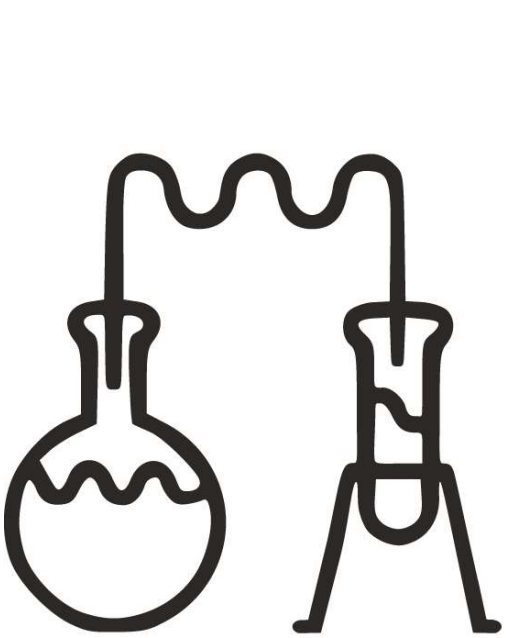

SURC 2025

54th Annual
ACS Southeast Undergraduate Research Conference

January 31 – February 1, 2025
Kennesaw, GA

info@surc2025.org

https://surc2025.org

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KENNESAW STATE UNIVERSITY

January 31, 2025

Dear SURC 2025 Participants,

The College of Science and Mathematics is VERY excited that the 54th meeting of the Southeast Undergraduate Research Conference is being hosted by Kennesaw State University! I want to offer a very warm welcome to everyone who is a part of this meeting, and I hope that you enjoy spending time on our campus and interacting with each other. Meetings such as these offer incredible opportunities for students to showcase their work, to meet other emerging scientists, and to speak with experts in the field.

Chemistry and Biochemistry are very strong programs at KSU, at both the undergraduate and graduate levels. Our exceptionally talented and dedicated faculty strive to provide excellence in the classroom, and, more importantly for this meeting, to offer undergraduate research experiences that prepare our students for their next steps: graduate school, professional school, or entering the workforce. We have multiple avenues for students to get involved in research, starting from their very first year. You will see many of them present their work at this meeting, and we are very proud of their accomplishments – and in fact, we are proud of all of the student researchers at SURC 2025.

We also acknowledge the hard work and dedication that it takes to be an effective faculty mentor, and I wish to thank all faculty at this conference who have played a role in helping a student prepare and present their research at this meeting.

Good luck to all, please enjoy yourselves, and I look forward to meeting you at the opening dinner.

Sincerely,

Heather Koopman
Dean, College of Science and Mathematics

COLLEGE OF SCIENCE AND MATHEMATICS
Office of the Dean

Science Laboratory Bldg. • Suite 5011 • MD 1301 • 105 Marietta Drive • Kennesaw, GA 30144
Phone: 470-578-6160 • Fax: 470-578-9138 • www.kennesaw.edu

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Daniela Tapu, Ph.D.
Professor of Chemistry
Kennesaw State University

Committee Member

Carl Saint-Louis, Ph.D.
Assistant Professor of Organic Chemistry
Kennesaw State University

Immediate Past Committee Chair

D. Brandon Magers, Ph.D.
Chair and Professor of Chemistry
Belhaven University

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Schedule of Events

Friday, January 31, 2025

4:00 pm	Registration Check-in Carmichael Student Center- University Rooms
5:30 pm	Dinner Carmichael Student Center- University Rooms
7:00 pm	Keynote Academic Learning Center, room ALC 1100
8:00 pm	Social Event Carmichael Student Center- University Rooms

Saturday, February 1, 2025

8:00 am	Registration Check-in + Breakfast Science Laboratory Atrium
8:30 am	Judge's Meeting Science Building, SC 212
9:00 am	Poster Session 1 + Grad & Career Fair Science Laboratory Hallway + Science Building Complex
10:45 am	Coffee Break Science Laboratory Atrium
11:00 am	Poster Session 2 + Grad & Career Fair Science Laboratory Hallway + Science Building Complex
12:45 pm	Lunch The Commons
1:30 pm	Business Meeting Academic Learning Center, ALC 2109
2:15 pm	Oral Sessions Academic Learning Center, ALC 2100-2103, 2105, 2106
4:00 pm	Awards Ceremony Academic Learning Center, room ALC 1100

Keynote Speaker

Professor M.G. Finn

Professor, School of Chemistry & Biochemistry
and School of Biological Sciences

Georgia Institute of Technology

“Chemistry meets Immunology: Boundary Crossing for Fun and Profit”

M.G. Finn received a B.Sc. degree in Chemistry from Caltech in 1980 (research in electrochemistry and inorganic chemistry with Profs. F. Anson and R. Gagne), and a Ph.D. degree in 1986 from MIT working with Prof. K.B. Sharpless, followed by an NIH postdoctoral fellowship with Prof. J.P. Collman at Stanford University. He joined the faculty of the University of Virginia in 1988, where his group studied and developed a variety of transition metal-mediated synthetic methods. Prof. Finn moved to the Department of Chemistry and The Skaggs Institute for Chemical Biology at The Scripps Research Institute in 1998, and then to the School of Chemistry & Biochemistry and the School of Biological Sciences at the Georgia Institute of Technology in 2013. He was chair of the former department from 2014 through 2024.

Prof. Finn’s current interests include the use of virus particles as molecular and catalytic building blocks for vaccine and functional materials development, the development of click reactions for organic and materials synthesis, polyvalent interactions and advanced linker technologies in drug targeting, and the use of evolution for the discovery of chemical function. He held the James A. Carlos Family Chair in Pediatric Technology until 2024 and is currently the Chief Scientific Officer of the Georgia Tech Pediatric Innovation Network, which brings new science and engineering to the aid of pediatric medicine.

Graduates from the Finn laboratory can be found in academic departments around the world, as well as in companies in the pharmaceutical, biotechnology, chemical, and materials industries. Prof. Finn was the first recipient of the annual Scripps Outstanding Mentor Award, a 2017 Arthur C. Cope Scholar award, and was Editor-in-Chief of the journal ACS Combinatorial Science from 2010 to 2020.

