

**Louisiana Academy of Sciences
94th Annual Meeting
Louisiana State University Alexandria**

MEETING-AT-A-GLANCE

7:45-8:30 AM	Continental Breakfast	Brumfield Caffey Ballroom
7:45-9:45 AM	Registration	Mulder Hall Lobby
8:30-8:40	Meeting Opening	Brumfield Caffey Ballroom
8:40-9:45 AM	Morning Keynote Address	Brumfield Caffey Ballroom
10:00-10:15 AM	Two-Minute Poster Competition Talks**	Mulder Hall (Room Listed)
	Computer Science / Cyber Security / Math and Statistics	144
	Material Science and Engineering	146
	Chemistry / Earth Sciences / Physics	221/223
	Botany / Zoology	226
	Agriculture, Forestry, and Wildlife / Environmental Sciences	219
	Microbiology / Molecular and Biomedical Biology	222/224
	Science Education / Social Sciences / Science and Humanities	225
10:15-11:45 AM	Oral Presentations*	Mulder Hall (Room Listed)
	Computer Science / Cyber Security / Math and Statistics	144
	Material Science and Engineering	146
	Chemistry / Earth Sciences / Physics	221/223
	Botany / Zoology	226
	Agriculture, Forestry, and Wildlife / Environmental Sciences	219
	Microbiology / Molecular and Biomedical Biology	222/224
	Science Education / Social Sciences / Science and Humanities	225
11:45-12:30 PM	Poster Competition Displays and Poster Viewing**	Mulder Hall 145 and 147
	See pages for two-minute talks for location of posters by topic	
12:30-2:15 PM	Lunch and Centennial Keynote Address	Brumfield Caffey Ballroom
2:30-4:45 PM	Poster Viewing	Mulder Hall 145 and 147
2:30-4:30 PM	Oral Presentations II	
	Computer Science / Cyber Security / Math and Statistics	144
	Chemistry	221/223
	Zoology	226
	Agriculture, Forestry, and Wildlife / Env. Sciences / Botany	219
	Science Education / Science and Humanities	222/224
	Social Sciences	225
4:45-5:30 PM	Convocation, Business Meeting and Snacks	Brumfield Caffey Ballroom

* Morning oral presentations will be used primarily for judging of student competitions, with afternoon oral sessions used for non-competing presenters of all levels.

**The Student Poster Competition has two components. Posters will be displayed and Poster Talks (2 min each) will begin at 10:00am in designated seminar rooms. Competitors will be available at their poster in the display room following the 2 min competition talks.

LAS 94

THE 94TH ANNUAL MEETING OF THE LOUISIANA ACADEMY OF SCIENCES

MORNING KEYNOTE ADDRESS

THE APPLICATION OF SCIENCE IN HEALTH



By Dr. Haywood Joiner
Chair Department of Allied Health
Louisiana State University Alexandria

How does a guy with dreams of becoming a fighter pilot end up becoming a medical laboratory scientist and hospital administrator? Science makes anything possible. Join me as we take a journey from a childhood love of science to the medical application of science in health that resulted in one fantastic voyage.

LAS 94

THE 94TH ANNUAL MEETING OF THE LOUISIANA ACADEMY OF SCIENCES

CENTENNIAL DECADE KEYNOTE ADDRESS



By Maureen Corcoran, PhD, RPG
Associate Technical Director
Water Resources Infrastructure
U.S. Army Engineer Research and Development Center (ERDC)

Dr. Corcoran received her doctoral degree from the University of Mississippi in geology and has been employed in a research capacity at ERDC for over 20 years receiving numerous scientific and civilian awards. She served as project lead on data collection efforts of the Interagency Performance Evaluation Team (IPET) to support the Hurricane Katrina research. She served as principal investigator for several work units in the System-Wide Water Resources Program (SWWRP) involving geomorphic responses in fluvial systems and also served as focus area leader under the Sediment Processes Studies for SWWRP. She currently serves as Project Manager for the Water Resources Infrastructure program. Dr. Corcoran has published her research in over 50 technical reports, technical notes, and peer-reviewed journals.

