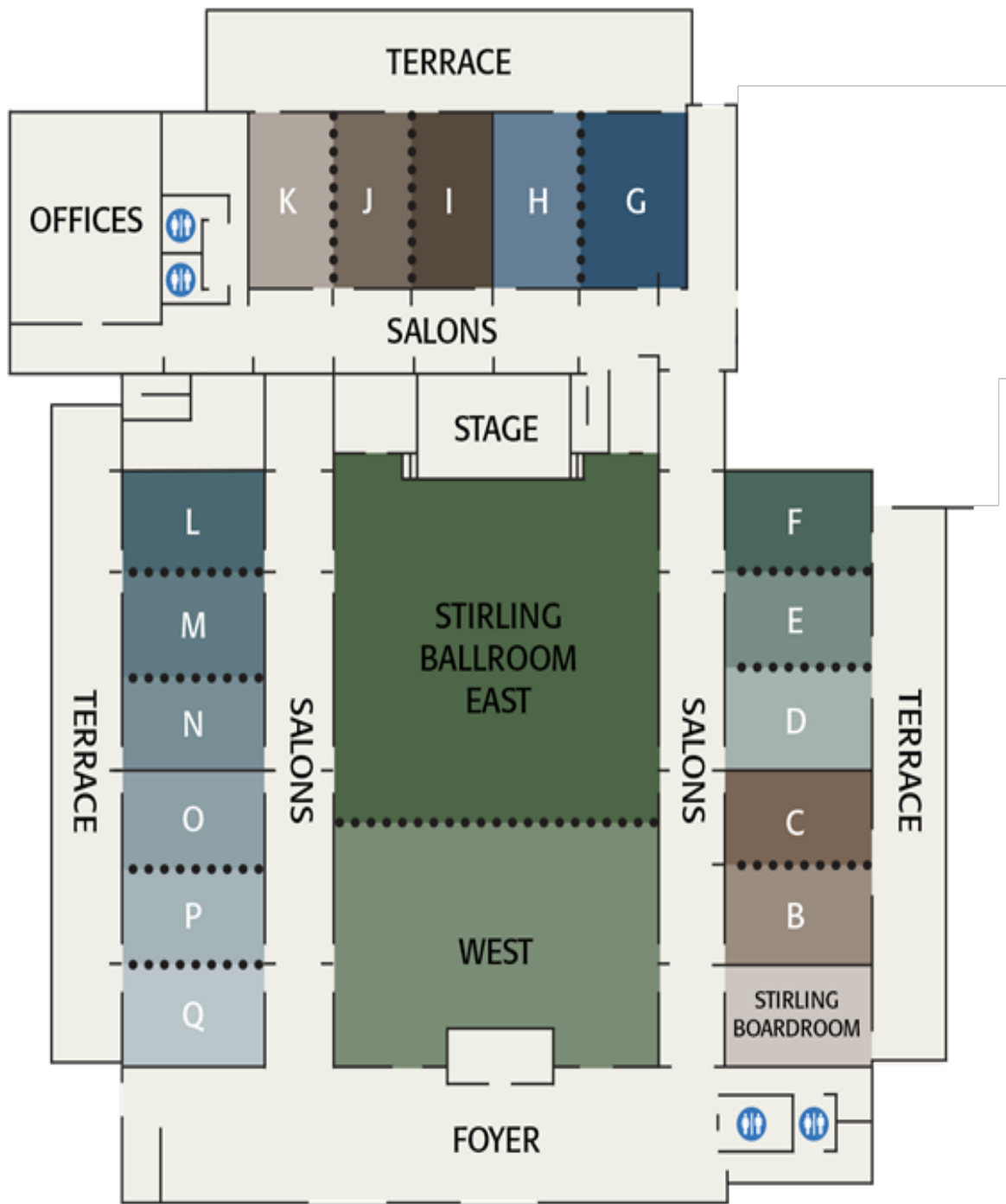


# FAME 2023

## 99<sup>th</sup> Florida Annual Meeting and Exposition

### PROGRAM OF ACTIVITIES





**STIRLING HALL**



FLACS  
FLORIDA ANNUAL MEETING & EXPOSITION

OFFICIAL PROGRAM

**FLACS (Florida Section of the ACS) Committee**  
**Message from the FLACS Chair and Program Chair**  
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**Meeting-at-a-Glance**  
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**Instructions for Poster Presenters**  
**Poster Session I**  
**Poster Session II**

**FLACS**  
**Publication of the Florida Section of the American Chemical Society**

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Florida Southern College  
Lakeland, FL 33801

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Department of Chemistry  
University of Florida  
Gainesville, FL 32611

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Department of Chemistry  
University of Florida  
Gainesville, FL 32611

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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 99<sup>th</sup> Florida Annual Meeting and Exposition (FAME). As the 2023 FLACS Chair, I would like to sincerely thank you for your participation and support of this year's meeting. We are still trying to get back our excellent conference to the state it was prior to COVID-19, but I think we are getting there..

I would like to acknowledge all those who were instrumental in getting us back together including our organizers and FLACS executive board members.

At this year's meeting, we are pleased to present our 2023 Florida award winner, Dr. Michael Therien from Duke University who is here and will present on Friday. He is an extraordinary Chemist in his field and excited to have him speak. I hope you will join us at his talk. Thank you to the Florida Award Selection Committee.

Students, postdoctoral scholars, faculty, companies, and researchers from over 240 academic and industrial institutions across Florida and the southeastern United States have chosen to share their work at this meeting. There are also collaborative work from across the nation represented in this work. We have over 85 talks and over 60 posters. Every year I am inspired by the work of my colleagues, students, post-docs and industry partners sharing new projects and ideas to tackle old problems. Like each year past, I am certain that this year will be no different. While this annual meeting traditionally invites participation from both professional and student members, FAME is particularly unique in the opportunity it provides for students (both graduate and undergraduate) to present their research in a relaxed and friendly environment; this year, students submitted majority of the abstracts.

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 Welcome Reception, which runs concurrently with Poster Sessions on Thursday and Saturday evening, and the Graduate Student and Faculty Mixers at Market Salamander Bar and Packard's Patio, respectively.

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. Please enjoy the conference as you learn about all of the exciting research happening in and around Florida!

Deborah Bromfield Lee  
FLACS Chair

### **FROM THE FLACS Chair Elect- Program CHAIR**



It is very exciting to be part of the 99<sup>th</sup> FAME meeting! What an accomplishment for the Florida Local Section of the ACS! As Deborah, Ralph and I have worked to put this together I get a real sense of excitement to meet again and share our work. I look forward to meeting you all and I hope you have a wonderful meeting. I am very thankful for our wonderful session chairs! It has been a pleasure to work with all of you. As I put the program together I was thinking that it would be nice to be able to attend multiple sessions at once as they all have very interesting presentations line up for us! Thank you for your support of FLACS and FAME and I hope you meet new friends and colleagues, and see exciting new science.