Graduate School and Career Fair

9:00 a.m. – 12:45 p.m. in Science (SC) & Clendenin (CL) Buildings Atriums and Hallways

Auburn University Chemical Engineering

Clemson University

East Alabama/ West Georgia ACS Local Section

East Tennessee State University

Emory University

Florida State University

Georgia Institute of Technology

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University of Georgia

University of Miami

University of Mississippi

University of North Carolina at Greensboro - JSNN

University of South Carolina

University of Tennessee Knoxvillle

Poster Presentation Session 1 Titles

9:00 – 10:45 a.m. in Science Laboratory (SL) Building 2nd and 3rd Floor Hallways

P1-AE1 **Thione and Selone N-heterocycles as Potential Radioactive Iodine Sequestering Agents**
Louis M. Fisher, Abigail G. McNamee, Dr. Colin D. McMillen, Dr. William T. Pennington, and Dr. Julia L. Brumaghim
Department of Chemistry, Clemson University, Clemson, SC

P1-AE2 **Functionalized hybrid materials for clean-up of water contaminated by nitrates**
Erica Tocholke [1], Lev Yampolsky [2], Ray Mohseni [1], Aleksey Vasiliev[1]
[1]Department of Chemistry, East Tennessee State University, Johnson City, TN
[2]Department of Biological Sciences, East Tennessee State University, Johnson City, TN

P1-AE3 **Forensic Fire Debris and Arson Investigation: Activated Charcoal Extraction Methods and GC/MS Analysis**
Thomas Rice and Catrena H. Lisse Ph.D.
Georgia College State University - Department of Chemistry, Physics, and Astronomy

P1-AE4 **Qualitative Detection of Illicit Drug Use in Hair Samples via GC/MS**
Carson Griffeth, Dr. Catrena Lisse
Department of Chemistry, Physics, and Astronomy, Georgia College and State University

P1-AE5 **Investigating Biomolecular Coronas on Carbon Nanotubes: A Pathway to Improved Sensor Performance**
Alexis Coscia, Mijin Kim
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta GA 30332

P1-AE6 **Evaluating Crop Growth in Astro-Terrestrial Analog Samples and Controls**
Soumit Guntupalli, Chloe Lecates, Tianyu Xu, and Amanda Stockton
School of Biological Sciences, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA

P1-AE7 **Limonene Analysis in Citrus Rinds Using GC/MS**
Ridham Raval, Nate St. Germaine, Wei Zhou
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-AE8 **Characterization of selected Yams using spectrometric and multivariate techniques and Gas chromatography-mass spectrometry**

Tristin Jerreau and Jomar Dominguez
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-AE9 **The In Vivo Study of Clove Essential Oil against Aflatoxin B1 Production in Aspergillus flavus Contaminated Georgia Peanuts**

Ari J. Schwartz, Premila N. Achar, Mohammad A. Halim, Md Taimuzzaman Sharif
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-AE10 **Ammonium and Sodium-Based Buffers as Charge Reducing Agents in Native Mass Spectrometry**

Michelle Mba
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-BM1 **The development and testing of docking parameters in COX-1 and 2 enzymes.**

Dr. Yakini Brandy, Irma Ramirez-Rodriguez, Teresa Ariza, Insherah Qazi, Linda Ho, Ivey Portis, Danni Nguyen
Department of Chemistry, Agnes Scott College, Decatur, GA

P1-BM2 **Leveraging Adenovirus-Associated Vectors to Induce SAMHD1 Degradation and Overcome Therapy Resistance in Glioblastoma**

Matthew Kededa [1,3], Aman Kalsi [1,3], Christian Fahmy [1,3], Ramsha Khanam [1,3], Arilyn Williams [1], Dominique Monroe [1,2], Waaqo Daddacha [1,2]

[1]Department of Biochemistry and Molecular Biology, Medical College of Georgia at Augusta University
[2]Georgia Cancer Center, Augusta University
[3]College of Science and Mathematics, Augusta University, Augusta, Georgia

P1-BM3 **Fractionation of Callicarpa americana Leaf Extracts for Anti-Acne Properties**

Monica Duan, Sunmin Woo, Cassandra Quave
Department of Chemistry, Emory University, Atlanta, GA
Center for the Study of Human Health, Emory University, Atlanta, GA

P1-BM4 **Endogenous Mitochondrial Heme Homeostasis Trafficking in *Saccharomyces Cerevisiae***
Allison Kurtz
Department of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA

P1-BM5 **Carboxyl-Containing NSAID Conjugates as Allosteric Inhibitors of DHFR: Insights for Rational Drug Design**
Syon Schlecht
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA

P1-BM6 **Utilization of the PP7 dimer Virus-Like Particle for Immunological Suppression of Peanut Allergic Response**
Kahlia Carl, Matthew Jenkins, M.G. Finn, Michael Kulis
Department of Chemistry and Biochemistry, Georgia Institute of Technology School of Medicine, University of North Carolina at Chapel Hill

P1-BM7 **Approaches toward the synthesis of a potential cancer therapeutic: an acridine-1,2,3-triazole-amino acid assembly**
Wintana H. Bekele, Alexandra N. Reece, Dr. Jannet Kocerha, Dr. Karelle S. Aiken
Department of Biochemistry, Chemistry and Physics, Georgia Southern University

P1-BM8 **Molecular Modeling of LAT1 for Novel Cancer Therapeutics**
Laura Echezabal, Dr. Karelle Aiken
Department of Chemistry, Georgia Southern University

P1-BM9 **The synthesis of amino acid-naphthoquinone derivatives as potential LAT1 substrate mimics**
Alysa M. Clarke, Abdullahi A. Ashimi, Austin Seymour, Christian Peterson, Dr. Jannet Kocerha, Dr. Karelle S. Aiken
Department of Biochemistry, Chemistry; Physics, Georgia Southern University

P1-BM10 **Naphthoquinone and acridine amino acid conjugates as LAT1 substrates for cancer therapeutics**
Chelsea C. Carrier, Messiah Brown, Laura Echezabal, Dr. Jannet Kocerha, Dr. Karelle S. Aiken
Department of Biochemistry, Chemistry, Physics, Georgia Southern University

P1-BM11 **Molecular Modeling of LAT1 for Novel Cancer Therapeutics**
Laura Echezabal, Dr. Jannet Kocerha, Dr. Karelle S. Aiken
Department of Biochemistry, Chemistry & Physics, Georgia Southern University

P1-BM12 **Protein Engineering and Thermostability of LDH**
Jonathan Waldrep and Sharifah Albraiki
Department of Chemistry and Geosciences, Jacksonville State University, Jacksonville, AL

P1-BM13 **The Role of Ammonium and Sodium Buffers in Charge Reduction for Native Mass Spectrometry (MS)**
Michelle Mba, Abdul Hannan, and Muhammad Halim
Department of Chemistry and Biochemistry, Kennesaw State University

P1-BM14 **Transcription Factor Binding and Discovery of Novel Gene in the Opportunistic Human Pathogen, Pseudomonas aeruginosa**
Alaina Brooke Westee
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-BM15 **Exploring NHC-Coinage Metal Complexes as Inhibitors of Glutaredoxins (GRx)**
Brooks Dickson, Alexander Van Dyke, Carol A. Chrestensen, and Daniela Tapu
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P1-BM16 **Design and Development of Substrate-based Peptide Inhibitors Targeting the Chymotrypsin Like Protease of SARS-CoV-2**
Heidi Woods
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

P1-BM17 **Developing Cation-Pi Peptide Targeting Main Protease of SARS-CoV-2**
Ngoc Diep Le Dong
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