8:30-9:45
Meeting opening and Morning Keynote Address
Brumfield Caffey Ballroom

10:00 – 10:15 AM
Two-Minute Poster Competition Talks

(Judging of posters for competition will occur from 11:45-12:30 in designated poster viewing rooms)

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics
2-Minute Talk 144 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

Undergraduate Competition

- P1** **Joubert, R.**, S. Sharifi, and Y. Banadaki (SUBR/LSU)
Apply Convolutional Neural Networks to Identifying the Laguerre-Gaussian Modes
- P2** **Logan, K.**, and M. Batais (MSU)
Design of Smart Energy Management Subsystem for a Planetary Rover Application
- P3** **Joubert R**, S. Sharifi, and Banadaki, Y., (SUBR/LSU)
On the Use of Convolutional Neural Networks to Identify the Optical Modes
- P4** **Conn, C.**, G. White., and Y. Reddy (GSU)
Penetration Testing
- P5** **White, A.** and Y. Reddy (GSU)
Relic Application Monitoring

Graduate Competition

- P6** **Price, N.**, and Y. Banadaki (SUBR)
On the Use of Machine Learning Approaches to Detect Anomaly in Networks

Materials Science and Engineering
2-Minute Talk 146 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

Undergraduate Competition

- P7** **Langlois, V.**, B. Reed, and M. Zeidan, (SELU)
Cement Mortar for Advanced Construction Applications
- P8** **Holland, T.**, D. Gaines, N. Crews and G. Nestorova (NOU Systems Inc/TECH)
One-Step Nucleic Acid Sampling Technology for Genetic Analysis on the International Space Station

Graduate Competition

- P9** **Robinson, A.**, and P. Derosa (TECH)
Surface Oxidation Mechanisms of CrCoFeNi High Entropy Alloys

Chemistry / Earth Science / Physics
2-Minute Talk 221/223 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

Undergraduate Competition

- P10** **Naquin, A.**, U. Pokharel and F. Fronczek (Nicholls/LSU)
Metal-Organic Supramolecules from Ferrocene-Linked Tetradentate Ligand
- P11** **Lo, M.**, R. Bista, S. Sekhar, A. Dahal, S. Jois and S. Murru (ULM)
Pyrazolones as Potential Anti-Cancer Agents
- P12** **Basnet, P.**, I. Chauvin, J. Chamcheu and S. Murru (ULM)
Design, Synthesis and Anticancer Activity of Novel Flavonol Derivatives
- P13** **Bista, R.**, J. Chamcheu, E. Perez and S. Murru (ULM)
Synthesis and Anticancer Activity Evaluation of Pyrazole and Isoxazole Derivatives
- P14** **Johnson-Buchanan, S.**, K. Williams and F. Ohene (GSU)
Computational Study of Concerted Diels Alder Reactions
- P15** **Miller, J** and R. Komati (Nicholls)
Scaffold Hopping: A Versatile Approach to Develop New Ligands for LXR

Botany / Zoology
2-Minute Talk 226 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

Undergraduate Competition

- P16** **Atkins, S.**, J. Riggins, C. Siegert, J. Tang, O. Leveron, and N. Clay (TECH)
Impacts of Bark-Beetle Attacked Trees and Bluestain Fungi (Ascomycota: Ophiostomataceae) on the Diversity of Ants (Hymenoptera: Formicidae) in Deadwood.
- P17** **Oubre, C.**, J. Pitre, D. Leblanc, and R. Boopathy (Nicholls)
Presence of Antibiotic Resistant Bacteria and Antibiotic Resistant Genes in the Migratory Birds of Louisiana

Graduate Competition

- P18** **Ashworth Z.**, C. Rouse, N. Hayat, V. Salim (LSUS)
Functional Characterization of Glucosidases in Medicinal Plants for Metabolic Engineering of Anti-Cancer Compounds.
- P19** **Dubose, J.**, and G. LaFleur (Nicholls)
Comparing the Reproductive Anatomy of the Apple Snail (*Pomacea Maculata*) in Wetlands across the Barataria-Terrebonne Estuary.
- P20** **Giri, N.**, and T. Sasek (ULM)
Responses of *Arabidopsis Thaliana* Lines Differing in Anthocyanin Concentrations to Ozone Exposure.