Kari B. Basso  
FLACS Chair-Elect

We are pleased to acknowledge the following individuals, companies, and institutions that helped to sponsor Symposia AND Exhibit at FAME 2023:

# UF | Research

UF

Liberal Arts *and* Sciences

# ThermoFisher

S C I E N T I F I C

The world leader in serving science

## PAST FLORIDA AWARD WINNERS

|      |                        |                                 |      |                            |                                 |
|------|------------------------|---------------------------------|------|----------------------------|---------------------------------|
| 1952 | <b>Paul Gross</b>      | Duke University                 | 1988 | <b>Edward K. Mellon</b>    | Florida State University        |
| 1953 | <b>A. E. Wood</b>      | University of Mississippi       | 1989 | <b>William R. Dolbier</b>  | University of Florida           |
| 1954 | <b>C. B. Pollard</b>   | University of Florida           | 1990 | <b>R. Bruce King</b>       | University of Georgia           |
| 1955 | <b>H. E. Skipper</b>   | Southern Research Institute     | 1991 | <b>George R. Newkome</b>   | University of South Florida     |
| 1956 | <b>George K. Davis</b> | University of Florida           | 1992 | <b>Charles E. Carraher</b> | Florida Atlantic University     |
| 1957 | <b>C. R. Hauser</b>    | Duke University                 | 1993 | <b>Norman L. Allinger</b>  | University of Georgia           |
| 1958 | <b>Karl Dittmer</b>    | Florida State University        | 1994 | <b>Albert Padwa</b>        | Emory University                |
| 1959 | <b>J. E. Hawkins</b>   | University of Florida           | 1995 | <b>Alan R. Katritzky</b>   | University of Florida           |
| 1960 | <b>H. H. Sisler</b>    | University of Florida           | 1996 | <b>Luis Echegoyen</b>      | University of Miami             |
| 1961 | <b>Michael Kasha</b>   | Florida State University        | 1997 | <b>N. Yngve Öhrn</b>       | University of Florida           |
| 1962 | <b>Jack Hine</b>       | Georgia Institute of Technology | 1998 | <b>Jack Saltiel</b>        | Florida State University        |
| 1963 | <b>George Butler</b>   | University of Florida           | 1999 | <b>Mostafa El-Sayed</b>    | Georgia Institute of Technology |
| 1964 | <b>C. T. Bahner</b>    | Carson-Newman                   | 2000 | <b>Rodney J. Bartlett</b>  | University of                   |



|      |                            |                              |      |                           |                          |
|------|----------------------------|------------------------------|------|---------------------------|--------------------------|
|      |                            | College                      |      |                           | Florida                  |
| 1965 | <b>Werner Herz</b>         | Florida State University     | 2001 | <b>Thomas J. Vickers</b>  | Florida State University |
| 1966 | <b>Paul Tarrant</b>        | University of Florida        | 2002 | <b>Alan G. Marshall</b>   | Florida State University |
| 1967 | <b>O. K. Rice</b>          | University of North Carolina | 2003 | <b>Kenneth B. Wagener</b> | University of Florida    |
| 1968 | <b>Earl Frieden</b>        | Florida State University     | 2004 | <b>John G. Dorsey</b>     | Florida State University |
| 1969 | <b>John Baxter</b>         | University of Florida        | 2005 | <b>Charles R. Martin</b>  | University of Florida    |
| 1970 | <b>S. P. McGlynn</b>       | Louisiana State University   | 2006 | <b>Roger M. Leblanc</b>   | University of Miami      |
| 1971 | <b>Ray Lawrence</b>        | USDA Naval Stores Laboratory | 2007 | <b>Naresh Dalal</b>       | Florida State University |
| 1972 | <b>James. V. Quagliano</b> | Florida State University     | 2008 | <b>George Christou</b>    | University of Florida    |
| 1973 | <b>Gregory Choppin</b>     | Florida State University     | 2009 | <b>Kirk S. Schanze</b>    | University of Florida    |
| 1974 | <b>Sidney Fox</b>          | University of Miami          | 2010 | <b>Timothy Cross</b>      | Florida State University |
| 1975 | <b>Dean F. Martin</b>      | University of South Florida  | 2011 | <b>Frank Millero</b>      | University of Miami      |
| 1976 | <b>William Jones</b>       | University of Florida        | 2012 | <b>Weihong Tan</b>        | University of Florida    |
| 1977 | <b>Cecil Criss</b>         | University of Miami          | 2013 | <b>Joseph Schlenoff</b>   | Florida State University |
| 1978 | <b>Harry Walborsky</b>     | Florida State University     | 2014 | <b>Weitao Yang</b>        | Duke University          |

|      |                             |                             |      |                            |                                 |
|------|-----------------------------|-----------------------------|------|----------------------------|---------------------------------|
| 1979 | <b>Mary Good</b>            | Louisiana State University  | 2015 | <b>Lisa McElwee-White</b>  | University of Florida           |
| 1980 | <b>Raymond Sheline</b>      | Florida State University    | 2016 | <b>Richard D. Adams</b>    | University of South Carolina    |
| 1981 | <b>Wallace Brey</b>         | University of Florida       | 2017 | <b>David N. Beratan</b>    | Duke University                 |
| 1982 | <b>James D. Winefordner</b> | University of Florida       | 2018 | <b>Kevin M. Smith</b>      | Louisiana State University      |
| 1983 | <b>Theodore A. Ashford</b>  | University of South Florida | 2019 | <b>John R. Reynolds</b>    | Georgia Institute of Technology |
| 1984 | <b>Leo Mandelkern</b>       | Florida State University    | 2020 | <b>Brian C. Benicewicz</b> | University of South Carolina    |
| 1985 | <b>Brian Stevens</b>        | University of South Florida | 2021 | <b>Jeffrey Johnson</b>     | University of NC Chapel Hill    |
| 1986 | <b>Harry P. Shultz</b>      | University of Miami         | 2022 | <b>Igor V. Alabugin</b>    | Florida State University        |
| 1987 | <b>Delos F. DeTar</b>       | Florida State University    | 2023 | <b>Michael Therien</b>     | Duke University                 |

## 2023 FLORIDA AWARD

### Michael Therien

Duke University  
Durham, NC



The Florida Award selection committee recognizes Michael J. Therien, the William R. Kenan, Jr. Professor at Duke University, for his contributions to physical inorganic and physical organic chemistry, and major impact in both teaching and service to the larger chemistry community. It is our honor to present him with the 2023 Florida Award.