P1-BM18 **Analysis of Binding Pocket Variants of p38 to Understand the Binding of p38 and NOS_3**
Bethany Daniels, Jensen Boyette, Gillyan Jewett and Carol Chrestensen
Kennesaw State University, Molecular and Cellular Biology
Kennesaw State University, Chemistry and Biochemistry

P1-BM19 **Biochemical and Structural Analysis of Aromatic Aldehyde Dehydrogenase B from Pseudomonas Syringae**
Oliver Buckley, Ayyan Paracha, Aaron Walker, Journey Lark, Levi Brigham, Taylor Clay
Department of Molecular and Cellular Biology, Kennesaw State University, Kennesaw, GA

P1-BM20 **Take Me Down to the Parasite City Where the Fish are Infected in the Mississippi**
Aamani Kalluru, Ella Bailey, Fritz Valerio, Christian Leach, Javian Ervin, Stephen Mills, William Janous, Chinaza Nwaiwu, Wilson Hooker, Jose Alfonso Xavier Fernandez, Caroline Armstrong, Alison Cevallos, Joseph Kazery, Nicole Phillips, Steven Everman, Trent Selby, and Scoty Hearst
Department of Chemistry & Biochemistry, Mississippi College, Clinton, MS

P1-BM21 **Retro Computational Assembly of 4-Thiolated Phenalkylamine GPCR Agonists**
Aryeh Bluestein, Brigitte Choudhary, Aissatou Gueye
Department of Chemistry, Atlanta Metropolitan State College College of Engineering, Georgia Institute of Technology

P1-ES1 **Joining the Arson Squad: A Community's Night of Clues and Curiosity**
Brinkley Bolton, Morgan Hanna, Carson Griffeth, Eris Arth, Dr. Peter Rosado Flores, Dr.Catrena Lisse,
Department of Chemistry, Physics, Astronomy Georgia College's Science Education Center, Georgia College and State University

P1-ES2 **Advancing STEM Education with Visual Technologies for Undergraduate Learners**
Bailey Johnson, Natsue Jo Huakay, Aurora Yeun, Brianna Brady
Department of Molecular and Cellular Biology, Kennesaw State University, Kennesaw, GA

P1-ES3 **Investigating the Value of Shadowing Healthcare Professionals in Belize**
Thomas Floyd, Mahima Sangtani, Amanda Spohn, Hilda Mata, and Amy E. Medlock
Department of Biochemistry and Molecular Biology, University of Georgia

P1-IM1 **Developing a Deoxyribose Assay for Electron Beam Ion Trap Compatibility and Radioprotectant Screening**
Kyle Bristow, Scout Hamrick, Krishna Patel, Ruben Sousa, Patrick Johnson, Modi Wetzler, Chad Sosolik, Julia L. Brumaghim
Department of Chemistry, Clemson University, Clemson
Department Physics and Astronomy, Clemson University, Clemson

P1-IM2 **Versatile Halogen Bonds in Iodopyridine-Organoiodine Cocrystals and Deep Eutectic Solvents**
Meridee A. Ritzer, Madhushi Bandara, William T. Pennington, Colin D. McMillen
Department of Chemistry, Clemson University

P1-IM3 **Halogen Bonding in Novel Thioimidazole-Organoiodine Cocrystals**
Makenna Lankford, Madhushi Bandara, Logan Grady, Collin McMillen, William Pennington
Department of Chemistry, Clemson University, SC

P1-IM4 **Dehydrofluorination of Tetrafluoroethane Using Copper Complexes: Exploring Sustainable Fluorocarbon Transformation**
Arta Tabrizi, Joseph Sadighi
School of Chemistry and Biochemistry, Georgia Institute of Technology

P1-IM5 **Synthesization pathways of an NHC-stabilized nickel(II) fluoride dimer from a nickel(0) precursor**
Ryan Wiebold, Neil Dodd, Mina Song, Eric Towles, Joseph Sadighi
Department of Chemistry, Georgia Institute of Technology

P1-IM6 **Polydentate Bis(amidinate) Ligands as Flexible Scaffolds for Multinuclear Copper Clusters**
*Lily Baghramian, Mason Hipp, Rhianna Allen, Francis Illori, Tomasz Kruczyński, Sanjay Dutta, and Michael Stollenz**
Department of Chemistry and Biochemistry, Kennesaw State University, GA

P1-OP1 **Synthesis of N-methyl-N-nitrosobenzylamine: Green Chemistry Approaches for Sustainable Donor-Acceptor Organic Co-Crystals**
Emilie Chapple, S.Ariel Kelley
Department of Chemistry; Belhaven University, Jackson, MS

P1-OP2 **A Sustainable Method for Synthesizing Nitrosodiphenylamine**
Reagan Nichols, Chloe B. Amos, Misa S. Meadows, Karlee McKinney, S. Ariel Kelley
Department of Chemistry, Belhaven University, Jackson MS

P1-OP3 **Alternative Synthesis of OMC: An Active Ingredient in Sunscreens**
Skylar Reid, Mason Grant
Department of Chemistry, Physics, and Astronomy, Georgia College & State University, Milledgeville, GA

P1-OP4 **Improving Esterification Reactions by Adopting the Use of a Heterogeneous Catalyst**

Elizabeth Dyal
Department of Chemistry, Physics, and Astronomy, Georgia College & State University, Milledgeville, GA

P1-OP5 **A Novel Bi-Directional and Bi-Temporal Delivery System for Enhancing Intrasynovial Tendon Repair**

Seth Kinoshita, Yidan Chen, Emily Yan, Min Hao, Hua Shen, Richard Gelberman, Stavros Thomopoulos, Younan Xia
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332, USA (Seth Kinoshita, Younan Xia)
School of Materials Science and Engineering, Georgia Institute of Technology, Atlanta, GA 30332, USA (Yidan Chen)
The Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory University, Atlanta, GA 30332, USA (Emily Yan, Min Hao, Younan Xia)
Department of Orthopedic Surgery, Washington University School of Medicine, St. Louis, MO 63110, USA (Hua Shen, Richard Gelberman)
Department of Orthopedic Surgery, Department of Biomedical Engineering, Columbia University, New York, NY 10032, USA (Stavros Thomopoulos)

P1-OP6 **Effect of Catalyst Properties on Carbon Dioxide Reduction with a Nickel (II) CNC-Pincer Complex**

Patrick D. Pridemore, Louis M. Bercaw, Sonya Y. Manafe, Md. Kausar Ahmed, and Elizabeth T. Papish
Department of Chemistry and Biochemistry, The University of Alabama

P1-OP7 **Preparation of conjugated polyphenylethynylarene macrocycles**

Alana Latorre and Trent D. Selby
Department of Chemistry & Biochemistry, Mississippi College, Clinton, MS

P1-OP8 **Organoiodine and Selone Cocrystals**

Elena Yu, Marasinghe Mudi Bandara, Fatema Tuz Zohara, Julia Brumaghim, Colin D. McMillen, William T. Pennington
Department of Chemistry, Clemson University