Agriculture, Forestry, and Wildlife / Environmental Science
2-Minute Talk 219 Mulder Hall
(Poster viewing in 147 Mulder 11:45-12:30)

Undergraduate Competition

- P21** **Aubert, J.** and J. Earl. (TECH)
Effects of Soil Composition of Leaf Tannins in Water

P22 **Lowry, M.**, N. Clay, L. Santiago, and K. Harms (TECH)
Subsidy or Stress? How Sodium Levels Impact Decomposer Communities and Decomposition Rates

P23 **Vuong, O.**, W. Tangkham, and F. LeMieux (MSU)
Effects of Dark Rye, Cricket, and Pea Powders on the Properties of 3D-Printed Novel Mulberry Canjeero

Graduate Competition

P24 **Gray, K.**, S. David, and Q. Fontenot (Nicholls)
Preliminary Results of Fish Community Survey in a Restored Marsh

Microbiology / Molecular and Biomedical Biology

2-Minute Talk 222/224 Mulder Hall

(Poster viewing in 147 Mulder 11:45-12:30)

Undegraduate Competition

P25 **Patel F.**, L. Cain, C. Peterson, S. Venigalla, and J. Newman. (TECH)
Investigation of Transcriptional Control in Directing Cell Fate.

P26 **Francis T.**, D. Dalrymple, Y. Yanamadala, V. Carriere, S. Poh, A. Kim, and P. Kim (GSU)
Cell-Penetrating MK2 Inhibitory Peptide Blocks LPS-Induced Expression of Pro-Inflammatory Cytokines in HepG2 Hepatocytes.

P27 **Murphy B** (LSUS)
Reverse Phase Protein Assay Analysis of TNBC and ATC Cell Lines Treated with FC101a

P28 **Rinderle C.**, J. Straub, and J. Newman. (TECH)
MED12 and Adipogenesis

P29 **Smith A.**, T. O'Neal, N. Baudoin, and C. Lyles. (NWSU)
Aerobic Degradation of Acetaminophen by Sewage Bacterial Community.

Graduate Competition

P30 **Idigo O.**, and J. Newman. (TECH)
The Role of MED12 in Adipogenesis of Human Adipose Stem Cells.

P31 **Hayat N.**, C. Rouse, E. Mahdavian, F. Chen, X. Yu, A-M. Dragoi, and J. Li. (LSUS)
Fusarochromanone as a Therapeutic Potential for Prostate Cancer.

P32 **Venigalla S.**, and J. Newman (TECH)
Expresion Levels of Mediator Kinase Subunits and their Interaction with Transcription Factors during Adipogenesis.

P33 **Hutson K.**, K. Willis, C. Nwokwu, and G. Nestorova. (TECH)
Ionizing Radiation-Induced Alteration of Mitochondrial Copy Number and Base-Excision Repair Capabilities in Human Astrocytes.

P34 **Hodnett R.**, and J. Newman. (TECH)
Role of MED12, Notch1, Notch3 Interactions in hASC Regulation and their Integrated Used in Public Educational Materials.

P35 **Cortez J.** and R. Boopathy (Nicholls)
Biodegradation of Triclosan by Bacteria Isolated from the Thibodaux Sewage Treatment Plant

Science Education / Social Sciences / Sciences and Humanities
2-Minute Talk 225 Mulder Hall
(Poster viewing in 147 Mulder 11:45-12:30)

Undergraduate Competition

- P36** **Chiasson, L.** and J. Plaisance. (Nicholls)
A Comparison of Levels of Burnout in Occupational Therapists in Louisiana.

10:15 – 11:45 am Oral Presentations I
Mulder Hall

(Bold lettering indicates presentation for student competition)

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics
144 Mulder Hall

Undergraduate Competition

- 10:15** **Brasseaux, Z.**, I. AL-Agha, and P. Chowriappa (TECH)
Active Learning using Dense Convolutional Neural Networks (CNNs) in Multi-Modal Sensor Streaming Data
- 10:30** **Michels, N.**, M. Hardin, M. Manning, and K. Adhikari (TECH)
Comparison of Bearing Estimation Algorithms for a Circular Array Transformed to Have a Vandermonde Manifold Vector
- 10:45** **White, G.**, C Conn, and Y. Reddy (GSU)
Ransomware

Graduate Competition

- 11:00** **Basalan, A.** and Salam, M (SUBR)
Intrusion Detection in IoT Systems using Machine Learning Algorithms

