SWRM 2022

SUNDAY AFTERNOON

Hilton Baton Rouge
The Louisiana Room

General Symposium in Analytical Chemistry

N. Elgrishi, *Organizer, Presiding*

1:30 1. Classification of Seaweeds and Tannin Characterization Using Differential Sensing and Untargeted Mass Spectrometry-based Metabolomics. **S. Kim**, D. Garcia, J. Richardson, C. Robles, E. Yu, K. Chahda, M. Ledesma, M. Tran, D. Zamora-Olivares, E.V. Anslyn

1:45 2. Development of Liposomal Drug Delivery Systems. **L. Boyd**

2:05 3. Environmentally Persistent Free Radicals in E. Cigarettes and in their flavoring Compounds. **F. Hasan**, S.M. Lomnicki

2:25 4. Instrument-free diagnosis of Mycobacterium tuberculosis on a point-of-care polymer/paper hybrid microfluidic biochip. H. Tavakoli, **X. Li**

2:45 Intermission.

3:05 5. Quantification of Kaempferol Conjugates in Watercress Juice and Extract using HPLC and Protein Binding Studies. **L. Simington**, B. Sengupta

3:20 6. Gas-phase dissociation chemistry of drugs of sports anti-doping relevance: Beta-2 agonists and beta blockers. **M. Carlo**, A.L. Patrick

3:40 7. Vibrational, optical absorption, and electronic spectra of 6-amino-, and 6-nitrochrysene: An experimental and computational study. **K.K. Onchoke**

Hilton Baton Rouge
The Victory Room

General Symposium in Chemical Biology and Medicinal Chemistry

S. Murru, *Organizer, Presiding*

1:30 8. Discovery and development of IACS-6274, a GLS1 inhibitor advancing in clinical trials for the treatment of cancers with specific metabolic vulnerabilities.. **M.J. Soth**, K. Le, g. liu, J.J. Kovacs, B.P. Jason, J. Bardenhagen, C. Bristow, B. Czako, C. Carroll, D. Maria Emilia, M.M. Hamilton, M. Geck Do, A. Harris, V. Giuliani, S. Huang, Y. Jiang, T. Johnson, Z. Kang, L. Zhen, T. McAfoos, M. Miller, P. Morlacchi, W. Palmer, J. Pang, N. Rogers, H. Shepard, N. Spencer, J. Theroff, Q. Xu, A. Yau, G. Draetta, C. Toniatti, T. Heffernan, P. Jones

1:45 9. Quenching of Bovine Hemoglobin Fluorescence Emission by TNS and ANS. **M. Marlow**

2:00 . Discovery of a 40-year-old Sequence Error Unveils New Understanding of Allosteric Ligand Binding to Glutamate Dehydrogenase. **O. Nassar**, B.M. Pettitt, T. Smith

2:15 10. New class of compounds developed as potential breast cancer therapeutics-exploration of mechanism of action. **J. Sridhar**

2:30 11. Identification of Compounds from Plant Extracts Targeting TrkB for Neurological Disorder. **Y. Bao**

2:45 12. Simultaneous evaluations of pH and enzyme activity using a cat-acido-CEST MRI contrast agent with three CEST signals. **E. Gonzalez**, A.C. Pollard, X. Liang, C. Kombala, S. Lokugama, A. Kotrotsou, T. Li, M. Pagel

3:00 13. Liposome Delivery of ADAM-10 Activators for the Treatment of Alzheimer's Disease. **M. Rubal**, K. Carson, K. Lang, D. Basu, N. Mc Mahon, J. Jaramillo

3:15 Intermission.

3:25 14. Free Energy Simulations to Understand the Stability of Human Serum Retinol-Binding Protein Mutants (W24L, W24F, W24Y). **K. Lee**, K. Kuczera

3:40 15. Characterizing the porous microstructure of aluminum based adjuvants using small angle scattering.. **K. Rinee**

3:55 16. Determining enzyme kinetic rate constants to predict viral enzyme mutations. **T.L. Ganapathy**, **E.J. Olinger**, D. Ramakrishnan, R.D. Tanner

4:10 17. Bakuchiol-inspired Derivatives as Potent Liver X Receptor Modulators. **D.P. Cao**, F. Rivas

4:25 18. Development of a pH-sensitive liposome Formulation for targeted delivery of anticancer pyrazolones in lung cancer cells. **D. El Hage**, S. Murru

4:40 19. Expression, purification, and isolation of chlamydial chaperone protein mutant, Scc4(V95A), for NMR structure determination. **H.C. Wickramasinghe**, P. Howard, M. Macnaughtan

Hilton Baton Rouge
The Paramount Room

General Symposium in Polymer Chemistry

L. T. Ngo, *Organizer*, *Presiding*

1:30 54. Developing a new approach to modifying alginate for use in biomedical applications. **H. Murphy**, S.K. Hamilton

1:45 55. Developing and optimizing a degradable collagen mimic for modern wound dressings. **J. White**, S.K. Hamilton

2:00 56. Accelerating Tissue Regeneration with Protein-Loaded Fiber Mats. **C. Cole**, S.K. Hamilton

2:15 Break.

2:25 57. Understanding the Role of Charge Pattern on the Micellar Structure of Polypeptoid Multi-Block Copolymers. **M. Zhang**, Y. Liu, D. Zhang

2:40 . One Pot Phenolic-Initiated Mechanochemical Synthesis of Poly(lactic acid) Nanoparticles. **M.A. Ebqa'ai**, **M. Tamimi**, **A. Kassick**, **S. Averick**, **T. nelson**

2:55 58. Unraveling the Role of Charge Patterning in the Micellar Structure of Sequence Defined Amphiphilic Peptoid Oligomers by Molecular Dynamics Simulations. **E. Tsai**, H. Gallage Dona, X. Tong, P. Du, B. Novak, R. David, S.W. Rick, D. Zhang, R. Kumar

3:10 59. Facile Mechanochemical Suzuki Polymerization for the Synthesis of Soluble Polyfluorenes. **T.N. Liyanapathirannehelage**, F.F. Pary, T. Nelson

3:25 60. Formation and Characterization of Temporal Controlled Thermoset Adhesive Based on Thiol-Michael Addition Triggered by Urea-urease Clock Reaction using Watermelon Seed Powder (WMSP). **F. Shaon**

3:40 61. Rapid hierarchical nanostructures of lamellar block copolymer thin films via microwave annealing. **u. aslan**, A. Karim

3:55 Break.

4:10 62. Structure-property relationships of solid polymer electrolytes PEG-segmented phosphonium ionenes. **A. Abdulahad**

4:25 63. DNA Imprinted Hydrogels. **D. Spivak**, N. Gariano, M. Hasan

4:40 64. New methods and materials to address polymer sustainability. **J.N. Brantley**, N. Galan, A.D. Fried, B. Wilson

Hilton Baton Rouge
The King Room

General Symposium in Inorganic Chemistry

S. Baranets, C. Wagner, *Presiding*

1:30 20. Lessons learned from the mechanochemical synthesis of anionic lanthanide complexes. **E. Fatila**, S.Y. Chappidi, J. Huang, M.N. Gordon, V. Carta, K.R. Dunbar, S.E. Skrabalak

1:45 21. Investigating intermediates in the CCC-NHC pincer ligand metalation/transmetalation to Rh sequence, an improved stoichiometric synthesis of CCC-NHC pincer Rh complexes. **E. Amoateng**, J. Zamora-Moreno, G.R. Kuchenbeiser, B. Donnadieu, F.S. Tham, V. Montiel-Palma, K. Hollis

2:00 22. Access to 1,4-diboranaphthalenes via Nickel catalyzed diboration of alkynes. **P. Verma**

2:15 23. Neutral Cyclometalated Iridium Complexes Generated by Ligand-Centered Organometallic Reactions. **C. Jiang**, T.S. Teets

2:30 24. Investigating C–H functionalization photocatalysis of a Mo Dioxo Complex. **C. Baumberger**, M.B. Chambers

2:45 25. Enhanced Reactivity for C-H Bond Functionalization Using a Oxo-Bridged Dinuclear Iron(III) Catalyst and Hydrogen Peroxide. **Z. Turner**, J.W. Jurss

3:00 Intermission.

3:30 26. Material Design by Electrospinning for the Application in Electrocatalysis. **L. Fei**

3:45 27. Understanding the Challenges of Biomimetic Nitrogen Fixation Using Computational Analysis. Z. Benedek, **T. Szilvasi**

4:00 28. Facilitating host-guest interactions of tris(β-diketonato)ruthenium(III/II) hosts with cationic guests through a redox stimulus. **J.S. Sanford**, F.R. Fronczeck, A.W. Maverick

4:15 29. Optimal binding affinity for Sieving-Like Separation of Propylene from Propane in an Oxyfluoride Anion-Based Metal-Organic Framework. **Y. Xie**, B. Chen

4:30 30. Effect of pH and Electrolyte Choice on the Nitrogen Reduction Reaction Activity of Ti2N Nitride MXene. **D. Johnson**, A. Djire

4:45 31. Optical characterization and local coordination environments of LnCrTeO6 (Ln= La, Pr, Nd). **K.R. Cruz**, R.T. Macaluso

Hilton Baton Rouge
The Capitol Room

General Symposium in Organic Chemistry

P. B. Chanda, *Organizer*
J. L. Bolliger, C. Hobbs, *Presiding*

1:30 Introductory Remarks.

1:35 32. C–H bond functionalization as tool for the synthesis of tricyclic heteroarenes. **J.L. Bolliger**

1:55 33. Synthesis, characterization and biological activity of benzothiazolium salts against a panel of ALS-like cells. K. Powell, A. Kennedy, D. Thornton, J. Gorden, D. Unruh, D.R. Goode, A. Taraboletti, M. Frazier, **K.S. Taylor**

2:15 34. Synthesis of a CCC-NHC pincer Re complex: An air stable catalyst for coupling ketones with primary alcohols via borrowing hydrogen. **H. Pham**, B. Donnadieu, K. Hollis

2:35 35. C-N bond Formations: Cu (II) catalyzed coupling of aryl halides with Imides and N-formylamines.. **R. Komati**

2:55 36. Molecular hybridization of 1,3-diarylpyrazolones via C-N and C-C bond formations using cross-coupling reactions. **A. SIRIKI**, D. El Hage, V. Prasasty, S. Satyanarayanajois, S. Murru

3:15 Intermission.

3:25 37. Biocatalysts for Selective Oxidations. **M.E. Hinze**

3:45 38. Synthetic approaches towards (-)-berkeleyamide A and its derivatives. **J. Garfias**, T. Ling, F. Rivas

4:05 39. New monomers for ring opening metathesis polymerization (ROMP) and their post-polymerization modification. **C.E. Hobbs**

4:25 40. Synthesis of N-fused polycyclic indole derivatives via Ru(II)-catalyzed C–H bond activation and intramolecular hydroarylation. **N. Udayanga**, X. Cui

4:45 41. Atypical Modifications of the Carbapenem Scaffold Leading to Antibiotics with Improved Activity Against Resistant Bacterial Pathogens. **P. Quan**, R. Gupta, M. Alqurafi, N. Stewart, M. Toth, N. Al-Kharji, T. Nguyen, W. Chai, T. Hassan, J. Billman, J. Neniel, H. Craley, E. Tapp, H. Wilson, R. Hosseini, J. Hanna, V. LI, R. Bansal, K. Lodes, Y. Wais, H. Nguyen, K. Lin, A. Kurella, S. Koh, M. Metchick, S. Nguyen, A. Lanners, S. Monga, M. Pan, A. He, A. Raghunathan, S. Jaikumar, P. Mortimer, C. Smith, S.B. Vakulenko, L.A. Brammer Basta, K. Rohde, J.D. Buynak

5:05 42. Facile lactone formation from ferrocene-bound keto-carboxylic acids. **U.R. Pokharel**

Hilton Baton Rouge
The Governor Room

General Symposium in Physical Chemistry

K. Lopata, *Organizer*
A. Datar, A. W. Harrison, *Presiding*

1:30 43. Studies of the reactivity of graphene driven by mechanical distortions. **N. Hawthorne**, S. Banerjee, Q. Moore, A.M. Rappe, J.D. Batteas

1:45 44. Excited state chemistry: Measuring two-state reactivity (TSR) in metal mediated reactions. **D.J. Bellert**, T. Lewis

2:05 45. First-Principles Simulations of Strong-Field Dynamics in SiO2 and Diamond. **L. Kurkowski**, M. Yang, A. Sissay, K. Lopata

2:20 46. Optical Signatures of Many-Body Exciton Scattering Dynamics in 2d perovskites and 1d quantum dots.. **E.R. Bittner**

2:40 47. Ab Initio Investigation of intramolecular charge transfer processes in DMABN by calculation of transient X-ray absorption spectra. **A. Datar**, S. Gudivada, D. Matthews

2:55 48. The positive side to halogens: A σ-hole interaction study. **D. Devore**, T.L. Ellington, K.L. Shuford

3:10 Break.