P1-OP9 **Base-Catalyzed Silyl Ether Exchanges for Dynamic Polymers**

Henry Chesley-Vogels, Dr. Bassil El-Zaatari
Davidson College Department of Chemistry

P1-PC1 **Patterns in Visible and Nonvisible Lattice Points and Polygons**
Christina Mark
Department of Mathematics, Flagler College, St. Augustine, FL

P1-PC2 **A Model Prebiotic Scenario for the Emergence of Structured RNA Sequences**
Davis Duren, Asem Alenaizan, Nicholas V. Hud
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia, USA 30332
Chemistry Department, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia

P1-PC3 **Modeling Intermolecular Coulombic Decay with Non-Hermitian Real-Time Time-Dependent Density Functional Theory**
Yi-Siang Wang, James X. Zhong Manis, Matthew C. Rohan, Thomas M. Orlando, Joshua S. Kretchmer
School of Chemistry and Biochemistry, Georgia Institute of Technology

P1-PC4 **Butterworth filtering as a method of approximate BCARS NRB generation**
Eric G. Baker, Jessica Z. Dixon, Marcus T. Cicerone
Department of Chemistry and Biochemistry, Georgia Institute of Technology, 950 Atlantic Drive, Atlanta, GA 30332, USA

P1-PC5 **Computational investigations of nonclassical cations**
Hanna K. Bynum and David H. Magers
Computational Chemistry Group, Department of Chemistry & Biochemistry, Mississippi College

P1-PC6 **Calculation of conventional strain energies of small heterocycles of carbon and silicon and their amino and nitro derivatives by model reactions**
Eli M. Franklin and David H. Magers
Computational Chemistry Group, Department of Chemistry & Biochemistry, Mississippi College

P1-PC7 **Conventional strain energies of thiasilirane and the thiasiletanes**
Avery C. Foret, Mia K. Hyme, Kayla E. Ryan and David H. Magers
Computational Chemistry Group, Department of Chemistry & Biochemistry, Mississippi College

P1-PC8 **Enthalpies of formation of amino and nitro derivatives of benzene and toluene by homodesmotic reactions**
Caroline B. McCaleb and David H. Magers
Computational Chemistry Group, Department of Chemistry & Biochemistry, Mississippi College

P1-PC9 **The Development of Serotonin 5-HT2A Receptor Ligands for the Treatment of Mental Diseases**

Aubria A. King, Kimaya D. Lacey, James K. Addo
Department of Chemistry and Biochemistry, Spelman College

P1-PC10 **Comparative Study of Effects of Chain-Length and Saturation of Fatty Acids on Combustion Reactions**

Kohl Kervin and Subha Pratihar
Department of Physical Science, Arkansas Tech University, Russellville, AR

Poster Presentation Session 2 Titles

11:00 a.m.– 12:45 p.m. in Science Laboratory (SL) Building 2nd and 3rd Floor Hallways

P2-AE11 **Elemental Analysis of Tomatoes Grown Traditionally Versus Hydroponically**
Ward Adams, Anuradha Ragila, Scoty Hearst, and Trent D. Selby
Department of Chemistry & Biochemistry, Mississippi College, Clinton, MS

P2-AE12 **Metal Oxide Variability Across Ecosystems**
Lily Barnett, Sherlynette Pérez Castro, Nehru Sambasiva Mantripragada, Steven Hall, Samantha Weintraub-Leff, Aaron Thompson
Department of Crop and Soil Sciences, University of Georgia, Athens GA, USA
Plant and Agroecosystem Sciences, University of Wisconsin, Madison WI, USA
National Ecological Observatory Network, Battelle, Boulder CO, USA

P2-AE13 **Electrochemical Sensing of Heavy Metals Based on Metal-Organic Frameworks**
Rashomi Mathanan, Humayun Kabir
Department of Chemistry and Physics UNA

P2-AE14 **Electrochemical Detection of Stress Hormone Cortisol With Aptamer Biosensors for Electrochemical Quartz Crystal Microbalance Applications**
Elijah Langston, Royce Dansby-Sparks
Department of Chemistry and Biochemistry, University of North Georgia

P2-AE15 **Investigation of the Formation of Disinfection Byproducts from High and Low Intensity Wildfires**
Hannah Keen, Erin Katie Jaynes, Patrick Justen, Coley Beavers, Cody King, Carlynn Rychener, Patrick Ferguson, Susan D. Richardson
Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC

P2-AE16 **Novel Approach to Bring back Oyster Populations Worldwide**
Darius Jackson, Dr. Thomas Manning
Department of Chemistry & Geosciences, Valdosta State University, Valdosta, Ga 31602

P2-AE17 **Determination of Chlorhexidine and Para-chloroaniline Using High-Performance Liquid Chromatography (HPLC)**
Abigail L.E. Young, Glenda Ferguson
Department of Chemistry, Wesleyan College, Macon, Georgia

P2-AE18 **Is Honey really the Bee's Knees?**
Addie Bowen and Areatha Ketch
Department of Natural Sciences, Piedmont University, Demorest, Georgia

P2-BM22 **Impact of Kratom Extracts on Mouse Behavior Reveals Safety Concerns**
Christina Raley, Jaylen Vance, Todd Cox, Aamani Kalluru, Hannah West, Makayla Stage, Chinaza Nwaiwu, Carlie Masa, Ashton Griffin, Avery Foret, Hanna Bynum, Joshua Berry, Hamzeh Alzoughool, Jessica Carro-Pedreira, Katee Herman, Zarina Lala, Alya Shanklin, Mallory Wilbanks, Swizel Fernandes, Nilay Kantibhai Zalavadiya, Anuradha Ragila, Ashley Carter, Hinaben Patanvadia, Harsh Bharatbhai Patel, Landon Maloney, Trent Selby, and Scoty Hearst
Department of Chemistry & Biochemistry, Mississippi College, Clinton, MS

P2-BM23 **Analyzing Energy Transference in the γ Subunit of Escherichia coli ATP Synthase through Terminus Extension**
Esmeralda Tanya Victor, Abigail Penny, Matthew Stankus, Yunxiang Li
Department of Chemistry and Biochemistry, Texas Woman's University, Denton, TX

P2-BM24 **Investigation of the DNA Binding Activity of Light-Activated Ruthenium-Ligand Complexes as Anticancer Agents**
Elena Kuehner, Olaitan Oladipupo, Sarah Khweis, Elizabeth Papish
Department of Chemistry & Biochemistry, The University of Alabama, Tuscaloosa, AL

P2-BM25 **Identification of Nuclearity of Chromium Binary Adducts with DNA by Negative Ion Mass Spectrometry**
Kaleb Kovitch, Stephen A. Woski, John B. Vincent
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, AL

P2-BM26 **Investigation of DDX41 and DHX8 Oligomerization**
Ross Dahlberg and Elizabeth C. Duran
Chemistry Department, University of Alabama at Birmingham, Birmingham, AL