Regular Contributions

- 11:15** Jackson, C., and B. Baniya (GSU)
Machine Learning in Cybersecurity
- 11:30** Drozdenko, B., and M. Michele (TECH)
Optimal Mote Placement for an Ad Hoc Distributed Sensing System

Materials Science and Engineering
146 Mulder Hall

Graduate Competition

- 10:15** **Ishraq-Bari, S.**, L. Reis, and G. Nestorova (TECH)
Calorimetric Sandwich-Type Immunosensor for Quantifying TNF- α : Experimental Results and Numerical Analyses of Heat Transfer for Maximized Detection Sensitivity
- 10:30** **Dokku, S.**, and S. Jones (TECH)
Effects of Endogenous and Exogenous Agents on Platelet Adhesion

Regular Contributions

- 10:45** Derousselle, A., C. Davis, and M. Krutzfeldt, and M. Zeidan (SELU)
Developing Low-Cost Storm Shelter

- 11:00 McGibboney, C., S. Yoshida, N. Fujishima, S. Takahashi, and ME. Hoq (SELU)
Characterization of Fatigue with the Field Theory of Deformation and Fracture

Chemistry / Earth Science / Physics
221/223 Mulder Hall

Undergraduate Competition

- 10:15 **Reed, P.** and D. Rivera-Vazquez (NSU)
Synthesis and Characterization of CuS Quantum Dots: Towards the development of a Cost-Effective Biosensing Platform
- 10:30 **Primeaux, S.** and P. Chanda (SELU)
Diastereoselective Aldol Reactions of N,N-dialkylphenylacetamides
- 10:45 **Warren, O.** and D. Rivera-Vazquez (NSU)
Modification of Graphene Oxide for Desalination and Antibacterial Application

Graduate Competition

- 11:00 **Luo, L.** and H. Yan (ULL)
Investigating CO Adsorption on Mesoporous Pt-Ceria with VT-DRIFTS
- 11:15 **Godara, S.,** and D. Mainardi (TECH)
CO Adsorption on Transition Metal Fischer Tropsch Catalysts: A DFT Study

Regular Contributions

- 11:30 Pokharel, U., B. Curole, A. Andras, and M. Lo (Nicholls/ULM)
E-Liquids as a Vehicle for the Investigation of Organic Mechanisms

Botany/Zoology
226 Mulder Hall

Undergraduate Competition

- 10:15 **Benedetto, N.,** J. Riggins, C. Siegert, J. Tang, O. Leveron, and N. Clay (TECH)
Impacts of Bark Beetles and Termites on Wood Decomposer Communities in Honduras.
- 10:30 **Faria, V.,** A. Hale, R. Maxwell, and S. Kinney (MSU)
Effect of Freezer Storage on *Anguilla rostrata* Gonadal Tissue
- 10:45 **Naquin, E.,** R. Boopathy, and JP Daigle (Nicholls)
Presence of Multi-Drug Resistant Pathogens and Antibiotic Resistance Genes in Waterways and Seafood Populations of Rural Southeast Louisiana, USA.

Graduate Competition

- 11:00 **Cannon, C.,** and C. Beachy (SELU)
Environmental Impacts on Alternate Life-History Pathways in Caudata
- 11:15 **Kolbmann C.,** and A. Wright (SELU)
Fossil Sampling Bias Impacts Node Ages in a Formicidae Phylogeny

Regular Contributions

- 11:30 Aucoin S., A. Thapa, E. Fruge, J. Bonza, E. Marque, K. Sweeney, S. Baker, W. Brame, and M. Merchant (MSU)
Characterization of Antibacterial Activity of Hemolymph from Desert Hairy Scorpions

**Agriculture, Forestry, and Wildlife / Environmental Science
219 Mulder Hall**

Undergraduate Competition

- 10:15 Hermann, M.**, N. Clay, M.E. White, and S. Entrekin (TECH)
Direct and Indirect Low-Level Sodium Additions to Riparia Impact Leachate Quality
- 10:30 Lemoine, A.** and C. Corbat (LSUA)
Nest Building Materials of the Eastern Woodrat in Central Louisiana
- 10:45 Oubre, C.** and R. Boopathy (Nicholls)
Effect of Silver Oxide Nanoparticle on the Sediment Bacteria of the Gulf of Mexico in Removing Carbon and Nitrogen

Graduate Competition

- 11:00 Phillips, T.** and R. Boopathy (Nicholls)
Biodegradation of Metribuzin under Various Electron Acceptor Conditions.