3:25 49. Computational Study of a YAP/TAZ-TEAD Inhibitor. **K. Mills**, H. Torabifard

3:40 50. Computational design of fluorinated opioid derivatives for pH-specific binding. **A.W. Harrison**

4:00 51. Cosurfactant effects in artificial lipid phase formation. **C. XU**, A. Fracassi, C.P. Baryiames, A. Bhattacharya, N.K. Devaraj, C. Baiz

4:15 52. Mesoporous silica as a sorbent for potential integration into NASA's Trace Contamination Control System.. **N.F. Materer**, M. Krishnan, E. Kadossov, A.W. Apblett

4:30 53. Gas-phase dissociation of piperidinium-, pyrrolidinium- and pyridinium-based ionic liquid cations. **T. Abdulraheem**

4:45 . Synthesis of TiO2-g-C3N4 for visible-light-driven photodegradation of Congo red dye. **M. Saeed**, I. Khan

Hilton Baton Rouge
Riverview Ballroom

Undergraduate and High School Poster Session

C. D. Gasery, C. Schneider, *Organizers*

2:00 - 4:00

P16. Computational Spectroscopy of Hydantoins in the Solution Phase. **A. Abdul**, A. Zhang, A. Kumar, D. Matthews

P7. Analysis of trace elements of metal artifacts from an American Civil War campsite located in Bentonia, Mississippi. **L.T. Ashley**, J. Evans, A. Mobley, C.E. Stokes, S. Hearst

P107. Virtual Reality Activities in an Undergraduate Biochemistry Curriculum. **R.G. Ayres**, J. Neiswinger, B. Magers

P1. 9-Borabicyclo[3.3.1] nonyl trifluoromethanesulfonate-mediated syn-selective aldol reactions of arylacetates. **K. Badeaux**, **P.B. Chanda**

P85. Syn- and anti-selective enolboration-aldolization of N, N-dialkyl substituted phenylacetamides. **J.P. Barthelemy**, **D.J. Schwaibold**, **P.B. Chanda**

P59. N-Boc-hydroxylamine as a Boc-donor Agent for the Catalytic N-tert-Butoxycarbonylation. **D. Basnet**, A. SIRIKI, S. Murru

P52. Investigating the potential of sunflower plants (Helianthus annuus), ferns (Nephrolepis biserrata) and mustard greens (B rassica juncea) to remove toxic metals from soils. **S. Bergeron**, D. Wayment

P29. Enthalpies of formation of quinoline derivatives by homodesmotic reactions. **R.G. Borbash**, D.H. Magers

P99. Synthesizing Carbon Dots with Red Phosphorescence for Security Ink Purpose. **E. Braghin**, S. He, S. Wu

P87. Synthesis and characterization of mellitic triimide based covalent organic frameworks. **M. Brenner**, **E. Snow**, **D.W. Holley**

P70. Quantifying Protein Secondary Structure Changes with Altered Solvent Environments and Backbone Polarization. **D. Bruce**, C.J. Fennell

P79. Stabilization factors in fluoro, chloro, and methyl derivatives of cyclopropyl carbinyl cation. **H.K. Bynum**, P. Wiget, D.H. Magers

P15. Chemical Investigations of Organics in the Chattahoochee River. **H. Carlisle**, K.S. Taylor, E. Klar, K. Goodwin

P39. Functionality of epoxies in frontal polymerization front velocity and temperature. **J. Carroll**

P42. ICP-OES analysis of trace elements in fish species inhabiting Mississippi River borrow pits. **A. Cevallos**, A. Harris, J. Kazery, T.D. Selby, S. Hearst

P98. Synthesis, characterization and antimicrobial properties of asymmetric N,N'-bis-substituted triazolium salts. **R. Clamor**, K. Shelton, D. Fico, L. Crane, I.C. Rodriguez, J. Wilson, D.R. Goode, J. Gorden, M. Frazier, L. King

P97. Synthesis, activity, and characterization of Pd/Al2O3 catalysts for methane combustion under stoichiometric conditions. **A. Clance**, **I.A. Rogers**, **K. Armstrong**, L. Proaño, A.C. Banerjee

P84. Symmetry Analysis of Biphenyl in the Gas Phase. **S. Coates**, C. Latterman, I. Tuvi-Arad, A. Kaspi-Kaneti

P2. A Bioinformatic Pipeline for the Detection of Amino Acid Enrichments in Three Dimensions: A Case Study of DNA Polymerase I. **L. Cortes Morales**, A. Fields, A. Schoeffler

P55. Microwave assisted molybdenum catalyzed C-C coupling of benzylic alcohols. **K. Coussan**, A.A. Gallo, R.S. Srivastava

P4. Access to Tricyclic Heteroarenes by an Iodine-promoted Cyclization Reaction. **R. Crittell**, M.J. Lavenue, S. Hutchinson, R. Nakiwala, J.L. Bolliger

P45. Identification of native and small-molecule ligands of the Chlamydial chaperone proteins Scc4 and Scc1 using the thermal shift assay. **A. D'Armond**, **S. Noble**, H.C. Wickramasinghe, M. Macnaughtan

P23. Diastereoselective aldol reactions of phenylacetates with ketones. **G.N. Dawsey**, **P.B. Chanda**

P44. ICP-OES analysis of trace elements to determine environmental factors causing brittle antlers in White-tailed Deer. **C. Dean**, Z. Dixon, L. Sisson, J. Kazery, **S. Hearst**

P27. Elemental analysis of local crayfish for environmental monitoring. **A. Doubert**, J. Garteiser, S. Hearst, J. Kazery

P37. From Surviving to Thriving in a post-COVID World:Tarleton State University ACS Student Affiliate Chapter. **C. Droguett**, B.A. Saurenmann, M.A. Fowler

P49. Intramolecular hydrogen bonding in isoflavones, emodin and hypericin. **C.P. Droguett**, T. Gibbs, S. Tuck, **W.L. Whaley**

P34. Exploring 2-phenylethylamine hydrochloride as a potential model for scheduled amines. **P. Eagle**

P57. Monitoring BPA leaching from feminine hygiene products using fluorescence spectrophotometry. **M. Easley**, S.E. Hubbard

P51. Investigating introductory undergraduate STEM students' problem-solving processes through eye tracking. **T. Eaves**, S. Silva, M.B. Atkinson, R. Thompson

P62. Organic Molecules for Near Infrared Spectroscopy. **D. Emenike**, S.R. Gwaltney

P54. Microscale and combinatorial synthesis and resolution of fluorinated warfarin-derivatives by symmetric and asymmetric methods and their purification by LC-MS/MS. **L. Evans**, M. McGuire, R. Bishop

P6. Analysis of trace elements in ceramic pottery samples collected from the Holy Land. **T. Farmer**, J. Xavier, B. Parks, D. Parks, **S. Hearst**

P12. Calculation of conventional strain energies of small heterocycles of carbon and silicon by model reactions. **E.M. Franklin**, D.H. Magers

P82. Student performance in two-semester general chemistry at a primarily undergraduate institution measured as a function of gains in arithmetic fluency. **C. Galloway**, T.E. Alivio

P71. Quantum cutting ytterbium-doped lead-free inorganic halide perovskites to increase the efficiency of silicon solar cells. **J. Geniesse**

P50. Investigating how undergraduate students interpret IR spectra. **J. Gonzalez**, D. Hamilton, M. Gregory, T. Golden, M.B. Atkinson

P19. Conventional strain energies of thiaziridine and the thiazetidines. **J.D. Gramm**, D.H. Magers

P66. Prediction of the Excitation Energies of Carbonic Acid Configurations Using Equation-of-Motion Coupled-Cluster Theory. **O. Haney**, B. Westbrook, R.C. Fortenberry

P10. Beta-2-Microglobulin protein misfolding. **R. Hanumandlu**

P43. ICP-OES analysis of trace elements in fish species inhabiting the Ross Barnett Reservoir. **A. Harris**, A. Cevallos, W.E. Schuler, T.D. Selby, **S. Hearst**

P68. Preparation of propargylamines via an A3 condensation reaction catalyzed by a tandem CuI/Zinc dust. **H.N. Heinz**, M.E. Agbo, **A. Chanda**, J. Fotie

P81. Streamlined Molecular Model Crafting for Capturing Chemistry Concepts. **L. Henke**

P40. Green Synthesis of Nitrosamine Derivatives for use in Co-crystallization. **M. Henson**, K. McKinney, M. Meadows, C. Amos, S. Roberson, Z. Mouton, S.A. Kelley

P93. Synthesis of oligo-benzodiazaboroles based on meta-phenylene ethynylene linking units. **J. Hodges**, D.E. Gross

P18. Conventional strain energies of cyclopropylborane, borirane, boretane, the diboretanes, borolane, the diborolanes, borinane, and the diborinanes. **K.E. Hood**, D.H. Magers

P106. Using eye tracking to explore undergraduate general chemistry students' understanding of acid-base titrations. **S. Jacob**, M.B. Atkinson

P17. Controlling oxygen binding to bovine hemoglobin with a home-assembled oxygen purge apparatus. **K. Jordan**, A.J. Perez, A.N. Newton, D.E. Thompson

P75. Retinoid Exposure, its Effects on FOXP3 Expressions in CTCL Lines, and Methods for Identifying These Effects. **J. Kendrick**, S. Stahly, A. Powers, A. Danekas, R. Cline, L. Griffin, B. Sarcar, L. Bridges, A. Geis, N. Siddiqui, S. Martin, L. Johnson

P26. Effect of pH on the aqueous electrocatalytic reduction of nitrite using a copper-containing catalyst. **K.A. Knecht**, V.A. Hulse, N. Elgrishi

P53. Microglial mitigate cytotoxic effect of glyphosate and rotenone on neuron cell populations; microglial activation possible mechanism. **A. Kramer**

P61. Observation and analysis of flexible closed-cell foams via frontal polymerization. **S. Li**

P80. Stereoselective synthesis of α-quaternary α'-hydroxyketones. **C. Locicero**, F. Badmus, C. Bailey, F.R. Fronczeck, R.G. Kartika

P8. Antimicrobial Activity Analysis of Seasonal Derived Phytochemicals of Rumex salicifolius on Escherichia coli and Staphylococcus epidermidis. **G. Martinez**, C. Fermaintt, T. Munguia

P38. Functional Genomics Tools for Calcium Signaling in the Salt-Tolerant Plant Schrenkiella parvula.. **S. Matylis**, A. Smith, M. Dassanayake, J. Larkin

P9. Assessing aflatoxin risk points in peanuts via polymer science and chemical sensing. E. Schué, **C.L. McCormick**, A. Mallavarapu, J. Pitts, C.R. Kagan, B.S. Sumerlin

P58. Monitoring polycarbonate degradation conditions to mimic museum object damage. **A. McCoy**, S.E. Hubbard

P21. Development of a high-throughput thermal shift assay for the assessment of the energetics of drug binding to serum albumin. **M. McGuire**, L. Evans, R. Bishop

P64. Photochemical Key Steps in Cyclization Reactions: Synthesis of Isoindolone Piperidines As Kinase Inhibitors. **C. McKinney**, T. Bridges, W. Kramer, M. Donahue

P67. Preparation of conjugated polyphenylethynylarene macrocycles. **E. McRae**, B. Steen, T.D. Selby

P92. Synthesis of nitrosodiphenylamine: A greener way. **M. Meadows**, **C. Amos**, K. McKinney, S.A. Kelley

P47. Impact of the choice of buffer on the electrochemical reduction of hexavalent chromium in water. **D. Meche**, C.M. Stern, N. Elgrishi

P101. Synthetic Side-Chain Development of Pyridine-based HIV Integrase Inhibitors. **M. Miller**, H. Mattke, C. Bruni, S. Suffern, J. Kessl, M. Donahue, W. Kramer

P100. Synthesizing Tetraphenylporphrins And Metalloporphyrins Using Microwave And Ultrasonic Reactors. **N. Moro**, E.A. Nalley

P36. Fine-tuning reactivity on alkyne metathesis catalysts. **S. Napier**, S.W. Njoroge, S.R. Tanha, F.R. Fronczeck, S. Lee

P78. Spectral signatures of common errors in UV-vis spectroscopy – A learning module for student researchers. **A.N. Newton**, D.E. Thompson

P28. Enlighted: Silver Nanoparticles Undergo Shape Transformations in the Presence of Light EXCEPT when coated with Hybrid Lipid Membranes. **C. Nieves Lira**, M.R. Mackiewicz

P94. Synthesis of Silver nanoparticles using various sugars. **Y. Nuthalapati**, **P. Kesavan**