Prof. Therien received his undergraduate education at UCLA and St. Andrews University (Scotland). He earned his doctoral degree at UCSD under the research direction of William Trogler. Following a postdoctoral fellowship with Harry Gray at Caltech, he took a faculty appointment at the University of Pennsylvania, where he was the Alan G. MacDiarmid Professor. In 2008, his laboratory moved to Duke University, where his research program focuses on engineering novel photophysical, electro-optic, spintronic, and energy transducing function in molecular and nanoscale systems. Earlier honors include Dreyfus and Sloan Foundation Fellowships, and young investigator awards from the Beckman Foundation, the Searle Scholars Program, the Society of Porphyrins and Phthalocyanines, and the NSF. He has been recognized with the ACS Philadelphia Section Award, elected Fellow of the American Association for the Advancement of Science, and awarded the Francqui Chair in the Exact Sciences (Belgium). He is a Fellow of the John Simon Guggenheim Memorial Foundation, and was recently awarded the R. B. Woodward Career Award in Porphyrin Chemistry.

**Award and Presentation (Physical and Biophysical Chemistry):** June 2<sup>nd</sup> 4:30 pm

**The FLACS executive committee would like to acknowledge the Symposium Organizers without whom this program would not come together without.**

|                                                                                     |                                                                                                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Computational Chemistry</b><br>Dr. Shyam Kattel<br>Florida A&M University        | <b>Biochemistry and Chemical Biology</b><br>Dr. Yulia Gerasimova<br>University of Central Florida   |
| <b>Inorganic Chemistry</b><br>Dr. Keith Searles<br>University of Florida            | <b>Chemical Education</b><br>Dr. Erin Saitta<br>University of Central Florida                       |
| <b>Physical and Biophysical Chemistry</b><br>Dr. Matt Eddy<br>University of Florida | <b>Analytical Chemistry</b><br>Dr. Robert Lazenby<br>Florida State University                       |
| <b>Organic Chemistry</b><br>Dr. Rebecca Black<br>New College of Florida             | <b>PMSE/POLY and Materials Chemistry</b><br>Rhys Hughes<br>&<br>Megan Lott<br>University of Florida |

# MEETING AT A GLANCE

## THURSDAY AFTERNOON June 1st

| SESSION/EVENT |                                                                                                                          | LOCATION              |
|---------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 12:00-5:00    | <i>Registration and check-in</i>                                                                                         | Stirling Hall Foyer   |
| 1:30-5:00     | <b>Workshop A: ACS Career Workshop: Finding Your Pathway</b>                                                             | Stirling E-F          |
| 1:30-5:30     | <b>Workshop B: Chemical Biology RCR Workshop - Intrinsic Asymmetry: Mentor/Mentee Responsibilities and Relationships</b> | Stirling B-C          |
| <b>BREAK</b>  |                                                                                                                          |                       |
| 5:30 – 7:30   | Welcome Reception ( <i>refreshments served</i> )                                                                         | Stirling Hall Foyer   |
| 5:30 – 7:30   | <b>Poster Session I</b>                                                                                                  | Stirling Ballroom E&W |
| 8:00 PM       | Graduate Student Mixer ( <i>refreshments served</i> )                                                                    | Stirling I-J-K        |

## FRIDAY MORNING June 2nd

| SESSION/EVENT                  |                                              | LOCATION            |
|--------------------------------|----------------------------------------------|---------------------|
| 8:00 - 8:30                    | <i>Late Registration and Light Breakfast</i> | Stirling Hall Foyer |
| 8:30-                          | Biochemistry and Chemical Bio A              | Stirling L-M        |
|                                | Analytical A                                 | Stirling K          |
|                                | Physical and Biophysical A                   | Stirling G-H        |
|                                | PMSE/POLY A                                  | Stirling O-P        |
| <b>COFFEE BREAK</b>            |                                              |                     |
| 10:15-                         | Biochemistry and Chemical Bio A              | Stirling L-M        |
|                                | Analytical A                                 | Stirling K          |
|                                | Organic A                                    | Stirling B          |
|                                | Physical and Biophysical A                   | Stirling G-H        |
|                                | PMSE/POLY A                                  | Stirling O-P        |
| <b>LUNCH BREAK ON YOUR OWN</b> |                                              |                     |

## FRIDAY AFTERNOON June 2nd



## MEETING AT A GLANCE

| SESSION/EVENT             |                                                                        | LOCATION              |
|---------------------------|------------------------------------------------------------------------|-----------------------|
| 1:00-5:00                 | <b>Poster viewing</b>                                                  | Stirling Ballroom E&W |
| 1:30-                     | Biochemistry and Chemical Bio B                                        | Stirling L-M          |
|                           | Computational A                                                        | Stirling I-J          |
|                           | Inorganic A                                                            | Stirling E-F          |
|                           | Organic B                                                              | Stirling B            |
|                           | Physical and Biophysical B                                             | Stirling G-H          |
| <b>COFFEE BREAK</b>       |                                                                        |                       |
| 3:15-                     | Computational A                                                        | Stirling I-J          |
|                           | Inorganic A                                                            | Stirling E-F          |
|                           | Organic B                                                              | Stirling B            |
|                           | Physical and Biophysical B                                             | Stirling G-H          |
| 4:30-5:30                 | 2023 FL Award Winner Presentation and Award (Physical and Biophysical) | Stirling G-H          |
| <b>DINNER ON YOUR OWN</b> |                                                                        |                       |
| 9:00                      | Faculty Mixer ( <i>refreshments served</i> )                           | Packard's Patio       |

### SATURDAY MORNING June 3rd

| SESSION/EVENT                  |                                              | LOCATION            |
|--------------------------------|----------------------------------------------|---------------------|
| 8:00 -<br>8:30                 | <i>Late Registration and Light Breakfast</i> | Stirling Hall Foyer |
| 8:30 -                         | Biochemistry and Chemical Bio C              | Stirling L-M        |
|                                | Chemical Education A                         | Stirling K          |
|                                | Computational C                              | Stirling I-J        |
|                                | Physical and Biophysical C                   | Stirling G-H        |
|                                | PMSE/POLY C                                  | Stirling O-P        |
| <b>COFFEE BREAK</b>            |                                              |                     |
| 10:15-                         | Biochemistry and Chemical Bio C              | Stirling L-M        |
|                                | Chemical Education A                         | Stirling K          |
|                                | Computational C                              | Stirling I-J        |
|                                | Inorganic B                                  | Stirling E-F        |
|                                | Physical and Biophysical C                   | Stirling G-H        |
|                                | PMSE/POLY C                                  | Stirling O-P        |
| <b>LUNCH BREAK ON YOUR OWN</b> |                                              |                     |