P2-BM27 **Expression and Structural Characterization of Phosphorylated Human Ferrochelatase**
Samuel A. Galbraith and Amy E. Medlock
Department of Biochemistry and Molecular Biology, School of Medicine, University of Georgia, Athens, Georgia

P2-BM28 **The pH Dependence of Citrobacter freundii Tyrosine Phenol-lyase Quinonoid Formation with Aminoadipate**
Jenny Krakowski, Olivia Bauer, Robert S Phillips
Department of Chemistry, and Biochemistry and Molecular Biology, University of Georgia, Athens, GA 30602

P2-BM29 **Altered Enzymatic Mechanism of the DOKDC C387A Mutant in Salmonella enterica Serovar Typhimurium**
Nikki Zheng
Department of Biochemistry and Molecular Biology; UGA Department of Chemistry; UGA

P2-BM30 **Enhancing Expression of Human Progesterone Membrane Component Receptor 2 (PGRMC2)**
Cade McGlynn and Amy E. Medlock
Department of Biochemistry and Molecular Biology and School of Medicine, University of Georgia, Athens, Georgia

P2-BM31 **Expression and Purification of the S. pombe Iron Repressor Fep1 for Structure/Function Analysis**
Linden McGregor, Shashini Warahena Liyanage Dona, and Caryn Outten
Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC

P2-BM32 **AZ1 via Williamson Ether Synthesis and Reductive Amination**
Julia M. Chelli†, Audrey E. Volmer†, Kathryn J. Waycaster†, Paige E. Heiple‡, and Robert E. Lee, Sr.†
†Department of Chemistry and Physics, Bob Jones University, Greenville, SC 29614, USA
‡Cambrex High Point, High Point, NC 27265

P2-BM33 **AZ2 via Williamson Ether Synthesis and Reductive Amination**
Matthias Baladi†, Grace E. Douglas†, Paige E. Heiple‡, and Robert. E. Lee, Sr.†
†Department of Chemistry, Bob Jones University, Greenville, SC 29614
‡Cambrex High Point, High Point, NC 27265

P2-BM34 **AZ3 via Williamson Ether Synthesis and Reductive Amination**

Julia A. Douglas†, Lexa G. Moser†, Paige E. Heiple‡, and Robert. E. Lee, Sr.†
†Department of Chemistry, Bob Jones University, Greenville, SC 29614
‡Cambrex High Point, High Point, NC 27265

P2-BM35 **AZ4 via Williamson Ether Synthesis and Reductive Amination**

Ethan Lott†, Jeffrey Vaughn†, Robert E. Lee, Sr†, and Paige E. Heiple‡
†Department of Chemistry and Physics, Bob Jones University, Greenville, SC 29614, USA
‡ Cambrex High Point, High Point, NC 27265

P2-BM36 **Conductive Hydrogel Electrodes: Advances in Sensor Design**

Isabella G. McDonald†; Foram Madiyar‡; Forrest Dohner, Logan Shaffer, Jenny Baxter Vu*‡*
† Department of Physics and Chemistry, Bob Jones University, Greenville, SC, 29614
‡Department of Physical Science, Embry Riddle Aeronautical University, FL, 32114

P2-BM37 **Two Distinct Activities, One Shared Structure: Tracing the Evolution of LMW-PTPs and ArsCs from Versatility to Specificity**

Sara Dixon, Bruno di Geronimo, Shina Caroline Lynn Kamerlin
School of Chemistry and Biochemistry, Georgia Institute of Technology, 901 Atlantic Drive NW, Atlanta, GA-30332, USA

P2-BM38 **Investigating a Novel Mitochondrial-Targeting Cyanine Dye as a Potential Photosensitizing Agent for Photodynamic Therapy**

Yasamin Mofrad, David Brewer, Kristina Ilina, Maged Henary, Kathryn Grant
Department of Chemistry, Georgia State University, Atlanta, GA, USA

P2-BM39 **Optimization of HeLa Cell Lysis Buffer and Conditions for Top-down Proteomics Analysis**

Ashlyn Solenberger, Trishika Chowdhury, Kellye A. Cupp-Sutton, and Si Wu
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, AL

P2-ES4 **Unpacking the Journey of STEM Transfer Students: A Case Study Approach**

Astrid Yohana Lopez Matias, Evelyn A. Boyd
Department of Biology, University of Mississippi
Department of Chemistry and Biochemistry, University of Mississippi

P2-ES5 **Using WebMO to Introduce Computational Chemistry at the University of Southern Mississippi**
Sadie Pitre, Julie Pigza
University of Southern Mississippi, Hattiesburg, MS

P2-IM7 **Fabrication of Transparent Wood by Impregnating Voids in Delignified Wood and Possible Applications in Energy Efficiency and Electrical Devices**
Bharat Baruah, Ridham Raval
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA
Purafil Inc., Doraville, GA

P2-IM8 **Mixed Anion Effect in a Cobalt Chromite Spinel Family**
Rosia Jones, Madalynn Marshall
Kennesaw State University, Department of Chemistry and Biochemistry, Kennesaw, Georgia 30144, USA

P2-IM9 **Bioinspired Ligand Design: Tuning Cavity Size for Enhanced Mn2+ Selectivity**
Dr. Sid Creutz, Ryan Gaynor, Omri Parks, William Shy
Department of Chemistry, Mississippi State University

P2-IM10 **Synthesis of bipyridine-containing bio-inspired ligands to support manganese for oxidative catalysis**
Jennifer Greer, Sid Creutz
Department of Chemistry, Mississippi State University, Mississippi State, MS

P2-IM11 **Variations in Alkaline Earth Metal Carbonate Nanoparticles by Synthetic Mechanical Stimulation**
Michael Ajo-Nehring, Matthew Davidson, Tina Salguero
Department of Chemistry, University of Georgia, Athens, GA

P2-IM12 **Synthesis and Application of Zeolitic Imidazolate Frameworks with Polydopamine Coatings for Removal of Water Pollutants**
Tyler Simpson, and Levi Miller
Department of Chemistry & Biochemistry, University of North Georgia, Dahlonega, GA

P2-OP10 **Acid Catalyzed Silyl Ether Exchanges for Applications in Covalent Adaptable Networks and Composites**
Clara Middleton and Bassil El-Zaatari
Department of Chemistry, Davidson College, Davidson NC

P2-OP11 **Synthesis of Enantiopure 6-Halo-furo[3,2-b]furans from Carbohydrate-derived Furans**

Lindsey Bryson, William J. Berkey, Russell Kirkland, Christopher W. Jones, and Stefan France
School of Chemistry and Biochemistry, Georgia Institute of Technology
Renewable Bioproducts Institute, Georgia Institute of Technology
School of Chemical & Biomolecular Engineering, Georgia Institute of TechnologyCenter for a Renewables-based Economy from WOOD (ReWOOD), Georgia Institute of Technology

P2-OP12 **Optimizing Gel Network Architecture for Oxanorbornadiene-Based Degradable Hydrogels**