P76. Ring-Opening Random Copolymerization of N-(3-tert-butoxy-3-oxopropyl) glycine derived N-Carboxyanhydride and N-Butyl Glycine N-Carboxyanhydride. **K. Pham**, S. Owoso, D. Zhang

P25. Docking Studies of Pyridine-based HIV Integrase Inhibitors. **S. Pitre**, M. Donahue, W. Kramer

P86. Synthesis and biological activity of N-substituted-benzothiazolium salts with lipophilic and hydrophilic substituents upon application with ALS cells and the effects of the TDP-43 Protein. **K. Powell**, D. Thornton, A. Kennedy, H. Carlisle, S. Ramos, J. Gorden, A. Taraboletti, M. Frazier, K. Shelton, D.R. Goode

P77. Search for correlations between conformational preference of X-CH2-CH2-Y (X, Y = F, Cl, CN, CH3, SiH3) molecules and chemical descriptors. **A. Price**, E. Thompson, T. Sommerfeld

P103. The effect of varying pH on the leaching of BPA from panty liners. **K. Price**, S.E. Hubbard

P105. Thiosulfate Driven, Re-catalyzed deoxydehydration (DODH) of Glycol. **H. Privat**, P. Kesar, R.S. Srivastava

P60. N-nitrosopiperidine: Green synthesis and co-crystallization. **S. Roberson**, Z. Mouton, S.A. Kelley

P11. Bioinformatic Analyses of Paralogous RNA Methyltransferases Reveal Determinants of Substrate Specificity in ErmE. **B. Robichaux**, J. Mintken

P32. Examining potential toxicities of organotins, an emerging drinking water contaminant, in human health exposures. **J.D. Rodgers Gochicoa**, C. Collom, S. Pradhan, C.M. Sayes

P56. Microwave-assisted synthesis of phenylmethylene bis-pyrazolones. **R. Sapkota**, A. SIRIKI, S. Murru

P73. Relative stabilities of amino, nitro, and methoxy derivatives 6-methylpentacene and 6-methylene-6,13-dihydropentacene. **W.E. Schuler**, D.H. Magers

P88. Synthesis and thermal analysis of phosphonium ionic liquids.. **D.J. Schwaibold**, **G.E. Meadows**, B. Wicker

P91. Synthesis of macrocyclic diaminopolyphenylethynylarenes and diaminopyridinylethynylarenes. **S. Schwartz**, M. Stewart, T.D. Selby

P95. Synthesis of Substrates and Standards to Investigate Baeyer-Villiger Monooxygenase Reactivity. **S.M. Simmons**, C.N. Tebrinke

P14. Chemical analysis and biotoxicity assessment of plastic bioremediation using Tenebrio molitor larvae. **L. Sisson**, C.E. Stokes, S. Melton, T.D. Selby, S. Hearst

P72. Rational Design of Aptamer Scaffolds for the Detection of miR-92. **M.C. Smith**, C.D. Morgan, M.F. Ali

P96. Synthesis of vitexin-inspired 4-quinolone molecular scaffold against colorectal cancer cell lines. **W.R. Smither**, T. Ling, F. Rivas

P48. Incorporating a Bioengineered Protein and a Collagen Analog into Modern Wound Dressings. **J. Spiva**, S.K. Hamilton

P5. Analysis Of Cannabis Potency with High-Performance Liquid Chromatography,. E.A. Nalley, **H. Spoon**, R. Lirag, D.G. McGuire

P74. Relative stabilities of amino, nitro, and trifluoromethyl derivatives of 9-methylanthracene and 9-methylene-9,10-dihydroanthracene. **C.E. Stokes**, D.H. Magers

P102. Tensor-Hypercontraction for Doubles Amplitudes: A Benchmark Study on Reaction and Conformational Energy Profiles. A. Abdul, **A. Subramanian**, K. Chien, D. Matthews

P35. Expression and reactivity of a Baeyer-Villiger monooxygenase from Thermobifida fusca\. **C.N. Tebrinke**, M.E. Hinze

P69. Pt, Pd and Co nano-dispersed in organically modified silicates as catalysts for the oxidative coupling of amines. **G.C. Theis-Marchan**, J. Fotie

P13. Characterization of chromic platinum oxime complexes. **K. Thomas**, R. Sharma, S.O. Elsiddieg, A.W. Maverick

P90. Synthesis of heteroatom-rich aromatic donors and charge transfer complexes for superconductivity. **A.C. Villalobos Galindo**, J.T. Mague, Q. Qin

P22. Diastereo- and enantioselective aldol reactions of N, N-dialkylphenylacetamides. **R.H. Vo**, **P.B. Chanda**

P33. Expanded polystyrene consumption by insect larvae native to Mississippi. **S. Watts**, L. Sisson, S. Hearst, T.D. Selby

P89. Synthesis of a Novel Wound Healing Material Using Core-Shell Nanofibers Infused with AMD3100 and Tacrolimus.. **R. Wendt**, S.K. Hamilton

P83. Study of iodine distribution and concentrations in western Oklahoma brine waters and recycling of used chloroform. **J.R. Wickham**, J. Frame, A. Larson, D. Edlin

P20. Conventional strain energy and hyperconjugation in cyclopropylborane and fluoro, chloro, and methyl derivatives. **G.D. Winters**, P. Wiget, D.H. Magers

P104. Theoretical Investigation Of The X-ray Stark Effect In Small Molecules. **C. Wright**, A. Datar, D. Matthews

P63. Palladium catalyzed hydrosilylation of aldehydes and ketones into *O*-silyl ether derivatives under neat conditions.. **J. Wroblewski**, **A. Young**, H. Drago, J. Fotie

P30. Environmental analysis of trace elements in fish species inhabiting a former Mississippi gravel quarry. **J. Xavier**, T. Farmer, L. Sisson, C. Dean, Z. Dixon, J. Kazery, T.D. Selby, S. Hearst

P24. Diisopinocampheylboron triflate (Ipc2BOTf)–mediated diastereo- and enantioselective aldol reactions of substituted phenylacetates. **W. Yang**, **D.J. Schwaibold**, **G.N. Dawsey**, M. Yanez Diaz, S.K. Ferrufino Amador, T.L. Walls III, **P.B. Chanda**

P41. ICP-OES analysis of trace elements in fish species inhabiting former World War II military site near Clinton Mississippi. **W. Yarbrough**, A. Cevallos, A. Harris, T.D. Selby, S. Hearst

P31. Evaluation of synthetic White-tailed Deer attractants using behavioral analysis. **C. Young**, W. Yarbrough, T.D. Selby, **S. Hearst**

P65. Phytochemical Profiling of Ambrosia psilostachya and Investigating Bioactivity on Escherichia coli and Staphylococcus epidermidis. **E. Zapata**, C. Fermaintt, T. Munguia

P46. Identifying Derived Products from Clinopodium brownei Using GC-MS and Investigating the Efficacy on Gram-Negative and Gram-Positive Bacteria. **J.D. Zapata**, C. Fermaintt, T. Munguia

P3. Ab initio analysis of polarizability in molecular piezoelectric response for organic dimer systems. **D.L. Zetterholm**, D.H. Magers

MONDAY MORNING

Hilton Baton Rouge
The Louisiana Room

Making Strides in Shifting Paradigms within Chemistry Education Research and Practice

Z. S. Wilson-Kennedy, L. Winfield, *Organizers*
F. L. Payton Stewart, *Presiding*

8:30 Opening Remarks.

8:35 90. Insights Gained into the Use of Individual Development Plans as a Framework for Mentoring NIH Postbaccalaureate Research Education Program (PREP) Trainees. **A.C. Kimble-Hill**

8:55 91. Psi4Education: Free and Open-Source Programing Activities for Chemical Education with Free and Open-Source Software. **B. Magers**, V.H. Chávez, B. Peyton, D. Sirianni, R.C. Fortenberry, A. Ringer McDonald

8:55 92. Educator use of the open-access resource Chemistry For Your Life,. **M.A. Collini**

9:15 93. Demonstrations to teach and assess LeChatelier's principle. **S.G. Prilliman**, A. Asif, A. Beathard, J.M. Welsh, P.M. Hughes, T.A. Worley

9:35 94. Educational impacts of a museum sabbatical experience for chemistry faculty at the arts-science interface. **G.D. Smith**

9:55 Intermission.

10:05 95. Evidence of validity and reliability when using the Attitudes Towards Organic Chemistry (ATOC) instrument in first-semester organic chemistry. **M.A. Collini**, R.J. Weber, M.B. Atkinson

10:25 96. How does course culture affect the ways students structure their knowledge in organic chemistry. **S. Abeywardana**, M. Cooper

10:45 97. Triangulating undergraduate organic chemistry students' use of cognitive resources during stereochemical tasks with eye tracking. **A. Corrales**, R. Rodriguez, A.S. Allen, M.B. Atkinson

11:05 98. Investigating relationships between undergraduates' STEM identity and STEM problem-solving processes. **S. Silva**, T. Eaves, M.B. Atkinson, R. Thompson

11:25 Closing Remarks.

Hilton Baton Rouge
the Academy Room

Sources, Transport, and Fate of Metals in the Environment

P. Zito, *Organizer*
D. G. Hebert, D. Podgorski, *Presiding*

8:30 Introductory Remarks - Morning Session.

8:45 99. Dissolved and colloidal trace elements in rivers. **A. Shiller**

9:10 100. Electrochemical methods for the energy-efficient reduction of hexavalent chromium in contaminated water sources. C.M. Stern, D. Meche, **N. Elgrishi**

9:35 101. Spatiotemporal patterns of metal contaminants and carbon chemistry in rivers undergoing large restoration efforts. **J. D'Andrilli**, V. Silverman, D. Hebert, P. Zito, R. Payn, F. Young, M. DeGrandpre, M. Peipoch, H.M. Valett

10:00 Coffee Break.

10:45 102. Metal contamination effects on microbial carbon cycling in fresh and marine waters. **V. Silverman**, M. Nichols, H.M. Valett, D. Hebert, P. Zito, M.W. Bowles, J. D'Andrilli

11:10 103. Ion Selectivity of Oxidized Carbon Electrodes in Capacitive Deionization. **Y. Won**, Y. Kim

11:35 Discussion/Questions.

Hilton Baton Rouge
The Victory Room

Women Chemists Symposium: Transforming into Leaders

G. Thomas-Fuller, *Organizer, Presiding*

8:30 Networking.

9:00 Opening Remarks.

9:05 104. Introduction: Bonnie Eckhart. **B. Eckhard**

9:10 105. Introduction: Kinesha Harris. **K. Harris**

9:15 106. Introduction: Carolyn Ribes. **C. Ribes**

9:20 107. Introduction: Christie Sayes. **C.M. Sayes**

9:25 108. Introduction: Leyte Winfield. **L. Winfield**

9:30 Moderated Panel Discussion.

10:30 Coffee Break.

10:45 Open Dialogue / Audience Q&A.

11:30 Closing Remarks.

Hilton Baton Rouge
The Governor Room

Analytical and Materials Chemistry Symposium in Honor of LSU Boyd Professor Isiah M. Warner

R. Perez, *Organizer*, *Presiding*

8:30 84. Using Multivariate Frequency Domain Fluorescence Spectroscopy to Monitor Photosensitizer Degradation. **S.L. Neal**, Y. Zhang

9:00 85. Development of a Low-Cost, Portable, and Simple Microfluidic Paper-Based Analytical Devise for Indoor Formaldehyde Detection. **K. Kartowikromo**, P. Namboote, A. Malinowski, S. Djojodikromo, V. Fernand Narcisse

9:30 Break.

10:00 86. Laser ablation sampling for tissue proteomics. **K.K. Murray**

10:30 87. Analytical Applications to Environmental Fate of Organic Pollutants: 35 Years of Research Resulting from Isiah Warner's Mentorship. **M.A. Tarr**

11:00 88. Renewable Carbon Materials for Energy Application: Supercapacitor, Fuel Cells and Batteries. **N. Siraj**, S. Macchi, T. Viswanathan, W. Fu

11:30 89. Sustainability in the Lab, Pack and Farm. **J. Taurus**

Hilton Baton Rouge
The Capitol Room

Cope Scholar Symposium Catalysis in Organic Synthesis

X. Cui, R. G. Kartika, *Organizers, Presiding*
J. R. Ragains, D. C. Whitehead, *Presiding*

8:25 Introduction.

8:30 78. New methods for carbon-hydrogen bond functionalization. **O. Daugulis**

9:00 79. Enantioselective C-C bond formation via organoboron compounds. **M. Chen**

9:30 80. The Utility of Chiral Unsaturated Acylammonium Salts for Organocascade Processes and Natural Product Synthesis. **D. Romo**

10:00 Intermission.