### SATURDAY AFTERNOON June 3rd

## MEETING AT A GLANCE

| SESSION/EVENT             |                                                          | LOCATION              |
|---------------------------|----------------------------------------------------------|-----------------------|
| 1:00-5:00                 | <b>Poster viewing</b>                                    | Stirling Ballroom E&W |
| 1:30-                     | Chemical Education B                                     | Stirling K            |
|                           | Physical and Biophysical D                               | Stirling G-H          |
|                           | Inorganic C                                              | Stirling E-F          |
| <b>COFEE BREAK</b>        |                                                          |                       |
| 3:15-                     | Inorganic C                                              | Stirling E-F          |
|                           | Chemical Education CER Round Table                       | Stirling K            |
|                           |                                                          |                       |
| 5:30 –<br>7:30            | <b>Poster Session II</b><br><i>(refreshments served)</i> | Stirling Ballroom E&W |
| 7:30                      | END OF PROGRAM                                           |                       |
| <b>DINNER ON YOUR OWN</b> |                                                          |                       |
|                           |                                                          |                       |

# TECHNICAL PROGRAM

## THURSDAY, June 1st – AFTERNOON

### THURSDAY AFTERNOON: WORKSHOPS

|           | <b>SESSION/EVENT</b>                                                                                                             | <b>LOCATION</b> |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1:30-5:00 | Workshop A:<br><b>ACS Career Workshop: Finding Your Pathway</b>                                                                  | Stirling E-F    |
| 1:30-5:30 | Workshop B:<br><b>Chemical Biology RCR Workshop – Intrinsic Asymmetry:<br/>Mentor/Mentee Responsibilities and Relationships.</b> | Stirling B-C    |

### THURSDAY AFTERNOON: POSTER SESSION I and RECEPTION – STIRLING BALLROOM

| <b>Time</b> | <b>Title</b>                                                                                                                                                                                                                                                 |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5:30-7:30   | <b>POSTER SESSION I</b><br>(see list of posters and presenters at the end of this program)<br>Abstracts Available on the fl-acis site: <a href="https://fame2023.fl-acis.org/view/accepted-posters/">https://fame2023.fl-acis.org/view/accepted-posters/</a> |

## **Friday, June 2nd – MORNING SESSIONS**

Abstracts available on the fl-acs site: <https://fame2023.fl-acs.org/view/accepted-presentations/>

### **FRIDAY MORNING: BIOCHEMISTRY AND CHEMICAL BIOLOGY A – STIRLING L-M**

| <b>Time</b>         | <b>Presenter</b>      | <b>Title</b>                                                                                                                                      |
|---------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00                | Dmitry Kolpashchikov  | DNA Cephalopod Nanostructure for Improving Hybridization Rates                                                                                    |
| <b>COFFEE BREAK</b> |                       |                                                                                                                                                   |
| 10:15               | Alexandra Chamberlain | Kinetic analysis of a minimal RNA substrate as a tool for identification of inhibitors of bacterial Ribonuclease P; an emerging antibiotic target |
| 10:40               | Ronfu Zhang           | Characterizing CwsA and CrgA interaction in a lipid bilayer with ssNMR                                                                            |
| 11:20               | Ernesto Arcia         | Protein Evolution using Antibiotic Resistance as a System.                                                                                        |

### **FRIDAY MORNING: ANALYTICAL A – STIRLING K**

| <b>Time</b>         | <b>Presenter</b>              | <b>Title</b>                                                                                                                                                        |
|---------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30                | Kari B. Basso                 | Making normal more normal in quantitative lipidomics: using the Sulfo-phospho-vanillin assay for quantitative LC-MS/MS lipidomics                                   |
| 8:55                | Muzammil Ahmed                | A Novel Single Ionophore Single Electrolyte Configuration for Simultaneous Detection of Multiple Metal Ions via ITIES                                               |
| 9:15                | Yusuf Muhammed                | Developing nanopipettes with ion current and potentiometry response for applications in topography and pH measurement in single adenocarcinoma cells                |
| 9:35                | Thomas Volta                  | Cation Permselectivity Through Synthetic Nanopore Membranes: The Role of Surface Charge                                                                             |
| <b>COFFEE BREAK</b> |                               |                                                                                                                                                                     |
| 10:15               | Donald Luke and Carlos Borrás | Galvanic Removal of Polyfluorinated Compounds from Water A low cost, low energy breakthrough for the removal and destruction of Polyfluorinated “Forever Chemicals” |
| 10:40               | Amanda Ritz                   | In-situ electrochemical transformations of high-performance iron-nickel nanocarbide electrocatalysts for the oxygen evolution reaction                              |

|       |                |                                                                                                                                                |
|-------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00 | Brenna Hilborn | Elemental Analysis of Masculinized Fish Collected around Fort Myers, Florida by X-ray Fluorescence (XRF) Spectroscopy                          |
| 11:20 | Noel Manning   | Double-bore carbon fiber microelectrodes for the simultaneous detection of heavy metals and neurotransmitters via fast scan cyclic voltammetry |

**FRIDAY MORNING: ORGANIC A – STIRLING B**

| <b>Time</b> | <b>Presenter</b> | <b>Title</b>                                                                                                            |
|-------------|------------------|-------------------------------------------------------------------------------------------------------------------------|
| 10:15       | Zaafir Dulloo    | Fluorinated cyclic thiosulfonates as anti-cancer agents against EGFR+ and HER2+ breast cancers: Synthesis & formulation |
| 10:45       | Xiaodong Shi     | Regioselective Crossed Aldol Reactions and Alkyne Trifunctionalization via Au-Fe Catalysis                              |

**FRIDAY MORNING: PHYSICAL AND BIOPHYSICAL A – STIRLING G-H**

| <b>Time</b>         | <b>Presenter</b> | <b>Title</b>                                                                                                 |
|---------------------|------------------|--------------------------------------------------------------------------------------------------------------|
| 8:30                | Robert Silvers   | Structure and Function of Human La-Related Protein 1                                                         |
| 9:15                | Xiaofeng Fu      | The Southeastern Center for Microscopy of Macromolecular Machines (SECM4)                                    |
| <b>COFFEE BREAK</b> |                  |                                                                                                              |
| 10:15               | Mitch Gulkis     | Structures of LIG1 active site mutants reveal the importance of DNA end rigidity for mismatch discrimination |
| 10:40               | Emily Peng       | NMR characterization of the C-terminal domain of the <i>Streptococcus mutans</i> adhesin P1.                 |
| 11:05               | Arka Ray         | Dual mechanisms of cholesterol-GPCR interactions that depend on membrane phospholipid composition            |