Regular Contributions

- 11:15 Ning, Z., W. Thomas, and K. Abdollahi** (SUAREC)
Quantifying Photosynthesis, Stomatal Conductance and Transpiration of Crepe Myrtle in Response to Flooding at Elevated CO₂ Settings
- 11:30 West, J.** (LSUA)
Effects of Prescribed Burns on Skinks in Longleaf Pine Forest

**Microbiology/Molecular and Biomedical Biology
222/224 Mulder Hall**

Undergraduate Competition

- 10:15 Cart J.**, C. Miller, A. Bryan, I. Pursell, H. Barnett, and J. Newman (TECH)
The Role of Notch Signaling and Environmental Factors in Adult Stem Cell Myogenic and Osteogenic Differentiation
- 10:30 Soorya H.**, and R. Boopathy (Nicholls)
Presence of Sulfonamide Resistant Bacteria in Thibodaux Sewage Treatment Plant

Graduate Competition

- 10:45 Barnett, H.**, J. Newman, and M. Caldorera-Moore (TECH)
Investigating the Role of Extracellular Cues of Hydrogel Biomaterials on Stem Cell Fate
- 11:00 Nwokwu C.**, S. Bari, and G. Nestorova (TECH)
Smart” Microprobes Imbued with Recognition Element as a Sensitive Bioanalysis Platform for Exosomes.

**Science Education / Social Sciences / Sciences and Humanities
225 Mulder Hall**

Undergraduate Competition

- 10:15 Oubre, C.**, and J. Doucet (Nicholls)
Toward Molecular Mechanisms for Historical Houma Indian Curatives.
- 10:30 Gronemeyer, J.**, and L. Lewis. (LOYNO)
Understanding Affective Cognition through Evolutionary Developmental Neuroscience.

Regular Contributions

- 10:45** Mbah, R., and D. Wasum (SUBR)
Assessing the Relationship between Pell Grant and Federal Student Loan at Louisiana Four-Year Public Institutions.
- 11:00** Namwamba, J., and N. Enime (SUBR)
The Impact of Nigeria's Colonial Mathematics Education Practice on the Country's Post-Colonial Era Mathematics Education Practice.
- 11:15** Yehya, Riad (SUBR)
Why the United States Lags Behind Many Countries in Mathematics, Science and Reading, and What Could Be Done about It
- 11:45** De Silva, S., Diaz, and J., Gary, Jr., L. P. (TU/LSUHSC)
Lingering Health Impact of the 2004 Indian Ocean Tsunami

11:45-12:30

Poster Competition Presentations and General Poster Viewing

Mulder Hall 145 and 147

(All student competitors must be at poster for judging)

12:30-2:15 pm

Lunch and Centennial Keynote Address

Brumfield Caffey Ballroom

(see page 3 of the program)

2:30-4:30 pm Oral Presentations

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics
144 Mulder Hall

- 2:45** Smith, C., and B. Drozdenko (TECH)
A Straightforward, Reusable, Scalable Smart Cities Infrastructure using the Mean Stack in Docker Containers
- 3:00** Johnson, J., and P. Sreekumari (GSU)
Analysis of Cyber Attack Techniques to Ordinary Users
- 3:15** McGibboney, C. (SELU)
Graphing Euler Spirals with the Riemann Zeta Function
- 3:30** Hegab, N., and B. Drozdenko (TECH)
Enhancing Wireless Communication in Inventory Management
- 3:45** Zubari, C., and P.Sreekumari (GSU)
Biometric Privacy Laws: Identifying the Common Features