10:30 81. Transition Metal Catalyzed Olefin Amination. **K. Hull**

11:00 82. Stereoselective Reactions with Feedstock Chemicals. **U.K. Tambar**

11:30 83. Accelerating drug discovery: Innovations in catalysis and high-throughput experimentation. **D. Kalyani**

Hilton Baton Rouge
The King Room

Heterogeneous Catalysis Symposium

K. Ding, *Organizer, Presiding*

8:00 Introductory Remarks.

8:05 65. Catalytic Oxidative Reforming of Methane, the "Other" Greenhouse Gas. **M.P. Harold**

8:35 66. A systematic DFT study of the acetate formation on metals via CH4 carboxylation by CO2. **S. Rahman**, Y. Xu

8:55 67. Using Delplots to delineate product ranking in ethylene epoxidation under commercial operating conditions. **T. Lohr**

9:25 68. Electronic, ensemble, and coverage effects in PdCu alloys: From segregated bulk systems to dilute surface alloys down to the single atom limit. **L. Grabow**

9:55 Intermission.

10:10 69. Development and implementation of a non-local and non-linear implicit electrolyte model in the Vienna Ab-initio Simulation Package. **S. Islam**, F. Khezeli, C. Plaisance

10:30 70. Electrochemical Approaches to Decarbonizing Fuels and Chemicals. **H. Wang**

11:00 71. Optimizing Ti2N MXene Reactivity Through Decoupling Surface and Bulk Phenomena. **R. Yoo**, D. Johnson, A. Djire

11:20 72. Engineering of Titanium Carbonitride MXene for Pt-like HER activity by surface modification with Ruthenium. **E. Uwadiunor**, A. Djire

11:40 . Molten salt synthesis of platinum cobalt alloy planted in metal-nitrogen-graphene for efficient oxygen reduction. **S. Zaman**, H. Wang

Hilton Baton Rouge
The Paramount Room

Supramolecular and Organic Materials Chemistry

V. Garcia-Lopez, *Organizer*
S. Lee, *Organizer, Presiding*

8:20 Introduction.

8:30 73. Design and synthesis of stimuli-responsive molecular shuttles as biomimetic systems for active transport. **V. Garcia-Lopez**

9:00 74. Coumarin-enamine chemodosimeters and their inclusion compounds as fluorescent dyes for toxic analytes. **K.J. Wallace**

9:30 75. Synthesis and pi-extension of strained benzenoid macrocycles. **B.L. Merner**, N. Saha

10:00 20 min break.

10:20 76. Design Strategy and Applications of Polyaniline Derivatives. **C.N. Scott**, M.N. Almtiri, H. Giri

10:50 77. Water Soluble Conjugated Polyelectrolytes: Self Assembly and Applications to Biosensing and Disinfection. **K.S. Schanze**

11:30 . Up/Down-Coconversion Luminescene of Some Organic Molecules. **L. LIU**

Hilton Baton Rouge
The University Room

Symposium in Transformational Nanoscience

J. C. Garno, *Organizer*
O. H. Olubowale, A. R. Walker, *Presiding*

9:00 109. Mass spectrometry analysis of the deposition of diverse proteins on silicone surfaces. **C. Cai**, R. Li, G. Qin, S. Duong, S. Levy

9:20 110. Investigation of the hydrophobicity and hydrophilicity of silicon surfaces wetted with water vapor in ambient conditions - An atomic force microscopy and computational study. **D.I. Senadheera**, N.M. Kuruppu Arachchige, V. Subasinghege Don, R. Kumar, J.C. Garno

9:40 111. The latest 3D desktop manufacturing and its application in AFM in-situ study of Lithium Battery electrode morphology. **S. Xu**

10:00 112. Selective Blood Cell Hitchhiking in Whole Blood with Ionic Liquid-Coated PLGA Nanoparticles to Redirect Biodistribution After Intravenous Injection. **C. Hamadani**, G. Dasanayake, M. Gorniak, W.G. Monroe, C. Chism, M. Pride, R. Heintz, M. Hossain, K. Wong, D. Jones, J. Randall, J. Dhar, E. Jarrett, G. Singh, A. Merrell, T. Werfel, E. Tanner

10:20 Intermission.

10:35 113. Ionic Liquid-Coated Polymeric Nanoparticles for Targeted in situ Hitchhiking on Blood Components. **C. Hamadani**, E. Tanner

11:05 114. Polymer Ligands for Nanoparticles: Creating Structures and Controlling Properties. **A. Peters**

11:35 115. Challenges and Opportunities in Characterization of the Optical Properties of Macromolecular, Supramolecular, and Nanoscale and Larger Materials. **D. Zhang**

Hilton Baton Rouge
Riverview Ballroom

General Poster Session

F. Kizilkaya, F. Leonik, *Organizers*

10:00 - 4:00

P174. Rare Earth Metal-Organic Frameworsks with Fluoro-Bridged Clusters. **M. Abbas**, A.M. Maceda, K.J. Balkus

P197. Transformation of a Copper Metal-Organic Polyhedra into 2D Metal-Organic Framework. **M. Abbas**, A.M. Maceda, K.J. Balkus

P141. Free Energy Landscape of *n*-Alkanes Confined within Supramolecular Complexes. **B.D. Alagbe**, B.C. Gibb, H. Ashbaugh

P142. Free Energy Landscape of *n*-Alkanes Confined within Supramolecular Complexes. **B.D. Alagbe**, B.C. Gibb, H. Ashbaugh

P147. Investigating molecular adsorption and transport properties in liposomes, polystyrene microparticles, and bacteria using second harmonic generation spectroscopy. **R.O. Ali**, A.S. Dikkumbura, L.H. Haber

P123. Competitive dissociation reactions of ternary complexes containing Ni(II), nitrilotriacetic acid and alternative metal binding peptides. **P. Asare**

P193. Thermoset shape memory polymer synthesized by free radical frontal polymerization. **A.V. Aucoin**, J.A. Pojman, G. Li

P196. Towards the exploration of metal-organic frameworks as heterogeneous catalysts for EDA complex photochemistry. **M.J. Ayodele**, S.P. Pitre

P109. Adsorption of Phenol and Bisphenol-A from Aqueous Solution onto the Graphene-Oxide Surface. **G. Azom**, R. Kumar

P160. Monitoring the growth dynamics of colloidal silver-gold core-shell nanoparticles. **D. Babayode**, A.S. Dikkumbura, M. Chen, S.C. Peterson, L.H. Haber

P135. Effects of Encoded Electrostatic Interactions on the Intramicellar Assembly of Sequence-defined Amphiphilic Ionic Peptoid Block Oligomers Using Contrast Variation Small Angle Neutron Scattering. **B. Barrett**, C. Tung, G. Huang, W. Chen, D. Zhang

P139. Exploration into the Synthesis of n=4, 5 Ln(n+1)Ni(n)O(3n+1) (Ln = La, Nd) Ruddleson-Popper Phase as a Possible Analog to Superconducting Cuprates. **R. Bhuvan**, K. Dilley, H. Li, J. Zhou, V. Poltavets

P145. Heat capacity of PtC using viral coefficients. **L. Biolsi**

P134. Effects of Crowding Agents on the Complex Coacervation of Macromolecules. **S. BISWAS**, A. Xu

P175. Regulation of pyrimidine biosynthesis in Pseudomonas lemonnieri. **S. Bodampati**, A.R. Vara, T.P. West

P121. CO2 Capture using Nanomaterials. A. Rodriguez, V. Dattilo, D. Yazici, M. Simonetti, **M. Bozlar**

P153. Low-coordinate, first-row transition metal diborylamide complexes. **K. Brown**, B.M. Lindley

P119. Chemical Applications of Combined X-ray/Neutron Beamlines: The Quest for New Instrumentation. G.J. Schneider, **L.G. Butler**

P187. Synthesis of neutral lanthanide coordination complexes: A study on their magnetic properties. **S.Y. Chappidi**, J. Huang, K.R. Dunbar, E. Fatila

P131. Development of a high-throughput assay to identify small-molecule transmembrane anion transporters. **S. Chowdhury**, R. Salam, N. Busschaert

P127. Crystal growth of Pr-Fe-Ge ternary compounds: Structural comparison and synthetic parameters. **M. Copeland**, A. Dominguez, T. Kyrk, G. McCandless, J. Chan

P144. Growth Studies of Zeolite SSZ-39. **Z. Cui**, J. Pokhrel, D.F. Shantz

P190. The Crystalline Sponge Method: Working Towards Larger and More Functionalized Sponges for Structure Determination of Organic Molecules. **M. Dailey**, T. Ramadhar

P146. Impact of the presence of a M4L6 zirconium-based molecular cage on the electron transfer properties of small organometallic complexes.. **M. Das Bairagya**, N. Elgrishi

P168. Optoelectronic properties of edge functionalized quantum dot Van der Waals heterostructures. **U. De Alwis**, K.M. Weerawardene, K.L. Shuford

P112. Ammonia for Renewable Energy Storage: Novel Heterogeneous Catalysts for NH3 Decomposition. **J. Do**, L. Smith, V. Poltavets

P151. Ion specific effects on peptide diffusion. **E. Fazelpour**, C.J. Fennell

P198. Transition metal based redox shuttles featuring an electron-rich hexadentate ligand for application in dye-sensitized solar cells. **J. Ferdous**, R. Kaur, J.H. Delcamp, J.W. Jurss

P171. Platinum (II) Dinitrogen Adduct: Synthesis and Characterization of Bis-abnormal imidazolium CCC-NHC Pt Complex, [(BuCaiCaiCBu)Pt+N2]+. **E. Fosu**, L. Nghia, T. Abdulraheem, B. Donnadieu, A.L. Patrick, C.E. Webster, K. Hollis

P172. Probing the potential energy surfaces of σ/π-holes in double-bonded chalcogen donors in complex with ammonia. **K.A. French**, T.L. Ellington, K.L. Shuford

P117. Bridging the length scales in ionic separation via data-driven machine learning. **H. Gallage Dona**, L. Briceno-Mena, C. Arges, R. Kumar

P124. Control of the pyrimidine biosynthetic pathway in Pseudomonas aureofaciens. **L.V. Gore**, A.R. Vara, T.P. West

P116. Biosorption and Hydrothermal Liquefaction of Chlorella. **N. Green**, V. Duran, A. Silva, S. Islam, B. Jang

P120. Clay fillers affecting front kinetics in radical-induced cationic frontal polymerization. **B.R. Groce**, E. Lane, D. Gary, J.A. Pojman

P165. New methodology to analyze and extract information from 2DIR spectra. **A. Gurung**, D.G. Kuroda

P189. Tailoring of a reinforcing and artificial self-assembled alkyl sulfonic acid layer electrolyte interphase on silicon as anode for high-energy-density lithium-ion batteries. **A. Hailu**, F. Wang

P138. Examining how students interpret IR spectra: An eye tracking study. **D. Hamilton**, J. Gonzalez, M.B. Atkinson

P155. Matrimid/MOP-18 composite material for high-energy hybrid supercapacitor (HSC) electrodes. **S. Haque**, J.P. Ferraris, K.J. Balkus

P159. Molecularly imprinted polymers (MIPs) for the detection of fentanyl. **M. Hasan**, H. Spencer, D. Spivak

P150. Investigation of Albumin attraction of the cyanide antidote candidate dimethyl trisulfide (DMTS) and the antibiotic Cefuroxime. **D.W. Herath**, S.D. Manage, K. Black, W.G. Lao, K.D. Kelly, C.T. Rios, I. Petrikovics

P195. Time–lapse PVA hydrogels controlled by pH through competing enzyme reactions. **I. Hoffman**, **M. McHugh**, A. Ledford, A. Taylor, J.A. Pojman

P126. Controlling the Alcohol Production of a Cationic Co(II) Hydroformylation Catalyst. **D.R. Holzknecht**, M.B. Chambers

P113. Angular dependence of molecular tunneling ionization in two-color laser fields. **M. Jayasinghe**, I.S. Wahyutama, F. Mauger, M. Gaarde, K. Schafer, R. Jones, K. Lopata

P166. Non-hydrolytic synthesis of bare and caprylate-capped silver ferrite nanoparticles and their bactericidal properties. **M. Johnson**, M. Sehlaoui, T.M. Trad

P182. Structure and properties of racetams crystals and cocrystals. **E. Jucov**, J. Marquez, E. Novikov, S. Rigin, M. Fonari, T. Kornilova, T. Timofeeva

P164. New approaches to preparing functionalized aryltellurium compounds. J. Pierre, F.R. Fronczeck, **T. Junk**

P157. Metal-Metal Bonding in Tungsten Complexes. **L. LaBee**, R.R. Bhowmick, B. Vlaisavljevich

P177. Rhenium and Molybdenum-Catalyzed deoxydehydration (DODH) of polyols. **M.A. Lawrence**, **R.S. Srivastava**