Medha Pillai, Wenting Shi, Xi Ying, Xinyi Sheng, M.G. Finn
School of Chemistry and Biochemistry, Georgia Institute of Technology

P2-OP13 **Synthesis of precursors for [4+3]-cycloaddition of indole derivatives with donor-acceptor oxiranes**

Phuong Nguyen, Ryan Tran, Kostiantyn Marichev
Department of Chemistry, Georgia State University, Atlanta, GA

P2-OP14 **Synthesis and Characterization of a New Anionic N-heterocyclic Carbene**

Aidan Gerdis, Krish Patel, Jabren Cannida, and Daniela Tapu
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P2-OP15 **A New Anionic Bis-NHC: Building Block for Novel Architectures**

Aidan Gerdis, Krish Patel, and Daniela Tapu
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA

P2-OP16 **Progress Towards the Hofmann Rearrangement of Heteroaryl Carboxamides to Afford Heteroaryl Amines**

Shayla Wood, Dr. Jesse D. Carrick
Department of Chemistry, Tennessee Technological University, Cookeville, Tennessee

P2-OP17 **Synthesis of Unsymmetric Benzimidazole Scaffolds via Cyclization of Carbaldehydes and Aromatic Diamines for use in Spent Nuclear Fuel Remediation**

Blake Hudak, Jesse D. Carrick
Department of Chemistry, Tennessee Technological University, Cookeville, TN

P2-OP18 **Synthesis of Anabaenopeptins Using a Scalable Method: Applications Of Organic Chemistry**
Veer Singh, Meher Prakash, Jeremy Kodanko
Department of Chemistry, Wayne State University, MI

P2-OP19 **Photochemical Study of Vitamin D Field Reactions in Supramolecular Host Systems**
Ariyanna Andrews and Dr. Shipra Gupta
Department of Chemistry. Valdosta State University, Valdosta, GA.

P2-PC11 **Prediction of the pKa's of Hydrated Metal Carbonates and Bicarbonates for Sr, Cd, Ba, Hg, and Ra Dications and the Ra Aqueous Metal Ion +2 Complex**
Kathleen Butler, Amanda Loudermilk, David A. Dixon
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama

P2-PC12 **Predicted properties of C1 to C3 HFC's**
Cole Durkee, David Dixon
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama

P2-PC13 **The Electronic Structure of Zirconium Chalcogenides**
Elliot Kaye, Nickolas Joyner, João Gabriel Farias Romeu, David Dixon
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama

P2-PC14 **Computational Mechanistic Study of the Divergent Synthesis of Functionalized 1,2,4-Triazoles and 1,3,4-Oxadiazoles via [3+2] Annulation**
Richard Kulbacki, Thomas Dalton Andress, Jesse Carrick, David Dixon
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama
Department of Chemistry, Tennessee Technological University, Cookeville, Tennessee

P2-PC15 **Effects of Substituents and Heteroatoms on Parallel Displaced Stacking Interactions**
Khue U. Do and Steven E. Wheeler
Department of Chemistry, University of Georgia, Athens, GA

P2-PC16 **AaronTools: Computational Quantum Chemistry Made Easy**
Roman N. Edwards, Anthony J. Schaefer, and Steven E. Wheeler
Department of Chemistry, University of Georgia, Athens, GA

P2-PC17 **Investigations of Uranium and Uranium-Oxide Complexes (U+, UO+, UO2+) with Carbonyl and Carbon Dioxide Ligands**
*Olivia (Juyeon) Kim, Nathan Dynak, Michael A. Duncan**
Department of Chemistry, University of Georgia, Athens, GA.

P2-PC18 **Computational Studies of Screening Potential Molecular Bonds with Uranium Hexafluoride**
Gianna DeLisio, William Alexander
Department of Chemistry, University of Memphis, Memphis, TN

P2-PC19 **Accurate Quantum Chemical Spectral Data for Detection of Gaseous Imines in the Interstellar Medium**
Megan McKissick, Dr. Ryan C. Fortenberry
Department of Chemistry and Biochemistry, University of Mississippi, Oxford, MS

P2-PC20 **Computational Studies of the Relative Thermodynamic Energetics of Warfarin Tautomers**
Ashley Davidson, Ellie Jones, D. Brandon Magers
Department of Chemistry, Belhaven University, Jackson, MS

P2-PC21 **Comprehensive Study of Gas and Aqueous Phase Halomethane Thermodynamic Properties: Electron Affinity, Heat of Formation, Acidity, and pKa**
Cole Seely, Thomas Dalton Andress, and David Dixon
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama

Oral Presentation Titles by Session

Oral Session 1

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2100
Moderated by Dr. Michael Van Dyke

O1-1
2:15-2:30 PM

Synthesis of Thione and Selone N-Heterocycles as Antioxidants to Prevent Oxidative DNA Damage

Kaylee E. Board, Abigail G. McNamee, Rhianna Wolsleger, Modi Wetzler, and Julia L. Brumaghim
[1]Clemson University Honors College, Clemson University, South Carolina
[2]Department of Chemistry, Clemson University, Clemson, South Carolina
[3]Formerly affiliated with Department of Chemistry, Clemson University, Clemson, South Carolina

O1-2
2:30-2:45 PM

Progress towards the synthesis of cannabichromene

Jimenez Xavier and Baron Verna B.
Department of Chemistry and Physics, The University of Tennessee at Martin

O1-3
2:45-3:00 PM

A Comparative Untargeted Lipidomics Study for Mammalian and Plant Milks

Layth Alsibai
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O1-4
3:00-3:15 PM

Improving a Deoxyribose Assay to Determine Radical DNA Damage and Antioxidant Protection

Scout Hamrick, Kyle Bristow, Ruben Sousa, Patrick Johnson, Modi Wetzler, Chad Sosolik, and Julia L. Brumaghim
[1]Department of Chemistry, Clemson University, Clemson, SC
[2]Department of Physics and Astronomy, Clemson University, Clemson, SC

O1-5
3:15-3:30 PM

Peptidomimetics Design to Develop Staple Peptide Inhibitors Targeting the 3C-like Protease

Julia Franz
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

Oral Session 2

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2101
Moderated by Dr. Lingaraju Gorla

O2-1
2:15-2:30 PM

Identification of Lipids in Shellfish Using Untargeted Mass Spectrometry Based Lipidomics Approach

Nellie Abdul-Rahman
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O2-2
2:30-2:45 PM

Identification and Biophysical Characterization of Plasmodium Peptide Binding by Common African HLAs

Marielle Frooman, Klara Choi, Maya Kahn, Li-Yen Yang, Aubrielle Cunningham, Jenna RisCassi, and Andrew McShan
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332, USA

O2-3
2:45-3:00 PM

Advancing Food Safety to Combat Diarrheal Disease Through the Use of Biochemical Methods

Alexis Harrell and Jessica Coates
Spelman College

O2-4
3:00-3:15 PM

Chemical Platform for Identifying Protein Modifications Induced by Acrolein Toxicity