Chemistry
221/223 Mulder Hall

- 2:30** Junk, T., D. Smith, D. Alexis, and F. Fronczek (ULL/LSU)
Synthesis of Novel Heterocyclic Organotellurium Compounds and their Properties
- 2:45** Bonton, A and D. Rivera-Vazquez (NSU)
Modification of Activated Carbon: towards the Optimization of Wastewater Treatment
- 3:00** Poe, A., L. Scott and C. Thibodeaux (NSU)
A Comparison of Copper and Lead Concentrations in Filtered vs Unfiltered Drinking Water at Northwestern State University
- 3:15** Gallo, A., C. Brassieur, L.Allain, D. Bullard, A. Boudreau and J. Stephens, A. Nguyen, and K. Robin (ULL/LSU)
Chemical Analysis and Biological Screening of Extracts from Baccharis Halimifolia and Propolis
- 3:30** Dumancas, G., H..Ellis, C. Setijadi, B. Dufour, J. Felix, L. Adams, and E. Arroz (LSUA/WU/UK)
Chemometrics: A powerful and Simple Tool for the Development of Analytical Methods
- 3:45** Antenucci, P., B. Wicker and H. Marcello (SELU)
Modular Green Synthesis of Tridentate NacNac Ligands
- 4:00** Marcello, H., B. Wicker and P. Antenucci (SELU)
Modular Green Synthesis of Tetrudentate NacNac Ligands
- 4:15** Jones, S., B. Wicker and J. Davies (SELU)
Synthesis and Characterization of Phosphonium Ionic Liquids

Zoology
226 Mulder Hall

- 2:30** Muse, L., K. Pereira, S. Woodley, C. Fontenot, B. Crother, and D. Kandalepas (SELU)
Chytrid Growth Inhibition in Two Fully Aquatic Salamanders.
- 2:45** Perrera, B. (SELU)
Spatial Ecology of *Sternotherus odoratus* (Eastern Musk Turtles) in a Suburban Environment.
- 3:00** Whiting, D., Z. Jones (SELU)
Raptor Perch and Location Preferences in Rural Southwestern Oklahoma.
- 3:15** Bergeaux P., K. Beshera, A. Williams, C. Morgan, and A. Armstrong (LSUE)
Genetic Data Support the Existence of Novel Cryptic Diversity within *Eleutherodactylus Cystignathoides* (Rio Grande Chirping Frog) from Northern Mexico and Southern US.
- 3:30** Fulbright M., S. Hromada, M. Iachetta, B. Beas, J. Flaherty, K. Wild, A.F. Scott, and C.M. Gienger (ULL)
Reaping What Has Been Sown: Agricultural Impacts on Herpetofaunal Diversity.
- 3:45** Beachy, C (SELU)
How Plethodontid Lunglessness Informs a Perspective on Ancestral State Reconstruction for Life Cycle Evolution.
- 4:00** Meyer H., K. Jackson, P. Gasiorek, K. Zajac, D. Nelson, R. Kristensen, and L. Michalczyk (MSU)
The *Echiniscus virginicus* Complex and Tardigrade Distributions.
- 4:15** Ogunkoya, Y., (SUBR)
Avian Stomach as Observed Under the Scanning Electron Microscopy

**Agriculture, Forestry, and Wildlife / Environmental Science / Botany
219 Mulder Hall**

- 2:30** Sullivan, B., H. Munro, and K. Gandhi (USDA-FS/UGA)
What Makes a Tree Smell Good to a Pine Beetle?
- 2:45** Steitz, M., M. Landy, J. Diaz, and L.P. Gary (TU)
An Evolving Option to Eliminate Pollution by Dye Wastewater
- 3:00** Twumasi, Y., E. Merem, J. Namwamba, K. Abdollahi, R. Okwemba, C. Akinrinwoye, S. Welsh, J. Tate, and K. Conant, (SUBR)
Assessing the Risks from Changing Climate in South Texas Region
- 3:15** Nyatta, T., C. Kobia, and J. Namwamba (SUBR)
Rate of Decomposition of Different Textile Materials
- 3:30** P. Nair (GSU)
Phytotoxicity and Underlying Mechanisms of Manufactured Nanoparticles on Plants
- 3:45** Namwamba, J., K. Abdollahi, Y. Twumasi, B. Osimbo, R. Okwemba, and K. Kiwale (SUAREC)
Development of Non-Causal Models between Spatial Atmospheric Data and Their Application in Determining Air Cooling Benefits by Urban Trees in Baton Rouge
- 4:05** Namwamba, J., Y. Twumasi, and B. Osimbo (SUBR)
Cost-Benefit Analysis of Biogas Digester Systems for Application in 9th Ward, New Orleans, Louisiana.
- 4:15** Okwemba, R., Y. Twumasi, and K. Abdollahi (SUBR)
Application of Image Editing Software in the Visualization of Urban Forestry Green Infrastructure Solutions