**FRIDAY MORNING: PMSE/POLY A – STIRLING O-P**

| <b>Time</b>  | <b>Presenter</b> | <b>Title</b>                                                                                                       |
|--------------|------------------|--------------------------------------------------------------------------------------------------------------------|
| 8:30         | Peng Jiang       | Reconfigurable Nanooptics and Smart Chromogenic Sensors Enabled by Multi-Stimuli-Responsive Shape Memory Polymers  |
| 9:15         | Rhys Hughes      | Excitation Dependence in Photoiniferter Polymerization                                                             |
| <b>BREAK</b> |                  |                                                                                                                    |
| 10:15        | Megan Lott       | Ultrahigh Molecular Weight Triblock Copolymers via Difunctional Photoiniferters in Inverse Miniemulsion Conditions |
| 10:45        | Yu-Hsuan Shen    | Manipulating Size and Increasing Conductivity of Cyclic Polyacetylene                                              |



## **Friday, June 2nd – AFTERNOON SESSIONS**

Abstracts available on the fl-acS site: <https://fame2023.fl-acS.org/view/accepted-presentations/>

### **FRIDAY AFTERNOON: BIOCHEMISTRY AND CHEMICAL BIOLOGY B – STIRLING L-M**

| <b>Time</b> | <b>Presenter</b> | <b>Title</b>                                                                                                                                    |
|-------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:30        | Piyush Jain      | Engineered CRISPR/Cas systems as point-of-care diagnostics for infectious diseases and beyond                                                   |
| 2:15        | Sayan Kundu      | Labeling cell surface glycosylphosphatidylinositol-anchored proteins through metabolic engineering using an azide-modified phosphatidylinositol |

### **FRIDAY AFTERNOON: COMPUTATIONAL A – STIRLING I-J**

| <b>Time</b>         | <b>Presenter</b>    | <b>Title</b>                                                                                                                           |
|---------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1:30                | Shyam Kattel        | Computations Guided Catalysts Design                                                                                                   |
| 2:00                | Zhiyu Wang          | Atomic Charge Schemes Comparison for Fe Single Atom in Graphitic carbon: Insights from Quantum Simulations and Machine Learning        |
| 2:25                | Nick Terrel         | Atomistic uncertainty estimation in ANAKIN-ME neural network potentials                                                                |
| <b>COFFEE BREAK</b> |                     |                                                                                                                                        |
| 3:15                | Dimuthu Kodituwakku | Effects of glycosylation on the structure of Glucose oxidase                                                                           |
| 3:40                | Reza Esmaeeli       | Structural predictions of protein–DNA binding: MELD-DNA                                                                                |
| 4:05                | Tianming Qu         | CrypWater: Detection and Characterization of Protein Cryptic Pocket through Water Density Fluctuation in Molecular Dynamics Simulation |
| 4:30                | Joao Sequeira       | Extending the stochastic titration CpHMD to the AMBER14SB force field for future search of non-opioid analgesics                       |

### **FRIDAY AFTERNOON: INORGANIC A – STIRLING E-F**

| <b>Time</b> | <b>Presenter</b>  | <b>Title</b>                                                                                                        |
|-------------|-------------------|---------------------------------------------------------------------------------------------------------------------|
| 1:30        | Pranshu Puri      | On the nucleation and growth kinetics of PbSe magic-sized clusters                                                  |
| 1:50        | Samuel Adegboyega | Investigation of Effect of Hole Doping on the Magnetic and Structural Behavior of CaCo <sub>2</sub> As <sub>2</sub> |

|                     |                       |                                                                                                           |
|---------------------|-----------------------|-----------------------------------------------------------------------------------------------------------|
| 2:10                | ChristiAnna Brantey   | Single-Molecule Magnets on Molecular Nanoparticles of $\delta$ -Bi <sub>2</sub> O <sub>3</sub>            |
| <b>COFFEE BREAK</b> |                       |                                                                                                           |
| 3:15                | Reece Johnson         | Silica Supported Niobium Sites Tailored for Arene/Cyclic Olefin Conversion                                |
| 3:35                | Shubham Bisht         | Triangular Paramagnetic Molecules as Mimics of Long-Range Phenomena in Bulk Magnets                       |
| 3:55                | Atul Chaudhary        | Metal olefin carbonyl complexes as organometallic precursors for focused electron beam-induced deposition |
| 4:15                | Saryvoudh Mech        | Synthesizing CdTe Magic-Sized Clusters with a Secondary Phosphine                                         |
| 4:35                | Konstantin Bukhryakov | Vanadium Alkylidenes for Olefin Metathesis                                                                |

**FRIDAY AFTERNOON: ORGANIC B – STIRLING B**

| <b>Time</b>         | <b>Presenter</b>     | <b>Title</b>                                                                             |
|---------------------|----------------------|------------------------------------------------------------------------------------------|
| 1:30                | Parag Das            | Enlightening the photochemical behavior of INCN-functionalized donor-acceptor molecules. |
| 2:00                | Cole Stearns         | Self-Assembling Properties of Hybrid-Deck [2.2]Paracyclophanes                           |
| <b>COFFEE BREAK</b> |                      |                                                                                          |
| 3:20                | Zhongwu Guo          | Diversity-Oriented Synthesis and MS-Based Characterization of Glycosphingolipids         |
| 3:40                | Nishal Egodaw Aththa | Controlled Irradiation of Blue and Green Light Excitable Caged Glutamate                 |

**FRIDAY AFTERNOON: PHYSICAL AND BIOPHYSICAL B – STIRLING G-H**

Award Symposium in Honor of Dr. Michael Therien 2023 Florida Award Recipient

| <b>Time</b>         | <b>Presenter</b>    | <b>Title</b>                                                                        |
|---------------------|---------------------|-------------------------------------------------------------------------------------|
| 1:30                | Josef Michl         | Metalloporphenes, a new family of conjugated 2-dimensional polymers                 |
| 2:10                | Michael Wasielewski | Chirality-Induced Spin Selectivity (CISS) in Electron Donor-Bridge-Acceptor Systems |
| <b>COFFEE BREAK</b> |                     |                                                                                     |
| 3:15                | Dave Waldeck        | Adventures with Chiral Induced Spin Selectivity                                     |
| 3:50                | David Beratan       | A theory for high efficiency electron bifurcation                                   |

|      |                                                 |                                                                                      |
|------|-------------------------------------------------|--------------------------------------------------------------------------------------|
| 4:30 | Florida Award and Award Lecture Michael Therien | Fundamental Excitations in Highly Conjugated Supramolecules and Nanoscale Structures |
|------|-------------------------------------------------|--------------------------------------------------------------------------------------|

## **SATURDAY, June 3rd – MORNING SESSIONS**

Abstracts available on the fl-acs site: <https://fame2023.fl-acs.org/view/accepted-presentations/>