P114. Application of a low-temperature correction to the adaptive Hierarchy of Pure States (adHOPS). **J. Lynd**, D.I. Bennett

. Up/Down-Coconversion Luminescene of Some Organic Molecules. **L. LIU**

P132. Dipole Moment Distribution Analysis in Liquid Water and Ice. **R. Maharjan**

P143. Gas-Free initiation for Free-Radical Frontal Polymerization through Charge Transfer Complexes. **M. Mahmud**, D. Gary, J.A. Pojman

P118. Catalytic growth of intercalating micro-pyramidal ZnO structures by magnetite nanoparticles on Si(100) via chemical vapor deposition. **L. Marder**, J. Oyegoke, I. Ogbogo, T.M. Trad

P169. Photoreactivity of Mo(VI) dioxo complexes bearing sulfur-rich ligands. **K. Marroquin**, M.B. Chambers

P162. Nano zerovalent iron particles lead uptake for environmental remediation applications. **D. Martinez**, C.R. Cabrera

P163. Necessary and Sufficient Conditions for Frontal Polymerization in Thin Layers for Coatings. **M. Martinez**

P110. Aldose reductase as a possible target of Linearolactone. R. Argüello-García, F. Calzada, B. Chávez-Munguía, **A. Matus-Meza**, E. Bautista, E. Barbosa, C. Velazquez, M. Hernández-Caballero, R. Ordoñez-Razo, J. Velázquez-Domínguez

P152. Lone-Pair-Induced Structural Ordering in the Mixed-Valent 0D Metal-Halides Rb23BiIIIxSbIII 7-xSbV2Cl54 ($0 \leq x \leq 7$). **K. McCall**, B.M. Benin, M. Woerle, D. Borgeaud, T. Vonderach, K. Sakhatskyi, S. Yakunin, D. Guenther, M. Kovalenko

P129. Dependence of optical and electronic properties of Au-Cu alloys on strain. **M. Mendez Polanco**

P191. The Impact of Steric Congestion on the Synthesis, Conformation and Dynamic Behavior of Readily Prepared Macrocycles. **A.J. Menke**, E. Simanek

P128. Data-driven methods for predicting vibrational spectra from coarse-grained water simulations. **A.F. Moody**, D.P. Tabor

P188. Synthesis, evaluation and characterization of Ni-CeZrO2 for CO2 dissociation. **P. Mynarski**, D. Acker, S. Kumar, B. Jang

P192. The molecular origin of Donor Number for solvents used in Lithium-ion electrolytes. **E.O. Nachaki**, D.G. Kuroda

P111. Alkyne metathesis catalysts with florinated bidentate ligands. **S.W. Njoroge**

P136. Electrochemically-exfoliated graphene for molecular electronics. **P.F. Ortíz**, Y.A. Falconí, J.S. Narváez, K.S. Encalada, C.P. Santacruz, H.M. Osorio

P178. Ring-opening polymerization induced crystallization-driven self-assembly of poly (N-Methyl glycine)-block- poly (N-Decyl glycine). **S.D. Owoso**, D. Zhang

P130. Determining the theoretical pharmacological parameters of fluorinated thiosemicarbazones. **A.G. Perez Ruiz**, A.M. Rodríguez, A.S. Matus Meza, J.L. Bautista Martinez

P194. Ti2N MXene as an Active and Stable Bifunctional Catalyst for Oxygen Involving Electrocatalytic Reactions. **E.A. Pranada**, D. Johnson, R. Yoo, A. Djire

P133. Effect of pH and metal ions on the oligomeric state of a probable Dps from the opportunistic pathogen Pseudomonas aeruginosa. **N. Rajapaksha**, S. Lovell, M.E. Rivera

P183. Sugar Excipients Modulate Protein Interactions in Model Protein Solutions under Stress. **V. Rittell**, A. Xu

P161. MoS2 semiconducting nanoelectrodes for single molecule junctions. **H.E. Rodríguez**, S.Y. Barragán, K.S. Encalada, C.P. Santacruz, H.M. Osorio

. Pre-concentration of reactor produced theragnostic radionuclides onto a carbon nanotube adsorbent via the Szilard-Chalmers effect. **A. Samia**, W. Charlton, D.D. Nolting, J. Lapka

P154. Machine Learning Approaches for Tensor Hypercontraction. **I. Satyarth**, G. Mongaras, D. Matthews

P149. Investigating the efficacy of capped zinc ferrite nanoparticles against the rice pathogen Xanthomonas oryzae pv. oryze and X. oryzae pv. oryzicola. **M. Sehlaoui**, M. Johnson, T.M. Trad

P137. Energy-resolved threshold collision-induced dissociation of Zn(II) ternary complexes of alternative metal binding peptides with nitrilotriacetic acid. **K.N. Senyah**

P115. Benchmark of A Semiempirical Tight-Binding Quantum Mechanical Method Using Infrared spectroscopy. **L. Sepulveda**, J.F. Galindo, D.G. Kuroda

P170. Physical and electrochemical characterization of the hexaboride-type NaB5C, an intercalation cathode with a redox active anion framework. **M.R. Shabetai**, F. Kizilkaya, V. Poltavets

P186. Synthesis of amphiphilic biodegradable aliphatic polyesters for drug delivery. **T. Shah**, M.C. Stefan

P125. Controlling host-guest interactions of tris(β-diketonato)manganese(III/II) hosts with sodium ion as a guest. **R. Sharma**, F.R. Fronczeck, A.W. Maverick

P108. A Scandium-based Microporous Metal-Organic Framework for Ethane-Selective Separation. **Y. Shi**, B. Chen

P122. Comparison of photochemical C–H functionalization by WO2Cl2(bpy-R) complexes. **S.M. Siddhiaratchi**, F.R. Fronczeck, M.B. Chambers

P167. Open-Shell Tensor Hypercontraction. **M. Simons**, D. Matthews

P179. Salty ice: A quantitative look at the molecular uptake of ions in doped ice. **T. Sivells**, P.K. Viswanathan, J.D. Cyran

P156. Mechanophore protecting group (MPG) for use in organic synthesis. **H.C. Spencer**, D. Spivak

P185. Synthesis and characterization techniques to produce distinct size populations of stabilized zinc nanoparticles. **M. Stevens**, E. Braswell, C.M. Sayes

P184. Synthesis and Characterization of Polypeptide and Polypeptoid Polyelectrolyte Complexes. **A. Thapa**, D. Zhang

P140. Explorations into the reactivity of an Fe(0) precursor with a Strained Cyclic Diboron Compound. **R. Thornton**, B.M. Lindley

P148. Investigating Photochemical Reactivity of Re(V) Nitrido Complexes Towards the Formation of Ammonia. **V.Z. Valley**

P199. Tuning the Basicity of the Ligand Field within Cationic Co-based Hydroformylation Precatalysts. **A. Van Alstine**, D. Holzknecht, M.B. Chambers

P180. Sort-Seq Approach to CMV Promoter Engineering for transgene expression. **M. Wheeler**, C. McGraw, N.R. Sandoval

P158. Molecular modeling application for stereochemical and thermochemical studies of Ni(II) and Zn(II) ternary complexes. **J.D. Wilcox**, K.N. Senyah, P. Asare, L.A. Angel

P176. Reinforcing Effect of Collagen and Fibroin on a Tung Oil-based Thermosets. **P.L. Williams**, C. Dzorkpata, Y. Lopez, A. Lorts, H. Hartman, C. Morris, K. Burrows, D. Kornegay, A. White, R.L. Quirino

P181. Structural properties and dynamical behavior of α-alumina (0001)/water interfaces from Ab initio molecular dynamics. **X. Zhang**, R. Kumar

P173. Rand-Reduced representations of the connected triples in Coupled Cluster theory. **T. Zhao**, D. Matthews

MONDAY AFTERNOON

Hilton Baton Rouge
The Governor Room

Analytical and Materials Chemistry Symposium in Honor of LSU Boyd Professor Isiah M. Warner

R. Perez, *Organizer*
C. Ayala, *Presiding*

1:00 116. Impact of Multivalency: When Catalyst and Affinity Reagent Meet Inside of a Protein Nanoparticle. **B. Manuel**

1:30 117. Glue microfluidics: Making automated analyses child's play. **N. Speller**, G. Morbioli, Z. Duca, M. Cato, A. Stockton

2:00 break.

3:30 118. GUMBOS and ILs for the extraction of emerging contaminants.. **R. Perez**, C. Ayala, Z. Patton, A. Hecht, B. King, K. Jorgensen, R. Davis, S. Lauper-Cook

4:00 119. GUMBOS and Education: Evolution and Applications. **I.M. Warner**

Hilton Baton Rouge
The Victory Room

How to Strengthen and Promote Diversity in the Chemical Sciences: Lessons Learned and Taught from the Stories of Recipients of the Stanley C. Israel Award.

S. Y. Ablordeppey, R. Joseph, *Organizers, Presiding*

1:30 Introductory remarks.

1:40 134. What lessons have been learned from decades of successful underrepresented student mentorship. **K.H. Pannell**

2:10 135. Understanding Identity Safety as a Driver of Inclusive Environments and Culture. **A.C. Kimble-Hill**

2:40 136. Increasing Resilience and Retention in STEM by Building Strong Scientific and Professional Development Student Identities. **M.R. Mackiewicz**

3:10 Coffee break.

3:20 137. The Stan Israel Legacy. **L.M. Watkins**

3:50 Panel discussion.

4:35 Concluding Remarks.

Hilton Baton Rouge
The Louisiana Room

Making Strides in Shifting Paradigms within Chemistry Education Research and Practice

Z. S. Wilson-Kennedy, L. Winfield, *Organizers*
F. L. Payton Stewart, *Presiding*

1:30 Opening Remarks.

1:35 138. Identity and Representation in the Chemistry Curriculum. **L. Winfield**

1:55 139. Linking chemistry to the community in the general chemistry laboratory. **A.J. Winstead**, P.C. McCarthy, D. Rice, G. Nyambura

2:15 140. Incorporating inclusive teaching practices to design a CURE in polymer chemistry at Xavier University of Louisiana. **A. Abdulahad**

2:35 141. Enhance learning outcomes of undergraduate capstone laboratory course by introducing a new project: reaction optimization. **J. Sridhar**, G. Goloverda

2:55 Intermission.

3:05 142. Supporting Underrepresented Groups in Science through Structured Mentoring Networks. **T. Williams**, K.S. Williams, W.A. Johnson

3:05 143. Introduction of Scaffold Writing Across the Chemistry Department. **S.L. Jones**, C.B. Frech, L.D. Montes, A.L. Waters, E.S. Eitrheim, T. Morris

3:25 144. An investigation of the impact of timing of learning strategy interventions on performance in general chemistry courses. **G. Thomas-Fuller**, C.A. Jones

3:45 145. The Role of Cultural Captial in the Success of Black Women STEM Graduates from Predominantly White Institutions. **R. Davis**

4:05 Closing Remarks.

Hilton Baton Rouge
The Paramount Room

Supramolecular and Organic Materials Chemistry

V. Garcia-Lopez, S. Lee, *Organizers*
V. Garcia-Lopez, *Presiding*

1:30 146. Development of membrane-active small molecules with antibacterial activity. **N. Busschaert**

2:00 147. Photochemical Micropatterning With Visible Light Using A Digital Light Processing (DLP) Fluorescence Microscope. **A.R. Lippert**

2:30 148. Expanding the toolbox of dynamic DNA chemistry using supramolecular hosts. **J. Jayawickramarajah**, D. Walpita Kankanamalage

3:00 20 minute break.

3:20 149. From Molecular Anion Receptors to Water Purification Membranes. **R. Hernandez Sanchez**

3:50 150. Antiaromaticity Relief in Light-Induced Proton Transfer Reactions. **J. Wu**

4:20 151. Binding Anions using Nitrone C-H Hydrogen Bond Donors. **S. Lee**, X. He

Hilton Baton Rouge
The University Room

Symposium in Transformational Nanoscience

J. C. Garno, *Organizer*
Q. Do, D. I. Senadheera, *Presiding*

1:30 152. Imaging single molecules to map dynamics and nanoscale structures in 3D throughout cells. **A. Gustavsson**

1:50 153. Putting Molecules in their Place: Using Directed Molecular Assembly to Tune Optoelectronic Properties of Materials. **J. Batteas**

2:20 154. Can Short Linear Block Copolymers Stabilize Vertical Lamellae in Linear-Cyclic Block Copolymer Blend Films?. **R. Kumar**, W. Yang, J. Albert, H. Ashbaugh

2:40 155. Monitoring growth dynamics of colloidal plasmonic gold, silver, and hybrid nanoparticles using in situ second harmonic generation and extinction spectroscopy. **L.H. Haber**, J.C. Ranasinghe, A.S. Dikkumbura, M. Chen, D. Babayode, S.C. Peterson

3:00 intermission.