**Science Education / Sciences and Humanities
222/224 Mulder Hall**

- 2:45** Doucet, J. (Nicholls)
Ecological Anthropology of a Louisiana Marshland Village
- 3:00** Busby, A. (Nicholls)
Two Cultures, One Classroom: An Examination of a Class on Art and Science.
- 3:15** Giguette, R. and A. Alexander (Nicholls)
How Do Humans Compute Meaning?
- 3:30** Doucet, J. (Nicholls)
A Bacillus on the Bononi: A Fifth Reading of Science Poetry.
- 3:45** Zenon, E. (RPCC)
Increasing Equity in STEM and CTE with OER
- 4:00** Gary, A., B. Stokes, M. Malbrough, and L. Gary (Youth Advocacy Team)
Leadership Development in a High School Environment

**Social Sciences
225 Mulder Hall**

- 2:45** Akinrinwoye, C., Y. Twumasi,, J.B. Namwamba, and R. Okwemba (SUBR)
Identification and Analysis of Factors That Have Influenced Urbanization in Fine Cities in Nigeria
- 3:00** Chirewa, R., F. Ayeni, F., V. Mbarika, and G. Fagbeyiro (SUBR)
Financial Literacy and Savings Culture among African Americans: A Critical Review
- 3:15** Bello, A. O., A. Williams, M.T. Akinlade, F. Ayeni, and V. Mbarika (SUBR)
Interrogating the Impact of Modular Refinery Policy on the Sustenance of Peace in Niger-Delta Region of Nigeria.
- 3:30** Pacquette, A. (GSU)
Should African Americans Register to be Organ Donors
- 3:45** Sharon Njie, S. (SUBR)
Demystifying the Essence of Technological Innovations and Artificial Intelligent Machines for the 21st-Century Workers
- 4:00** Sobotie, D. (SUBR)
Barriers to Diabetes Self-Management among African Americans

**2:30 – 4:45 pm
Poster Presentations**

**Computer Science
145 Mulder Hall**

- P37** Maharjan, B., U. Cvek, P. Kilgore (LSUS) and J. McLarty (LSUS/LSUHSC)
Mobile Application to Improve Detection of Undiagnosed Diabetes and Pre-Diabetics
- P38** Rogers, D., and B. Drozdenko (TECH)
Cloud Analytics for Smart Communities
- P39** Katchoua, G (GMU), and F. Yari (TECH)
How Can an Organization Successfully Use Artificial Intelligence to Promote Diversity and Overcome Bias?

**Materials Science and Engineering
145 Mulder Hall**

- P40** Shama, I., W. Sun, and S. Stinnett (MSU)
CZTSSe-Based Thin-Film Solar Cell Fabrication and Characterization
- P41** Tortorich, D., Y. Yu, and A. Fayed (SELU)
LionBot: Design, Simulation, and Construction of an Office Assistant Robot
- P42** Burrell, R., N. Seetala, and H. Yang (GSU)
Impact of Cu Nanoparticles on the Melting and Magnetic Properties of SmCo

Chemistry
145 Mulder Hall

- P43** Vaughan, T., A. Fruge and S. Meissner (MSU)
E-Liquids as a Vehicle for the Investigation of Organic Mechanisms
- P44** Fierro, J., N. Dissanayake, K. Boggavarapu and V. Thalangamaarachchige (MSU)
Organo-Catalysis Using Ionic Liquids
- P45** Xavior, J., N. Dissanayake, K. Boggavarapu and V. Thalangamaarachchige (MSU)
Extraction of Chitin using Ionic Liquids
- P46** Anyanwu, A., N. Dissanayake, K. Boggavarapu and V. Thalangamaarachchige (MSU)
Ionic Liquids as Cellulose Solvents
- P47** Smith, C., N. Dissanayake, K. Boggavarapu and V. Thalangamaarachchige (MSU)
Dissolution of Biomass in Ionic Liquids
- P48** Andras, A., U. Pokharel, B. Curole, D. Daigle, and F. Fronczek (Nicholls/LSU)
Understanding the Mechanism of Lactone Formation in Ferrocene-Bound Keto-Carboxylic Acids
- P49** Gaudet, R. and D. Rivera-Vazquez (NSU)
Synthesis of Zinc Sulfide Quantum Dots and Surfactant Dependent Size Study
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