### **SATURDAY MORNING: BIOCHEMISTRY AND CHEMICAL BIOLOGY C – STIRLING L-M**

| <b>Time</b>         | <b>Presenter</b> | <b>Title</b>                                                                            |
|---------------------|------------------|-----------------------------------------------------------------------------------------|
| 8:45                | Wen Zhu          | Catalytic mechanism of radical SAM enzyme PqqE in pyrroloquinoline quinone biosynthesis |
| <b>COFFEE BREAK</b> |                  |                                                                                         |
| 10:15               | Seth Ablordeppey | The Therapeutic Potential of Functionally Selective 5-HT <sub>7</sub> Receptor Ligands  |

### **SATURDAY MORNING: CHEMICAL EDUCATION A – STIRLING K**

| <b>Time</b>         | <b>Presenter</b>      | <b>Title</b>                                                                                             |
|---------------------|-----------------------|----------------------------------------------------------------------------------------------------------|
| 8:55                | Jessica Young         | Students' familiarity, skepticism, and usage of artificial intelligence language processing tools        |
| 9:20                | Jabdiel Laboy Santana | Mitigating teaching anxiety through the use of an adaptable virtual community of practice                |
| <b>COFFEE BREAK</b> |                       |                                                                                                          |
| 10:15               | Martina Sumner        | Mentoring at-risk students in large enrollment General Chemistry 1                                       |
| 10:40               | Keila Muller          | Investigating students' sense of belonging in general chemistry courses with varied instructional styles |
| 11:05               | Scott Lewis           | How successful general chemistry students describe ionic compounds                                       |

### **SATURDAY MORNING: COMPUTATIONAL C – STIRLING I-J**

| <b>Time</b>         | <b>Presenter</b> | <b>Title</b>                                                                |
|---------------------|------------------|-----------------------------------------------------------------------------|
| 9:00                | Prem Chapagain   | Computer-aided exploration of novel drugs and drug targets                  |
| 9:35                | Bipin Lamichhane | First principles study of transition metal carbide for single atom catalyst |
| <b>COFFEE BREAK</b> |                  |                                                                             |

|       |                 |                                                                                       |
|-------|-----------------|---------------------------------------------------------------------------------------|
| 10:15 | Megan Bentley   | Highly accurate thermochemical properties of the vinoxy radical                       |
| 10:45 | Kate Huddleston | ANAKIN-ME and Electrostatics                                                          |
| 11:40 | Michael Lynn    | Density Functional Theory (DFT) Study on Bulk Properties of Transition Metal Nitrides |

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**SATURDAY MORNING: INORGANIC B – STIRLING E-F**

| Time  | Presenter         | Title                                                                                                                                                                                       |
|-------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:15 | Peijie Hu         | Silica Supported Group IV Metal Complexes Prepared via SOMC for Arene Hydrogenation Reactions                                                                                               |
| 10:35 | Alexander Diodati | Covalently-linked Supramolecular Dimers of $\{Mn_2\mu-O\}^{2+}$ Complexes                                                                                                                   |
| 10:55 | Randy Larsen      | Photoinduced Energy and Electron Transfer within a Mixed Guest Ru(II)(2,2'-bipyridine):M(III)tetrakis(4-sulphonatophenyl) porphyrine@HKUST-1 (M = Mn(III), Fe(III)) Metal Organic Framework |

**SATURDAY MORNING: PHYSICAL AND BIOPHYSICAL C – STIRLING G-H**

| Time                | Presenter     | Title                                                                                         |
|---------------------|---------------|-----------------------------------------------------------------------------------------------|
| 8:30                | Ioannis Gelis | Conformational dynamics during kinase loading to the Hsp90-Cdc37 chaperone complex            |
| 9:10                | Alberto Perez | Targeting BET Proteins: Advances in Understanding Intrinsically Disordered Peptide Binding    |
| <b>COFFEE BREAK</b> |               |                                                                                               |
| 10:15               | Emma Mulry    | Probing Site Specific Protein PEGylation to Improve Therapeutic Potential                     |
| 10:40               | Mario Chang   | Real Time Deuterium Metabolic Imaging of Mouse Brain Metabolism by the Two-Point Dixon Method |
| 11:05               | Yudan Chen    | Investigating Li microstructure formation in solid electrolytes using NMR and MRI             |

**SATURDAY MORNING: PMSE/POLY C – STIRLING O-P**

| Time | Presenter               | Title                                                                                            |
|------|-------------------------|--------------------------------------------------------------------------------------------------|
| 8:30 | Patricia Calvo          | Synthesis and Applications of Chelating Polymers                                                 |
| 9:15 | Valentina Gomez         | [2.2]Paracyclophanes as a platform to synthesize star polymers and supramolecular bottle-brushes |
| 9:35 | John Oladimeji Akintola | Zwitterglass: Anti-fouling Coatings from Glassy Polyelectrolyte Complexes                        |

| <b>BREAK</b> |                |                                                                                                               |
|--------------|----------------|---------------------------------------------------------------------------------------------------------------|
| 10:15        | Joshua Moon    | Versatile synthetic platform for elucidating water and ion transport in post-functionalized polymer membranes |
| 11:00        | Steven Lenhart | Supramolecular Aptamers                                                                                       |

## **Continue the conversation and Networking**

Stirling D-E



## **SATURDAY, June 3rd – AFTERNOON SESSIONS**

Abstracts available on the fl-acS site: <https://fame2023.fl-acS.org/view/accepted-presentations/>

### **SATURDAY AFTERNOON: CHEMICAL EDUCATION B – STIRLING K**

| <b>Time</b>  | <b>Presenter</b>                                                | <b>Title</b>                                                                                                              |
|--------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1:30         | Matilynn Lam                                                    | Key Stakeholders' Interpretations of Scientific Information Literacy: A Survey of Central Florida's K-16 Educators        |
| 1:55         | Deborah Bromfield Lee                                           | Modifying an Organic Chemistry Esterification Teaching Lab to be Accessible to Blind and Visually Impaired (BVI) Students |
| 2:20         | Shailendra Singh                                                | Development and Implementation of Hydrofluoric Acid Program at the University of Florida                                  |
| <b>BREAK</b> |                                                                 |                                                                                                                           |
| 3:15         | Roundtable Event: Conversations in Chemistry Education Research |                                                                                                                           |