Zachary E. Paikin, Benjamin Emenike, and Monika Raj
Department of Chemistry, Emory University, Atlanta, GA, United States, 30322

O2-5
3:15-3:30 PM

Development and Assessment of Stapled and Dimeric Cationic Peptides for Targeting SARS-CoV-2 Main Protease

Inaara Dinani
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O2-6
3:30-3:45 PM

Cysteine is All You Need for Global Proteome Profiling of Methyl Lysine and Methyl N-Terminus

Tuan Bao Vinh, Bao Le, and Monika Raj
Department of Chemistry, Emory University; Atlanta, GA, United States

Oral Session 3

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2102
Moderated by Dr. Tomasz Kruczynski

O3-1 **Machine Learning-Enhanced Nanosensor Arrays for Volatile Organic Compound Detection**

2:15-2:30 PM *Yibo Wang, Guan-Cheng Liu, and Mijin Kim*
School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332

O3-2 **Spectrophotometric Determination of Equilibrium Constants for Acid-Base Indicators**

2:30-2:45 PM *Christopher Wozny and Allison Wolfe-Driver*
Department of Chemistry, Dalton State College, Dalton, GA

O3-3 **Photocaged sulfonic acid catalyzed silyl ether exchanges for the synthesis of dynamic polymers**

2:45-3:00 PM *Matthew McLaughlin, Dmytro Davydenko, and Bassil El-Zaatari*
Department of Chemistry, Davidson College, Davidson, NC 28035

O3-4 **Pre-Twisted Molecular Geometry's Effect on the Optical Properties of Nitrophenyl Substituted Polycyclic 1,2-BN Heteroarenes**

3:00-3:15 PM *Lilianna Kocai and Carl J. Saint-Louis*
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O3-5 **Blue LED Modulation of Commensal Bacteria and Human Cells**

Lauren Milam, Xavier Jimenez, and Violet V. Bumah
3:15-3:30 PM *Department of Chemistry and Physics, The University of Tennessee at Martin, Martin, TN, United States*

O3-6 **Synthesis of Oxo-Binding Ligands for Vanadyl and Uranyl**

Riley E. Clark, Brandon G. Wackerle, Kayleigh Wahr, Jaelin G
3:30-3:45 PM *Ammerall, Julia Feresin, Shanna L. Estes, Colin D. McMillan, Modi Wetzler, and Julia L. Brumaghim*
Department of Chemistry, Clemson University, Clemson, SC 29634-0973, USA

Oral Session 4

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2103
Moderated by Dr. Graham Collier

O4-1 **Exploring Greener Alternatives for the Friedel – Crafts Acylation Experiment for the Undergraduate Laboratory**
2:15-2:30 PM *Ketron Charles K. and Baron Verna B.*
The University of Tennessee at Martin

O4-2 **Synthesis and Testing of Halofuginone Derivatives for the Treatment of Tickborne Diseases**
2:30-2:45 PM *Abigail Taylor, Brooke Warren, Aiden Leise, and Julie Pigza*
Department of Mathematics and Natural Sciences, University of Southern Mississippi

O4-3 **Carotenoid extraction using hydrophobic deep eutectic solvents (HDESs)**
2:45-3:00 PM *Darius Jackson, Dr. Gopeekrishnan Sreenilayam, and Dr. Alexandria Ligia Focsan*
Department of Chemistry; Geosciences, Valdosta State University, Valdosta, GA 31602

O4-4 **Pulsed Laser Ablation for the Formation of Nickel Catalysts under Inert Gas**
3:00-3:15 PM *Samuel Arnold*
Department of Chemistry, University of Alabama in Huntsville, Huntsville, AL

O4-5 **Exploiting Heterogeneity in Metal Nanoparticle Populations for Analytical Applications**
3:15-3:30 PM *Farzane Khalili, Marco Bonizzoni, Shane Street*
The Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, AL 35487

O4-6 **Bridging the Gap: The Impact of Forensic Chemistry Internships on Student Confidence and Career Readiness**
Anna Hogan and Evelyn A. Boyd
3:30-3:45 PM *Department of Chemistry and Biochemistry, University of Mississippi*

Oral Session 5

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2105
Moderated by Dr. Bharat Baruah

O5-1 **The 'X' Factor: Exploring halogen bonding in cocrystals and deep eutectic solvents**

2:15-2:30 PM *Logan Grady, Madhushi Bandara, Colin D. McMillen, and William T. Penningto*
Department of Chemistry, Clemson University, Clemson, South Carolina

O5-2 **Using Functionalized Graphene Heterostructures in Hydrogen Gas Sensing**

2:30-2:45 PM *Natasja Bechtold, Evans Addo-Mensah, Janet Obaemo, Uche Wejinya, and Hugh Churchill*
Micro and Nano Engineering Laboratory, University of Arkansas, Fayetteville, Arkansas

O5-3 **Structural Behavior of the Sb-doped Magnetocaloric Candidate CrNiP**

2:45-3:00 PM *Miriam Raggs and Madalynn Marshall*
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O5-4 **Structure Disorder and Magnetic Behavior of an Olivine-Type Cathode Material**

3:00-3:15 PM *Hamida Hassan, Huibo Cao, Bryan Chakoumakos, and Madalynn Marshall*
Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA 30144

O5-5 **Direct synthesis of Methylidyne Ligand from Anthracene Elimination**

3:15-3:30 PM *Chandler Woo, Rajesh Mukkera, Nghia Le, Charles Webster, and Sid Creutz*
Department of Chemistry, Mississippi State University, Mississippi

O5-6 **The Influence of Vacuum Processing on the Structural Phase Stability of Lead Halide Perovskites**

3:30-3:45 PM *Austin C. Shoemaker, Diana K. LaFollette, Carlo A. R. Perini, and Juan-Pablo Correa-Baena*
Georgia Institute of Technology School of Materials Science and Engineering

Oral Session 6

2:15 – 3:45 p.m. in Academic Learning Center, ALC 2106
Moderated by Dr. Sanjay Dutta

O6-1 **Two Dimensional Spectroscopy of Monodeuterated Methane**
Trinity Smith, Deacon Nemchick, Keeyoon Sung, Peter Chen
2:15-2:30 PM *[1]Department of Chemistry and Biochemistry, Spelman College, Atlanta, GA, 30314*
[2]Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, 91109

O6-2 **d-Translated Unit Sensitive Consecutive Primes**
R. James Philpott and Thomas Luckner
2:30-2:45 PM *Flagler College, Department of Mathematics and Technology*

O6-3 **Conventional strain energy and hyperconjugation in cyclopropylborane and fluoro and chloro derivatives**
2:45-3:00 PM *Gabrielle D. Winters and David H. Magers*
Computational Chemistry Group, Department of Chemistry; Biochemistry, Mississippi College