3:15 156. Using Fast-Scan Atomic Force Microscopy to Probe Nanoscale Polymer Crystallization in Ultra-thin Films. **J. Albert**, S. Steadman

3:35 157. Strategies for Nanofabrication Based on Chemistry Steps and Colloidal Lithography. **J.C. Garno**

3:55 158. Electric field polarization to increase bifunctional oxygen electrocatalyst performance of nitrogen-iron functionalized carbon nanomaterials. **G. Zhao**, J. Xia, R. Zhao, K. Li

4:15 159. Developmen of magnetic nanoparticles for biomedical application: A coordination chemistry approach. **V.L. Kolesnichenko**, G. Goloverda

4:35 160. AFM + Nanoscale vis-IR Spectroscopy via Photo-induced Force Microscopy. **S. Xu**

Hilton Baton Rouge
The Capitol Room

Cope Scholar Symposium Catalysis in Organic Synthesis

X. Cui, R. G. Kartika, *Organizers, Presiding*
J. R. Ragains, D. C. Whitehead, *Presiding*

1:25 Introduction.

1:30 120. Isohexane-Soluble Anilinium Borate Activators for Metallocene Catalysts. **C.A. Faler**, M. Whalley, J. Hagadorn, P. Jiang, R. Dharmarajan, A. Reed

2:00 121. Photochemical Strategies for the Generation of Carbon-Centered Radicals from Alkyl and Aryl Halides. **S. Pitre**

2:30 122. Distal Functionalization via Transition Metal Catalysis. **H. Ge**

3:00 Intermission.

3:30 123. The advent and recent developments of Fe-catalyzed multicomponent cross-coupling reactions. **O. Gutierrez**

4:00 124. Highly selective catalytic platforms for reduction and interhalogenation chemistry: Early explorations in ZrH and Lewis base catalysis. **L. Romero**

4:30 125. Harnessing Radicals To Enable Unconventional Reactivity. **D. Nagib**

Hilton Baton Rouge
The King Room

Heterogeneous Catalysis Symposium

K. Ding, *Organizer, Presiding*

1:30 126. Heterogeneous Catalysis: Academic vs. Industrial Research. **X. Bao**

2:00 127. Partial oxidation of methane to methanol over the small-pore zeolite Cu-SSZ-39. **J. Pokhrel**, Z. Cui, D.F. Shantz

2:20 128. Theoretical investigation of ceria as a general de-esterification catalyst. S. Rahman, S. Bhasker-Ranganath, **Y. Xu**

2:50 129. A mechanistic study on amorphous alumina overcoated Pd catalyst for selective hydrogenation. **D. Aireddy**, H. Yu, D. Cullen, K. Ding

3:10 Intermission.

3:30 130. Selective hydrogenation of unsaturated aldehydes. **B. Wang**

4:00 131. CH4, CO2 and C2H4 to value-added C3 oxygenates and C3 olefins. **A. Aurnob**, K. Ding, D. Kauffman, J.J. Spivey

4:20 132. Hierarchical Ceria Catalysts for Methane Dry Reforming. J. Lucas, B. Safavinia, K.M. Dooley, **J. Dorman**

4:50 133. Investigating the formation of active PdZn nanoparticles for carbon dioxide hydrogenation to methanol. **N. Lawes**, N. Dummer, M. Bowker, T. Slater, L. Smith, K. Aggett, G. Hutchings

5:10 Concluding remarks.

Hilton Baton Rouge
the Academy Room

The Development of Analytical Methods to Measure Trace Metal Concentrations and Their Chemical Speciation in Environmental Media (Air, Water, Soil)

P. Zito, *Organizer*
D. G. Hebert, D. Podgorski, *Presiding*

1:30 161. Direct Measurements of Arsenic Complexation with Dissolved Organic Matter: New Techniques and New Insights into Arsenic Mobility in the Environment. **A. Ojeda**, N. Malina, C. Herron

1:55 162. Sensing heavy metal pollutants in complex high-salinity media, including seawater, using light-emitting conjugated polymers. M. Ihde, J. Tropp, J.D. Azoulay, **M. Bonizzoni**

2:20 163. Comparative investigation of carbon electrodes for the development of an electrochemical sensor for pertechnetate. **D. Weber**, J.M. Rakos, V. Flaum, K. Gonzalez, N. Baule, M. Muehle, S.D. Branch, C. Rusinek

2:45 Afternoon Session Coffee Break.

3:30 164. Sample decomposition for trace element analysis of biological tissues by ICP-MS/MS: a comparison between two microwave-assisted digestion systems. **D.R. Luneau**, A.L. Galusha, P.J. Parsons

3:55 165. Identification and characterization of metal nanoparticles present in facial cosmetics by Single Particle-Inductively Coupled Plasma Triple Quadrupole Mass Spectrometry (SP-ICP-QQQ). **D.G. Hebert**, T. Washington, P. Zito

4:20 166. GC-ICP-MS Distributions of Vanadium and Nickel in n-pentane, in-between C5-C6 Asphaltenes, and n-heptane Asphaltenes of Heavy Crude Oils. **J. Nelson**

4:45 Closing Remarks/Discussion.

Hilton Baton Rouge
Hunt Room

Industrial Round Table

J. L. Maclachlan, *Organizer*, *Presiding*

3:00 167. Chemical business experts roundtable discussions. **J.L. Maclachlan**, D.L. Merkle

Hilton Baton Rouge
The Governor Room

Keynote Speaker Monday

R. G. Kartika, D. G. Kuroda, *Organizers*
R. Perez, *Presiding*

5:00 Keynote meet and greet.

5:15 Prof. Isiah Warner's presentation.

TUESDAY MORNING

Hilton Baton Rouge
The Paramount Room

Energy and Materials Symposium

J. Chan, *Organizer, Presiding*

8:50 Comments.

8:55 217. Exploiting Disordered Photonics for Light Trapping in Photoelectrochemical Energy Conversion Applications. **R.H. Coridan**

9:25 218. Meeting the Synthesis and Structural Characterization Challenges of Heteroanionic Solid-State Materials. **R.T. Macaluso**

9:55 219. Understanding the Solution Chemistry of Metal Halides for New Materials Discovery. **B. Saparov**, Z. ZHANG

10:25 break.

10:40 220. Development of a tolerance factor for Remeika phases. **A. Dominguez**, R. Baumbach, O. Oladehin, J. Chan

11:00 221. Probing lone pairs and vacancies effects on optoelectronic properties of TeO2 polymorphs from first principles. **H. Nguyen**, R.T. Macaluso, M. Huda

11:20 222. Chemical insights into high-pressure materials discovery. **A.B. Altman**, A. Tamerius, N. Koocher, M. Waters, J. Rondinelli, D.E. Freedman

Hilton Baton Rouge
Heidelberg

ACS Career Pathways

C. Varnado, *Organizer, Presiding*

8:30 Workshop.

Hilton Baton Rouge
The University Room

ACS DFW Wilfred T. Doherty Award Symposium-morning

M. C. Stefan, *Presiding*

8:30 197. Exceptional power of ligands decorated with fluorine. **R. Dias**

9:00 198. Synthesis of inorganic polymers and their precursors: Four decades of main group chemistry in DFW. **P. Wisian-Neilson**

9:30 199. Hypervalent iodine compounds in the synthesis of functional polymers. **N.V. Tsarevsky**

10:00 Break.

10:30 200. Conjugated polymers for light emission, electrochromism, energy storage and gas separations. **J.P. Ferraris**

11:00 201. 35 Years of Porous Materials Research, A Retrospective. **K.J. Balkus**

11:30 202. How I Helped To Fit Your Cell Phone in Your Pocket!. **P.B. Smith**

Hilton Baton Rouge
The Victory Room

Chemical Biology Symposium

F. Rivas, *Organizer*
M. E. Rivera, *Organizer, Presiding*

8:30 Introduction.

8:35 203. Natural products as chemical tools for drug discovery. **F. Rivas**, T. Ling

9:05 204. Discovery of Medicinal Leads by Synergistic Collaboration of Synthetic and Natural Product Chemists. **M.P. Croatt**

9:35 205. Stimuli-Responsive Liposomes for Triggered Cargo Release and Activated Cell Delivery. **M. Best**

10:05 Coffee break.

10:25 Reconvene .

10:30 206. CRISPR/Cas9-engineered Drosophila knock-in models to study age-related diseases. **A. Johnson**

11:00 207. What can second harmonic generation teach us about bacterial membranes?. **T.R. Calhoun**

11:30 208. The mysterious structures of Scc4 and its dual functions in Chlamydia trachomatis. **M. Macnaughtan**

Hilton Baton Rouge
The King Room

Inorganic Symposium: Energy and the Environment

M. B. Chambers, N. Elgrishi, *Organizers, Presiding*

8:20 welcome.

8:25 177. Stochiometric and Catalytic Transformations of Strained Cyclic Diboron Compounds Mediated by First-Row Transition Metals. **B.M. Lindley**, R. Thornton, P.K. Verma

8:45 178. Harnessing Reactivity Patterns of Photoexcited Complexes with Metal-Ligand Multiple Bonds. S.M. Siddhiaratchi, C.L. Baumberger, S. Fosshat, V.Z. Valley, **M.B. Chambers**

9:05 179. Ru2 carboxylates as a platform for N-atom transfer (NAT). **M. Cosio**, D.C. Powers

9:25 180. A nonoxidative approach to methane functionalization: efforts towards realizing the methanol economy. **K.M. Clark**

9:45 Intermission.

10:45 181. Comparing uranyl and tranistion metal complexes with imine donor ligands. **A.E. Gorden**, J. Ducilon, D. Gardner, T. Hoang

11:05 182. Green applications of phosphonium compounds. **B. Wicker**

11:25 183. Exploring the synthesis and application of various Cu(I)-NHC complexes in chemical catalysis and light emission.. **L. Tahsini**, R. Latifi

11:45 184. Insights into nickel-catalyzed cross-coupling mechanisms evinced by catalytically relevant organonickel radical complexes. **C. Wagner**

Hilton Baton Rouge
The Louisiana Room

Physical Chemistry of Liquids

R. Kumar, D. G. Kuroda, *Organizers*
S. Shin, *Presiding*

8:00 168. Understanding the Behavior of Perfluorocarboxylic Acids at Aqueous Interfaces. L.J. Musegades, T. Sivells, **J.D. Cyran**

8:25 169. Beyond Arrhenius: Elucidating the Driving Forces for Liquid Dynamics. **W.H. Thompson**

8:50 170. Coherent oscillations in 2DIR spectra. T.X. Leong, J. Zhou, A. Sribnyi, S.U. Nawagamuwage, **I.V. Rubtsov**

9:15 171. Elucidation of the Molecular-Level Organization of Liquid Phase 1H-1,2,3-Triazole. **N. Hammer**, G.S. Tschumper, J.H. Delcamp, A.E. Craig, L.A. Wallace, A. Williams, A. Huckaba

9:40 172. Potassium channel ion transport mechanism with electronic polarization. **S.L. Rempe**, Z. Jing, J. Rackers, L.R. Pratt, C. Liu, P. Ren

10:05 Break.

10:25 173. Observing Solvent-Dependent Dynamics in Water-Ionic Liquid Mixtures with 2D IR Spectroscopy. **A.T. Krummel**

10:50 174. Polarization encoding in simple liquid models. **C.J. Fennell**

11:15 175. Low-frequency (0-450 cm-1) intermolecular dynamics of n-alkyl cyanides studied by OHD-RIKES. D. Meng, S. Sagala, **E.L. Quitevis**

11:40 176. Fluctuations and Hydrophobic Effects. **H. Ashbaugh**

Hilton Baton Rouge
The Capitol Room

Recent Advancement and Applications in Organic Synthesis

J. R. Ragains, D. C. Whitehead, *Organizers, Presiding*
X. Cui, R. G. Kartika, *Presiding*

8:25 Introduction.

8:30 191. Taming the reactive duality of ambdent nucleophiles via catalysis.. **D.E. Frantz**, M. Cadena, R.S. Villatoro, J.R. Coombs, A. Delmonte

9:00 192. Design and synthesis of water-soluble molecular containers as model systems to study photocatalysis in nanoconfinement. **V. Garcia-Lopez**

9:30 193. Recent Advances in the Interrupted Homo-Nazarov Cyclizations of Donor-Acceptor Cyclopropanes. **S.A. France**

10:00 Intermission.