### **SATURDAY AFTERNOON: Inorganic C – STIRLING E-F**

| <b>Time</b>         | <b>Presenter</b>            | <b>Title</b>                                                                                                                                                                                                                                            |
|---------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:30                | W. D. C. Bhagya Gunatilleke | <b>WITHDRAWN</b> Investigation of Structural Features and Their Effects on Thermal Properties of Multinary Chalcogenides for Thermoelectric Applications                                                                                                |
| 1:50                | Ashlyn Hale                 | Molecular Analogues of the Structure and Spin Vector Ordering of LnMnO <sub>3</sub> Manganite Perovskites                                                                                                                                               |
| 2:10                | Chenjie Zeng                | Binary Semiconductor Nanoclusters: from Magic Sizes to Atomic Precision                                                                                                                                                                                 |
| <b>COFFEE BREAK</b> |                             |                                                                                                                                                                                                                                                         |
| 3:15                | Milo Adams                  | Transition-Metal Dependent Magnetic Ordering in Intercalated Vanadium Ditelluride                                                                                                                                                                       |
| 3:35                | Zhichun Shi                 | A combined structural, spectroscopic, electrochemical, and magnetic study of Nickel (II) pyrazolates: dinuclear [Ni <sub>2</sub> ], linear [Ni <sub>3</sub> and triangular [Ni <sub>3</sub> ] incorporating five-/six-coordinate Ni <sup>2+</sup> ions. |
| 3:55                | Jaihui Liu                  | Solvent Effects on Intercalation Reactions in VOPO <sub>4</sub> ·2H <sub>2</sub> O                                                                                                                                                                      |
| 4:15                | Ioannis Spanopoulos         | Generating Porosity to Hybrid Metal Halide Semiconductors                                                                                                                                                                                               |

**SATURDAY AFTERNOON: PHYSICAL AND BIOPHYSICAL D –  
STIRLING G-H**

| <b>Time</b> | <b>Presenter</b> | <b>Title</b>                                                                                                                         |
|-------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1:30        | Thanh Nguyen     | High Accuracy Reaction Rate Coefficients from First Principles                                                                       |
| 1:55        | Anna Rushin      | Applying Dynamic Nuclear Polarization to Measure Pancreatic Metabolism using Hyperpolarized [ <sup>13</sup> C] Pyruvate              |
| 2:25        | Enzo Petracco    | Development of an in-situ NMR approach to identify lead compounds and map their binding epitopes with GPCRs in native cell membranes |

**Continue the conversation and Networking**

Stirling I-J & Stirling D-E

**SATURDAY AFTERNOON: POSTER SESSION II – STIRLING BALLROOM**

| <b>Time</b> | <b>Title</b>                                                                                                                                                                                                                   |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5:30-7:30   | (see list of posters and presenters at the end of this program)<br>Abstracts available on the fl-acS site: <a href="https://fame2023.fl-acS.org/view/accepted-posters/">https://fame2023.fl-acS.org/view/accepted-posters/</a> |

**POSTERS**

**Instructions for poster presenters:**

- Posters should be no larger than 36”x48”. Poster boards, stands, and clips will be provided to mount your poster.
- Poster set up for SESSION I is Thursday from 2:00-5:00 pm. Each stand will have a number corresponding to your assigned number in the program. Posters from Session I must be removed on Friday between 2:00 and 4:00 pm.
- Poster set-up for SESSION II is Friday from 1:00-4:00 pm. Each stand will have a number corresponding to your assigned number in the program. Posters from Session II must be removed on Saturday after 7:30 pm.

POSTER SESSION 1  
THURSDAY 5:30 – 7:30 STIRLING BALLROOM

| No. | NAME               | Topic                            | Title                                                                                                                                |
|-----|--------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Debashis Sen       | Analytical                       | Developing aptamer-based microelectrode sensors for use in scanning electrochemical microscopy (SECM)                                |
| 2   | Ana Ramirez        | Analytical                       | Functionalization of nanopipettes for the detection of biomolecules                                                                  |
| 3   | Kenley Herbert     | Analytical                       | Modifications for signal improvements within a custom-built Raman Spectrometer instrument for heterogeneous atmospheric reactions    |
| 4   | Jeanpierre Fuente  | Biochemistry<br>Chemical Biology | Molecular Dynamics Simulation Reveals the Structural Basis Underlying Reverse Transcriptase Activity by Human DNA polymerase $\eta$  |
| 5   | Enzo Raymond       | Biochemistry<br>Chemical Biology | Development of an in-situ NMR approach to identify lead compounds and map their binding epitopes with GPCRs in native cell membranes |
| 6   | Sreyashi Das       | Biochemistry<br>Chemical Biology | Probing Site Specific Protein PEGylation to Improve Therapeutic Potential                                                            |
| 7   | Louis Herrera      | Biochemistry<br>Chemical Biology | Bacterial Effector Protein: From Cloning to Sample Preparation for Biophysical Studies                                               |
| 8   | Caitlin McCadden   | Biochemistry<br>Chemical Biology | Genome Mining of Bacterial Cytochrome P450 Enzymes for Novel Biocatalysts                                                            |
| 9   | Matthew Dias       | Biochemistry<br>Chemical Biology | Discovering novel bacterial DNA gyrase poisons using unique high throughput screening assay.                                         |
| 10  | Yisel Martinez Noa | Computational                    | Elucidating the binding rates and affinities of IDP peptides towards the ET receptor                                                 |
| 11  | Bhumika Singh      | Computational                    | Combining molecular simulations and semi-reliable data to determine protein structures                                               |
| 12  | Justin Lee         | Computational                    | Enhanced Free Energy Sampling of Transmembrane Permeation                                                                            |
| 13  | Christine Gambino  | Computational                    | Virtual Target Screening: A Greener Way To Screen Analog For The Prediction Of Target Binding                                        |
| 14  | Anjali Sharma      | Inorganic                        | Aerosol-assisted chemical vapor deposition of tungsten oxide and nitride films                                                       |

|    |                             |                      |                                                                                                                             |
|----|-----------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 15 | Alex Bottorff<br>Fnu Nikita | Inorganic            | Identifying electron-induced reactions of inorganic complexes to enable mechanism-based design of new EUV resists           |
| 17 | Erik Ferenczy               | Inorganic            | Aerosol-Assisted Chemical Vapor Deposition of Transition Metal Dichalcogenides                                              |
| 18 | Rashmi Singh                | Inorganic            | Ruthenium carbonyl halide complexes as precursors for area selective deposition by photo-assisted chemical vapor deposition |
| 19 | Doory Dan                   | Inorganic            | Molecular models for Ce/Co oxides: insights into atomic structures and electronic properties                                |
| 20 | Sarah Bennett               | Inorganic            | Modulating the Plasmon of Cd <sub>2</sub> SnO <sub>4</sub> Nanospinels by Variation of Size and Morphology                  |
| 21 | Samuel Klingenberg          | Inorganic            | Synthesis of a Novel, High Nuclearity Ce/V Cluster with an Unusual Structure                                                |
| 22 | Diba Allameh zadeh          | Inorganic            | Self-assembled double hydrophilic block copolymers mixed with paramagnetic lanthanides for use as PARACEST MRI agents       |
| 23 | Andrew Link                 | Organic              | Catalytic Akermark Cyclizations of Electron-Poor Diphenylamines                                                             |
| 24 | Osamah Alghazwat            | Organic              | Releasing and Capturing carbon dioxide CO <sub>2</sub> using Morpholine and Photo acid Solutions                            |
| 25 | Melisa Gonzales             | Organic              | Organic synthesis of candidate PKAL-1 substrates to probe the nemamide biosynthetic pathway                                 |
| 26 | Sydney Paulin               | Physical/Biophysical | How caffeine modulates actin filament assembly dynamics                                                                     |
| 27 | Stephen Jones               | Physical/Biophysical | Modeling Self Assembling Peptides Using MELD                                                                                |
| 28 | Vinay Malut                 | Physical/Biophysical | <i>In vivo</i> Application of the 2-Point Dixon Method by Deuterium Metabolic Imaging and Spectroscopy                      |
| 29 | Alec DeCecco                | Physical/Biophysical | Molecular-Weight Growth: Ozone-Assisted Low-Temperature Oxidation of Crotonaldehyde                                         |
| 30 | Sarriah Hassoun             | PMSE/POLY            | <b>Withdrawn</b> Complexing Polyelectrolytes with Small Biomolecules for Underwater Adhesive Applications                   |