O6-4 **Predicting structures and thermodynamic properties of actinide fluoride compounds in high oxidation states**
3:00-3:15 PM *Jackson Maxwell, Kayleigh Barlow, Zachary Lee, and David Dixon*
Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Alabama

O6-5 **Raman Spectroscopic and Quantum Chemical Investigation of Ethylene Carbonate Molecular Clusters**
3:15-3:30 PM *Kenneth Arnett and Nathan Hammer*
Department of Chemistry and Biochemistry, University of Mississippi, Oxford, MS

O6-6 **Hydrogen-Bonding Interactions of Xylazine in Polar Environments**
Brandon Suh and Nathan I. Hammer
3:30-3:45 PM *Department of Chemistry and Biochemistry, The University of Mississippi, University, MS, 38677*

Kennesaw State University Campus Map (Kennesaw)

January 31st Activities:

Dinner & Social Event:
Carmichael Student Center, University Rooms

Keynote Speaker:
Academic Learning Center, room ALC 1100

February 1st Activities:

Poster Presentations and Graduate/Career Fair:
Science Building Complex

Lunch:
The Commons

Oral Presentation and Award Ceremony:
Academic Learning Center, Various Classrooms

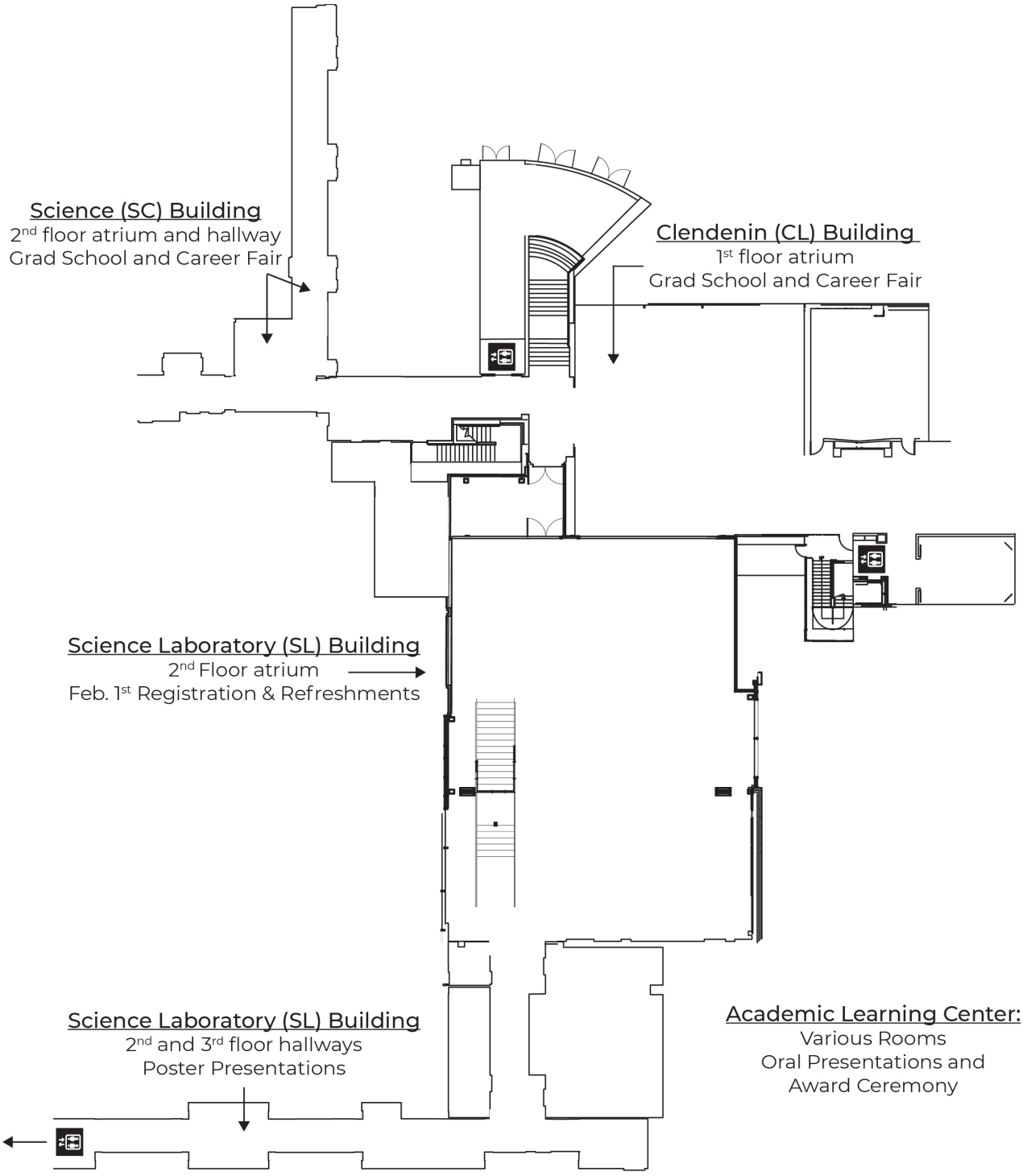
Parking:

East Deck:
305 Hopkins Dr NW
Kennesaw, GA 30144

Hotels:

1. SpringHill Suites
2. Hampton Inn
3. Comfort Suites
4. Embassy Suites

Science Building Complex Map



WiFi Information

How to Connect to the KSU Guest Wi-Fi

1. In your network settings, connect to **KSU Guest**.
2. Enter the WPA2 passphrase in the dialog box: Where it says "Enter the network security key" type **kennesaw** with all letters in lower case.
3. You will be directed to the KSU Guest Wi-Fi Portal in your browser. Click **Click here to create a temporary guest account**.
4. You will be directed to the Create Account form. Complete the fields, select **I agree to the terms and conditions**, and click **Register**. You will be redirected back to the KSU Guest Wi-Fi Portal.
5. You will then receive an email and SMS containing your temporary guest credentials with the email and phone number provided.
6. Enter your guest credentials and click **Sign On**.
7. You will be required to create a new password. Complete the fields and click **Submit**.
8. You are now connected to the Wi-Fi network.

Note: Guests have limited bandwidth and are restricted to Internet connectivity through a web browser. Additionally, guests are only able to access the Network between 6 a.m. and midnight.

Acknowledgments

We, the organizers of the Southeast Undergraduate Research Conference (SURC), extend our deepest gratitude to Ryan Beckett, Jennifer Painter, and Leah Weaver, whose dedication was instrumental in bringing this conference to life. We are profoundly thankful to all the student and faculty volunteers for their invaluable contributions.

We owe a special debt of gratitude to our sponsors, whose generous financial support made this event possible, and to the graduate schools that participated in the graduate school fair, ensuring its success.

Additionally, we want to express our sincere appreciation to the Kennesaw State University Department of Chemistry and Biochemistry, the College of Science and Mathematics, and the KSU Foundation for providing the facilities and additional funding necessary for the conference. Finally, we extend our thanks to everyone who has supported us in any other way.

SURC Organizing Committee