10:30 194. Development of an Atroposelective Process of KRAS G12C Inhibitor GDC-6036. **H. Zhang**

11:00 195. Toward Atropselective Aromatic Disubstitution. **A. Grenning**

11:30 196. Taming nitrene reactivity with silver catalysts. **J.M. Schomaker**

Hilton Baton Rouge
the Academy Room

Recent Advances in Industrial Chemistry

C. Varnado, *Organizer, Presiding*
K. Coppola, *Presiding*

8:20 Opening comments.

8:30 185. Historical vignettes on industrial bromine chemistry. **C. Varnado**

9:00 186. Colloidal Materials for Wellbore Stability. **H. Patel**

9:30 187. Multiscale Computational Chemistry: How molecular modelling accelerates innovation in the oil & gas industry. **R. Aglave**, E. Deguillard, H. Vai Yee, I. Chai Ching Hsia, J. van Male, J. Handgraaf

10:00 Break.

10:30 188. Sustainable flame retardant solutions for a circular economy. **J.P. McCarney**, D. De Schryver, R. Mathur

11:00 189. Overcoming Processing Challenges for the Louisiana Sugarcane Industry. **G. Eggleston**

11:30 190. Highly Active Cationic Co(II) Hydroformylation Catalysts. **G.G. Stanley**

Hilton Baton Rouge
The Governor Room

The Beauty of Polymers with Increasingly Complex Architectures - Morning Session

G. J. Schneider, *Organizer*
M. A. Quadir, E. Tanner, *Presiding*

8:30 Introductory Remarks.

8:35 209. Leveraging ring-opening metathesis polymerization to create topologically complex polymers. **Y.C. Simon**, L. Dugas, C. Liu, I.T. Dishner

9:00 210. The Synthesis and Tandem MS of bis-MPA Dendrimer, Hyperbranched Polymers, and Linear Polymers. **S.M. Grayson**, M. Redding, O. Kareem

9:25 211. Polymeric Assemblies – Large Molecular Ensembles to Challenge Larger Problems. **M.A. Quadir**

9:50 212. Core crosslinked star polymers by RAFT. **M.R. Radlauer**, M. Griffin, K. Huynh, D.A. Wong, J.C. Biton, G.E. Bauer

10:15 Intermission.

10:40 213. How to preserve and switch the active chain ends in atom transfer radical polymerization?. **Y. Wang**

11:05 214. Polypeptoid Polymers: Synthesis, Characterization and Self-Assembly. **D. Zhang**

11:30 215. Ionic Liquids for Monodisperse Assembly and Biological Functionalization of Linear Dendritic Block Copolymers. **E. Tanner**

11:55 216. Effect of elastic properties on rolling and sliding friction of functionalized micro-polymers. **H. Verma**

Hilton Baton Rouge
Hunt Room

Chemistry Connections: Learning from History

C. Hahn, N. V. Tsarevsky, *Organizers, Presiding*

9:00 Opening remarks.

9:05 223. March of the pigments: A colorful walk through human ingenuity. **M. Orna**

9:35 224. Integration of art conservation science in the General Chemistry curriculum with a focus on cultural heritage preservation. **A. Villalta-Cerdas**, G.D. Smith

10:05 225. Intelligent Design: Proven historically by chemists. **K.H. Pannell**

10:35 Intermission.

11:00 226. Polimera gratia artis: Polymers for art. **J.A. Pojman**

11:30 227. Mass spectral degradation of the poly(ethylene glycol) as a wood preservative with two 17th century warships: a time comparison after nearly fifty years.. **S.M. Grayson**, B. Curole

Hilton Baton Rouge
Riverview Ballroom

General Poster Session

10:00 - 4:00

P233. Highly Chemoselective Transfer Hydrogenation of Activated C=C bonds Catalyzed by Iridium-TsEN Complex in Water. **A. Ahmad**, J. Chapin, C. Wong, B. Ni

P219. Development of molecular shuttles for anion transport across membranes. **N. Akhtar**, U.N. Conthagamage, V. Garcia-Lopez

P221. Domino aza-Michael addition-SNAr-heteroaromatization route to N-alkyl-1H-indole-3-carboxylic esters. **E. Ametsetor**, S. Farthing, R.A. Bunce

P239. Influence of lutein content of marigold flowers on functional characteristics of baked pan bread. **A. Anderson**

P281. β, β'-functionalization and π-extension of porphyrin via fusion of acenaphthene based acenes. **J. Arvidson**

P207. Chemical and toxicological assessments of per-fluorinated substances and lead in human colon endothelial cells. **S.O. Ayisire**, C.M. Sayes, A. Charlton-Sevcik

P258. Simulation of environmental weathering of laboratory-generated microplastic particles (LG-MPP): Towards defining Reference Materials. **T. AYORINDE**, P.C. Obiako, C. Collom, C.M. Sayes

P203. Analysis of in vitro mechanistic effects in an in vitro pulmonary model after aerosolization and exposure to vaping mixture solutions. **Y.M. Baldovinos**, J. Liu, C.M. Sayes

P266. Synthesis of cyclobutane-containing natural products using macrocyclic 1,4-diketones as templates for diastereoselective transformations and strained carbon-carbon bond formations. **T.H. Barnes**

P223. Effect of flavoring molecules used in e-cigarette liquid formulations against lung cells. **J. Beard**, Y.M. Baldovinos, J. Liu, P.C. Obiako, R.M. Strongin, C.M. Sayes

P247. Palladium-Catalyzed Oxidative Amination and Borylative Difunctionalization. **S. Bhatt**, K. Hull

P260. Spectroscopic (UV-vis and fluorescence) and chromatographic (HPLC) studies of pharmaceuticals in the Nacogdoches wastewater treatment plant. **A.M. Broom**, **G. Lopez**, K.K. Onchoke

P238. Identification of an unexpected lower-ordered football-shaped Ti2L3 supramolecular capsule structure. **R. Bujol**, F.R. Fronczeck, N. Elgrishi

P246. Palladium catalysts for liquid phase selective hydrogenation of alkynes. **H. Burt**, J. Rodriguez, C. Nealy, B. Jang

P220. Direct access to symmetrical and unsymmetrical bis-abnormal CCC-NHC pincer complex precursors: C-H activation for bis(azolium) salt synthesis. E. Fosu, **A. Cecil**, K. Hollis

P244. Morphology dependent photoluminescent behaviors of porphyrin nanosheets on surfaces. **X. Chen**, J.D. Batteas

P268. Synthesis of molecular shuttles to modulate the lateral pressure of lipid membranes. **U.N. Conthagamage**, M.L. Davis, V. Garcia-Lopez

P275. Understanding chemical interactions of drinking water contaminant mixtures: Exposure to lead, copper, and glyphosate. **C. Collom**, S. Pradhan, J. Liu, C.M. Sayes

P241. Investigation of Methods for Piperidine Ring Synthesis. **D. Cooper**, M. Donahue

P229. Force-driven kinetics of mechanochemical pericyclic reactions. **M. Costales**, E. Nwoye, J.R. Felts, J.D. Batteas

P204. Analysis of poly(ethylene glycol) in artifact conservation of the Vasa and the Batavia, 17th century shipwrecks. **B. Curole**, S.M. Grayson

P243. Microwave-Assisted Catalytic C-C and C-N Bond Formation: Synthesis of Pyrazolone Molecular Hybrids. **S. Dahal**, A. SIRIKI, S. Murru

P231. Green extraction techniques for natural products. **S. Daigle**, M. McCann, S. Dharmarajan

P218. Design, synthesis, and characterization of out-of-equilibrium polymersomes. **S. Dawn**, V. Garcia-Lopez

P265. Synthesis of BODIPY- TKI conjugates. **S. Dhingra**, M.H. Vicente

P248. Periodic arrays of magnetic nanopatterns fabricated using colloidal lithography: Sample characterization with scanning probe microscopy. **Q. Do**, O.H. Olubowale, J.C. Garno

P274. Two-Pronged approach to increase plastic scintillator radiation efficiency. **G. Ducharme**, S. Grunau, A.E. King

P236. Hydrothermal Liquefaction of Common Reeds Grown in Wastewater. **V. Duran**, M. Brdecka, L. Guo, B. Jang

P242. Laser Ablation Sample Transfer for Proteomics of Formalin Fixed Paraffin Embedded Tissue. **B.C. Egbejiogu**, F. Donnarumma, K.K. Murray

P264. Synthesis of allosteric switchable molecular shuttles to modulate lipid bilayers. **C.M. Ellis**, V. Garcia-Lopez

P276. Use of phosphonium salts as cationic ligands. **S.K. Ferrufino Amador**, B. Wicker

P209. Cloud Point Extraction for the determination of lead with a Bismuth-Film Glassy Carbon Electrode by Anodic Stripping Voltammetry. **V. Flaum**, D. Weber, K. Gonzalez, C. Rusinek

P259. SMASH Chemistry: The Development of a Mechanochemistry Summer Camp for High School Students. **K. Floyd**, M. Costales, N. Hawthorne, E. Nwoye, J.D. Batteas, J.R. Felts

P222. Domino nitro reduction-Friedländer heterocyclization for the preparation of quinolines. **K. Fobi**, R.A. Bunce

P278. Visible light photochemistry of 1,4-dihydropyridine anions. **P. Gallage**, S. Pitre

P225. Effects of encapsulation within a supramolecular cage on the properties of a Mn-based electrocatalyst. **J. Grundhoefer**, R. Bujol, J. Bruna, N. Elgrishi

P216. Design and Synthesis of Polyimide Covalent Organic Frameworks based on the β-Functionalized Porphyrin. **T. Han**, **H. Wang**

P205. Anion receptors with nitrone C-H hydrogen bond donors. **X. He**, R.R. Thompson, S.A. Clawson, F.R. Fronczeck, S. Lee

P262. Strain-promoted reactions of cycloparaphenyleneacetylene derivatives. **R. Herman**, X. Zhou, A. LeBlanc, L. LaFleur, S.J. Jalife, J. Wu, S. Lee

P245. Nitrite Reduction using a Copper Containing Electrocatalyst. **V. Hulse**, K.A. Knecht, N. Elgrishi

P277. Utilization of microalgae Chlorella recovered from biosorption of Cu contaminated wastewater to produce bio fuel by hydrothermal liquefaction. **S. Islam**, M. Brdecka, V. Duran, N. Green, A. Silva, B. Jang

P206. Biosorption removal of heavy metals in wastewater using chlorella followed by hydrothermal liquefaction for fuel production. **B. Jang**

P249. Photoactive molecular containers to access the triplet excited states of bound guests and modulate their lifetime and reactivity in nanoconfinement. **S.G. Jayawardana Arachchige**, E.C. Madura, V. Garcia-Lopez

P250. Photocatalytic degradation of organic dyes using TiO 2 @hexaniobate nanopeapod composites. M. Islam Khan, **K.D. Jones**, J.B. Wiley

P253. Premier LC Technology. **T. Keller**

P234. How to conceptualize enantiomeric selectivity in C−H bond functionalization catalyzed by half-sandwich Ruthenium complexes. **N. Le**, C. Hetti Handi, N. Udayanga, X. Cui, C.E. Webster

P232. Hazard identification for inhaled particulates based on lung surfactant and lung cells. **J. Liu**, S. Pradhan, C.M. Sayes

P208. Chemistry Nobel Prize of the Twenty-First Century: Emerging Trends for Women Laureates. **G. Lyubartseva**

P237. Identification and analysis of cannabis terpenes using GC-FID. **S. Martinez**, D. McGuire, E.A. Nalley, R. Lirag

P240. Investigation of iron porphyrins as electrolytes in non-aqueous redox flow batteries. **N. Mitchell**, N. Elgrishi

P201. Access to substituted tricyclic heteroarenes by an oxidative cyclization reaction. **R. Nakiwala**, L. Ardon Munoz, J.L. Bolliger

P200. A Comparison of the Photophysical, Electrochemical and Cytotoxic Properties of meso-(2-, 3- and 4-Pyridyl)- BODIPYs and Their Derivatives. **C. Ndung'u**, D. LaMaster, S. Dhingra, N. Mitchell, N. Elgrishi, F.R. Fronczeck, M.H. Vicente, P.N. Bobadova

P255. Removal of PFOA and PFOS from water using a molecular cage. **S. Ntipouna**, M. Das Bairagya, N. Elgrishi

P254. Rapid assessment of emerging environmental contaminants using enzymatic activity assays to elucidate potential mechanisms of toxic action. **P.C. Obiako**, C.M. Sayes, A. Charlton-Sevcik

P251. Plasma discharge generated OH radical for protein footprinting. **O. Ogundairo**, K.K. Murray

P271. Synthesis, reactivity and properties of novel pyrazine-benzofluoro fused fluorescent dyes (BOPYPYs). **S. Oloo**, G. Zhang, M. Dunn, M.H. Vicente

P227. Encapsulation of metal nanoparticles with Skewered tetraphenyl porphyrin using Silane Coupling – Scanning Probe Microscopy Studies Reveal Core-Shell Morphology. **O.H. Olubowale**, Q. Do, V.L. Kolesnichenko, J.C. Garno