|    |               |           |                                                                        |
|----|---------------|-----------|------------------------------------------------------------------------|
| 31 | Lauren Bishop | PMSE/POLY | Expanding the Scope of Chemiluminescence Promoted Photopolymerizations |
|----|---------------|-----------|------------------------------------------------------------------------|

| POSTER SESSION 2                       |                             |                                  |                                                                                                                                                                |
|----------------------------------------|-----------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATURDAY 5:00 – 7:00 STIRLING BALLROOM |                             |                                  |                                                                                                                                                                |
| No.                                    | NAME                        | Topic                            | Title                                                                                                                                                          |
| 1                                      | Alissa Stranberg            | Biochemistry<br>Chemical Biology | Cell RNA Structural Studies of Spliced Leader RNA Transcripts in the Red Tide Dinoflagellate <i>Karenia brevis</i>                                             |
| 2                                      | Danielle Garzon             | Biochemistry<br>Chemical Biology | RNA Structural Studies of Wild-Type and Mutant RNA Spliced Leader Sequences of the Red Tide Dinoflagellate <i>Karenia brevis</i>                               |
| 3                                      | Alexus Morgan               | Biochemistry<br>Chemical Biology | Enantiomeric separation of selective 5-HT <sub>7</sub> receptor ligands.                                                                                       |
| 4                                      | Ismail L. Jones             | Biochemistry<br>Chemical Biology | Towards the isolation and identification of the bioactive principles with potential anticancer properties from an African plant                                |
| 5                                      | Swapnil Joshi               | Biochemistry<br>Chemical Biology | Identifying Allosteric Communication Mechanism in Human Ribonucleotide Reductase                                                                               |
| 6                                      | German Meija                | Biochemistry<br>Chemical Biology | Serum Starvation and Stringent Response in <i>H. pylori</i>                                                                                                    |
| 7                                      | Sloan Berry and Maria Ribot | Chemistry<br>Education           | Assessing Graduate Teaching Assistants' Understanding of Inclusive Teaching through the Lens of Universal Design for Learning                                  |
| 8                                      | Rebecca Black               | Chemistry<br>Education           | How do organic chemists contribute sustainable solutions?: a student-driven Organic Chemistry I research project based in the UN Sustainable Development Goals |
| 9                                      | Esther Francom              | Chemistry<br>Education           | Assessing Challenges of Organic Chemistry Education: Foundations for Faculty Action Research                                                                   |
| 10                                     | Marjan Roshandel            | Chemistry<br>Education           | Reflective practice of undergraduate learning assistants (ULAs) using the Vitruvian Model of Reflective Practice (VMRP)                                        |
| 11                                     | Kaila Weflen                | Computational                    | On the thermodynamic stability of the NF <sub>3</sub> molecule                                                                                                 |

|    |                           |                      |                                                                                                                     |
|----|---------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------|
| 12 | Tianming Qu               | Computational        | Sampling Protein Cryptic Site Formation via Advanced Molecular Dynamics Simulation Method                           |
| 13 | Elizabeth Sebastian       | Computational        | Molecular Dynamics Analysis of ET Domain-Peptide Interactions in BET Family Proteins                                |
| 14 | Xin Kang                  | Inorganic            | Ru olefin carbonyl complexes as organometallic precursors for focused electron beam-induced deposition              |
| 15 | Nicole Giorgi             | Inorganic            | Divergent Synthesis of Bimetallic Bisdipyromethane Complexes                                                        |
| 16 | Eduardo Hernandez Requejo | Inorganic            | Investigation of High-Symmetry Lanthanide Complexes as Molecular Spin Qubits                                        |
| 17 | Bishwaprava Das           | Inorganic            | Manganese Precursors for Area Selective Deposition (ASD) by Photoassisted Chemical Vapor Deposition (PACVD)         |
| 18 | Krittin Poottafai         | Inorganic            | Influence of surrounding medium on photoluminescence and phase behavior of two-dimensional lead iodide perovskites. |
| 19 | Courtney Sever            | Inorganic            | Rational Design of Double Tethered Metallacyclobutane Complexes                                                     |
| 20 | Fuyan Ma                  | Inorganic            | Synthesis of ultrasmall CdSe nanoclusters by cation exchange and subsequent growth                                  |
| 21 | Charlotte Bailey          | Inorganic            | Unusual manganese-lanthanide clusters from the use of phthalic acid                                                 |
| 22 | Cody Daneluik             | Inorganic            | Synthesis and magnetic characterization of enneanuclear $Fe_6M_3$ ( $M = Ca^{II}La^{III}$ ) clusters                |
| 23 | Brianna Ariza             | Physical/Biophysical | The effect of osmolytes on actin bundling and bundle mechanics by <i>Chlamydia trachomatis</i> Tarp                 |
| 24 | Blaine Gordon             | Physical/Biophysical | Alternative PAM2 Motif Architecture in La-related Protein 1                                                         |
| 25 | Arden Floyd               | Physical/Biophysical | Cloud condensation nuclei activity of fresh and aged submicrometer maleic acid aerosol particles.                   |
| 26 | Michael Lynn              | Physical/Biophysical | MOVED TO ORAL                                                                                                       |

|    |                        |           |                                                                                      |
|----|------------------------|-----------|--------------------------------------------------------------------------------------|
| 27 | Blanch Khouri<br>Sader | PMSE/POLY | Molecularly Imprinted Polymers for the<br>Detection of Aflatoxin                     |
| 28 | Cabell Eades           | PMSE/POLY | Lanthanide-Based Hybrid Polyion Complexes<br>for use as ParaCEST MRI Contrast Agents |
| 29 | Parker Boeck           | PMSE/POLY | Cyclic Polymers from Alkynes: Expanding the<br>Scope                                 |

**Thank you  
For  
Attending**