P211. Conformational analysis of *N*-alkylated triazine macrocycles. **C. Patterson-Gardner**

P228. Facile lactone formation from ferrocene-bound keto-carboxylic acids. **U.R. Pokharel**

P230. Get involved with the ACS Division of Chemical Education. **S.G. Prilliman**

P272. Synthesis, X-ray, and Theoretical Structural Analysis of A Binuclear Manganese Tricarbonyl Thionicotinic Acid Complex.. **A. Rahman**, D. Powell, S. Ramakrishnan, D. Hossain

P210. Cobalt-Doped Iron-based Metal Organic Framework with Unique Shell-shaped for Enhancing the Reaction Activity of Kumada-Coupling. D. HU, J. ZHANG, J. SONG, B. Ni, **H. Ren**

P252. Plasmonic gold nanoparticle synthesis via oxidation of 2-propynylamine in water using reactive high energy ball milling. **A. Reusch**, J. Vanegas, M.J. Fink, B.S. Mitchell

P263. Synthesis of 1,3,5-Trisubstitued Piperidine Rings through Thionium Ion Intermediate. **G.J. Rustin**, M.G. Donahue

P214. Cyclooctatetraene attached π conjugated porphyrins and optoelectronic studies on their conformational planarization state. **S.S. Shaikh**

P215. Design and Synthesis of Eumelanin-inspired Acidimetric Sensor. **F. Shanta**, M. Essandoh, T. Nelson

P226. Electrospun polyaniline-nanocellulose-graphene oxide composite membranes for application in water treatment. **J. Souza Soares**, D.F. Rodrigues

P273. The Development of Novel Alkyne Metathesis Catalyst. **M. Stewart**

P269. Synthesis of pyrrole-containing semisquaraines as viable precursors for non-symmetric squaraine dyes. **D. Ta**, J. Favret, S. Dzyuba

P270. Synthesis of pyrrole-containing semisquaraines as viable precursors for non-symmetric squaraine dyes. **D. Ta**, J. Favret, S. Dzyuba

P261. Spectroscopic studies on rotational isomerism of squaraine dyes. **D. Ta**, S. Dzyuba

P202. Alkyne metathesis catalysts with fluorinated alkoxide podand (FLAP) ligands. **S. Tanha**, S. Lee

P235. Hydroquinone assisted Halogen-bonding complex for radical perfluoroalkylation reactions. **T. Tasnim**, S. Pitre

P256. Role of metacognitive learning strategies in students' improved exam performance in general chemistry I. **H. Texada**, S.E. McGuire, E. Cook

P280. Vitamin B12-Catalyzed Cyclopropanation of Olefins. **J.G. Teye-Kau**, S. Pitre

P257. Ru(II)-catalyzed enantioselective carbon-hydrogen bond functionalization. **N. Udayanga**, X. Cui

P217. Design of laboratory experiences in art conservation science: electrochemical treatment of metal artifacts for cultural heritage preservation. **A. Villalta-Cerdas**, G.D. Smith

P212. Copper-Catalyzed Difunctionalization of 1,3-Diene. **V.R. Viviani**

P279. Visualization of the binding interactions between DNA and proteins with Atomic Force Microscopy. **A.R. Walker**, N. Rajapaksha, M.E. Rivera, J.C. Garno

P213. Cross-Conjugation Effects on β, β'-fused Pentacene Quinone Porphyrin. **S. Washburn**, H. Wang

P224. Effects of Carbon Oxidation on Capacitive Deionization. **Y. Won**, Y. Kim

P267. Synthesis of Cycloparaphenyleneacetylene (CPPA) via Alkyne Metathesis. **X. Zhou**, R. Herman, S. Lee

TUESDAY AFTERNOON

Hilton Baton Rouge
The University Room

ACS DFW Wilfred T. Doherty Award Symposium-afternoon

M. C. Stefan, *Presiding*

1:30 247. Working with Robert Curl. **S.C. O'Brien**

2:00 248. The joy of scientific discovery: 50 years of playing with the f-elements. **A. Sherry**

2:30 249. TCU Chemistry and the Doherty Award: A Temporal Snapshot of Chemistry, the Department, and the Region. **J.L. Coffer**

3:00 Break.

3:30 250. Molecular Choreography: Conformational Analysis of Triazine Macrocycles as a Foundation for Drug Design. **E. Simanek**

4:00 251. History of the Wilfred T. Doherty Award. **M.C. Stefan**

Hilton Baton Rouge
The Victory Room

Chemical Biology Symposium

M. E. Rivera, *Organizer*
F. Rivas, *Organizer, Presiding*

1:30 Reconvene .

1:35 252. New Paradigms and Strategies for FLT3 Precision Medicine in Acute Myeloid Leukemia. **B. Frett**

2:05 253. Crafting Small Molecules to Probe Biology and Treat Tuberculosis. **S. Roy**

2:35 Coffee break.

2:55 254. Combating Fosfomycin Resistance in Gram-positive Pathogens. **M.K. Thompson**

3:25 255. Manipulating iron homeostasis in the opportunistic Pseudomonas aeruginosa as a new approach to develop antibiofilm strategies. **M.E. Rivera**

3:55 Closing Remarks .

4:00 Network.

Hilton Baton Rouge
Hunt Room

Chemistry Connections: Learning from History

C. Hahn, N. V. Tsarevsky, *Organizers, Presiding*

1:00 228. Jons Jacob Berzelius - Father of Swedish Chemistry. **P. Kesavan**

1:30 229. Percy Julian, Robert Robinson, and the total synthesis of physostigmine and eserethole. How an unknown black American beat the odds. **F.G. Gelalcha**

2:00 230. Carl Jacob Loewig (1803-1890): An unjustly (almost) forgotten chemist. **N.V. Tsarevsky**

2:30 Intermission.

3:00 231. Life and work of Petrus Jacobus Kipp and the history of the development of the Kipp's Apparatus. **C. Hahn**

3:30 232. A comprehensive look at the history of noble gas chemistry. **P. Villarreal**

Hilton Baton Rouge
The Paramount Room

Energy and Materials Symposium

J. Chan, *Organizer, Presiding*

1:25 235. Structural insights into Li-based energy storage by metastable niobates. **M.M. Butala**

1:55 236. Battery Recycling for Second use Applications of Environmental Pollutants and Conflict Minerals. **M.C. Menard**

2:25 237. Finding Thermally Robust Superhard Materials with Machine Learning. **J. Brgoch**

2:55 Break.

3:10 238. Electrochemistry of transition-metal-free carbaborides. M.R. Shabetai, F. Kizilkaya, **V. Poltavets**

3:30 239. Design and Development of Efficient Sorbents for the Sequestration of Radio- and Nonradioactive Species. **M. Islam**

3:50 240. The Road Less Traveled: An Unconventional Career Pathway from Solid State Chemistry to Forensic Science. **J.M. Drake**

Hilton Baton Rouge
The King Room

Inorganic Symposium: Energy and the Environment

M. B. Chambers, N. Elgrishi, *Organizers, Presiding*

1:35 262. Electrochemically mediated deoxygenation of biomass model compounds.. **S.M. Kilyanek**

1:55 263. Non-covalent interactions to modulate electrochemical activity. R.J. Bujol, M. Das Bairagya, J. Grundhoefer, **N. Elgrishi**

2:15 264. Molecularly based bifunctional electrocatalysts for water splitting. **D. Villagran**, Y. Ge, N. Ocuane

2:35 Intermission.

3:35 265. First row transition metal photocatalysts for CO2 reduction: Control of the coordination environment. **E.T. Papish**, W. Yao, S.Y. Manafe

3:55 266. Solution-phase synthetic approaches to colloidal nanocrystals of emerging inorganic semiconductors. **S. Creutz**, D. Zilevu, O.O. Parks, T.J. Boggess

4:15 267. Heteroleptic copper(I) charge-transfer chromophores. **D. Kim**, T.S. Teets

4:35 268. Self-Sensitized Photocatalytic CO2 Reduction by a Series of Ruthenium Complexes Under Visible-Light Irradiation. A. Devdass, K. McCardle, A. Dorris, D.K. Buettner, N. Hammer, J. Panetier, **J.W. Jurss**

4:55 Closing Remarks.

Hilton Baton Rouge
The Louisiana Room

Physical Chemistry of Liquids

R. Kumar, D. G. Kuroda, *Organizers*
J. D. Cyran, *Presiding*

1:30 256. Computing accurate and reliable thermodynamic properties of small molecules from MP2 and density functional theory with adaptive force matching. **F. Wang**

1:55 257. Study of Cryoprotectants: Polymer Dynamics in Heterogeneous Dimethyl Sulfoxide:Water Cosolvent Environments. **X. Chen**, K. Lorenz-Ochoa, E. Lee, C. Baiz

2:20 Break (poster session).

3:20 258. Life at the Shore: The Impact of Interfaces on Lithium-Ion Electrolyte Structure and Dynamics. **R. Jorn**

3:45 259. Some insights into the liquids water and ethylene carbonate from course-grained and ab initio/machine learning potentials. **S.W. Rick**

4:10 260. Molecular adsorption and transport properties at liposome interfaces and cell membrane surfaces studied by second harmonic generation spectroscopy. **L.H. Haber**, R.O. Ali, A.S. Dikkumbura, P. Hamal

4:35 261. Inference of solute surface properties from water's interfacial molecular structure. **S. Shin**

Hilton Baton Rouge
The Capitol Room

Recent Advancement and Applications in Organic Synthesis

J. R. Ragains, D. C. Whitehead, *Organizers, Presiding*
X. Cui, R. G. Kartika, *Presiding*

1:25 Introduction.

1:30 241. Electrophilic Deborylations in Synthesis. **J. May**

2:00 242. Alkyl–alkyl cross-coupling enabled by d0 metals and redox-active ligands. **C. Roberts**, R. Belli, V. Tafuri, J. Gavin, C. Seong

2:30 243. Design and synthesis of glucocorticoid receptor modulator payloads for antibody-drug conjugates. **C.C. Marvin**

3:00 Intermission.

3:30 244. Rapid access to polycyclic systems via cascade cyclization reactions. **F. Rivas**

4:00 245. Lord of the Rings: Forging Piperidines via Iminium Ion Cyclizations. **M.G. Donahue**

4:30 246. Minimalism as a Guiding Concept for the Development of New Enantioselective Reactions using Bis(AMidine) [BAM] Catalysis. **J.N. Johnston**

Hilton Baton Rouge
The Governor Room

The Beauty of Polymers with Increasingly Complex Architectures - Afternoon Session

G. J. Schneider, *Organizer*
J. Albert, T. Werfel, *Presiding*

1:40 Introductory Remarks.

1:45 269. Practically Perfect Polyelectrolytes. P. Balding, R. Borrelli, R. Volkovinsky, **P.S. Russo**

2:10 270. Polymer Design Strategies for Functional Brush-Particle Based Hybrid Materials. **M.R. Bockstaller**

2:35 271. Glyco- and "Smart-" polymer hybrids as diverse, powerful tools for immune modulation. **T. Werfel**

3:00 Intermission & Poster Break.

3:45 272. Can Cyclic Block Copolymers Meet the Needs for Next-Generation Nanolithography?. **J. Albert**, R. Kumar, H. Ashbaugh

4:10 273. Simulation and theory approaches toward thermodynamic and structural understanding of polymer solutions of varying architecture. **T.E. Gartner**

4:35 274. Combined Computational and Machine Learning Approaches towards Polymeric Materials Properties Assessment. **B. Rasulev**

Hilton Baton Rouge
the Academy Room

The Entrepreneurs' Tool-Kit

J. L. Maclachlan, *Organizer*, *Presiding*

1:00 233. "Jane, stop this crazy thing": How to manage your business when things go bad. **J.L. Maclachlan**, D.L. Merkle, K. Drake

2:00 Panel discussion.

3:00 Break.

3:15 234. What's brewing on the bayou?. **J.L. Maclachlan**, D.L. Merkle

4:15 Panel discussion.

Hilton Baton Rouge
The Governor Room

Keynote Speaker Tuesday

R. G. Kartika, *Organizer*
D. G. Kuroda, *Presiding*

5:00 Speaker meet and greet.

5:15 Prof. Gabriela Gonzalez's presentation.

WEDNESDAY MORNING

Hilton Baton Rouge
The King Room

ACS New Faculty Workshop Symposium

J. Gavenonis, *Organizer, Presiding*

8:00 Workshop.

Hilton Baton Rouge
The Governor Room

2022 APTEC Meeting

J. A. Pojman, P. S. Russo, *Organizers*
D. Norwood, *Presiding*

9:00 Meeting.

9:05 Introduction.