Technical Agenda

Thursday, November 10

Technical Session 1: Catalytic/Synthetic Chemistry & Engineering

8:15 am New Perspectives in Iridium-Catalyzed C-H Borylation *Alex Kosanovich*

8:30 am The Redox Auxiliary Promoted [3,3]-Sigmatropic Rearrangement of 3-amino-1,5-Hexadienes *Chinenyeze Nwankwoalto*

8:45 am A Novel Method for Synthesis of OMC and M-OMC for PEM Fuel Cell Pt-electrocatalyst *Dereje Worku*

9:00 am Discovery of Novel Cationic-Cobalt(I) catalyst for hydrofunctionalization. *Stanley Jing*

9:15 am Adsorption and Catalytic Decomposition of Dimethyl Methylphosphonate on Metal Oxide Surfaces *Kim Huynh*

9:30 am Effect of Early Transition-Metal Carbides as a Support for Low Loading Noble Metals in Direct Ethanol Fuel Cells *Olabode Ajenifujah*

9:45 am Brønsted Acid Catalyzed SN1-Type Reaction via Unsymmetrical 2-Azaallyl Cation *Mirza Ardellan Saputra*

Technical Session 2: Analytical: Chemical Characterization

8:00 am Environmental Forensics: Molecular Insight into Chemical Degradation of Carbon Compounds in Aquatic Systems *Amy McKenna*

8:15 am Multiplexed and Direct Analysis of Malaria Biomarkers by a 3D Microfluidic Paper-based Device *Sierra Jackson*

8:30 am Total Glycosphingolipid Analysis Using UPLC-MS/MS: Comparison of Different Column Chemistries *Rodell Barrientos*

8:45 am Microaspiration CE-ESI-MS for In situ Tracking of Metabolism in Single Embryonic Cells of the Xenopus (Frog) Embryo *Rosemary Onjiko*

9:00 am Charge Storage Mechanisms of High Surface Area Carbides and Nitrides for Supercapacitors *Abdoulaye Djire*

9:15 am Deducing The Physisorb, Electron And Proton Transfer Processes On Sial Catalytic Surfaces From Epr/Endor Measurements Using The Antioxidant Carotenoid *Sefadzi Jay-Agbozo*

9:30 am Active-State CB1 Receptor Model Used as a Synthetic Cannabinoid Probe *Maria Muhammad*

9:45 am Algal Crop Protection Utilizing Integrated Pest Management through Early Detection via Mass Spectrometry and Identification of Pathogens and Predators using qPCR/HRMA *Robert Pomeroy*

Technical Session 3: Lloyd Ferguson Award Session-Polymers & Nanoscience

8:00 am ORMOCHALCs: Organically Modified Chalcogenide High-Refractive Index Polymers *Darryl Boyd*

8:15 am Site Selective Nucleation and Growth of Gold Nanoparticles on the Pore Structures of a Virus *Candace Benjamin*

8:30 am Improving Poly Lactic Acid (PLA) Thermal and Mechanical Properties Using Lignin Coated Cellulose Nano Crystals (L-CNCs) *William Simmons*

8:45 am Synthesis and Characterization of Emissive Eumelanin-Inspired Poly(arylenevinylene) Block Copolymers *RaiAnna Arscott Hopson*

9:00 am The effects of side chain engineering on optoelectronic properties of electrochromic conjugated polymers *Melony Ochieng*

9:15 am Solid-State Garnet Polymer Composite Electrolyte for Flexible Batteries *Marcus Carter*

9:30 am Quantifying Polycation-Membrane Interactions from Experiment and Theory *Alicia McGeachy*

9:45 am Plasma Effect on Polymer Surfaces *Kenia Colin*

Technical Session 4: Biochemistry & Chemical Biology

8:00 am Mechanisms of Packaging of Bunyaviridae Viral Genomes by N Protein *Shanai Brown*

8:15 am A Unified Mechanism for the Prebiotic Synthesis of Nucleobases from HCN *Sofia Walton*

8:30 am Cationic Polypeptoids: Potential as Vehicles for Nonviral Gene Delivery *Jessica Simpson*

8:45 am Mixed-valency Diiron Center in HD-GYP Phosphodiesterase Required for Cyclic-di-GMP Hydrolysis *Elizabeth Ndontsa*

9:00 am Insight on Thiopurines and their antimetastatic effects via Rac1 inactivation *Hope Gloria Umutesi*

9:15 am Chemically Amending Protein Alkene/Alkyne Functionalities for Catalyst-Free Click Reaction *Keturah Odoi*

9:30 am Harm-reduction tobacco products inhibit osteogenesis by altering kinase signaling response to oxidative stress *Lauren Walker*

9:45 am Chemical modulation of cystathionine gamma lyase/hydrogen sulphide system in mammalian cells *Fidelis Ndombera*

Technical Session 5: Analytical: Spectroscopy Characterization

10:15 am Surface Enhanced Raman Spectroscopy (SERS) Evaluation of Medicines Containing Diphenhydramine *Latevi Lawson*

10:30 am Characterization of Antioxidants in Coffee as Influenced by brewing Techniques *Arnold Jele*

10:45 am An automated droplet-based Chopper resolves small fluorescence differences and enables measurement of single-cell fatty acid uptake *Jean Negou*

11:00 am Lassification Of Bacteria By Surface Enhanced Raman Spectroscopy And Principal Component Analysis *Stacy Jones*

11:15 am Nonlinear Multi-Photon Laser Wave-Mixing Spectroscopy for Sensitive Detection of Environmental and Biomedical Applications *Jean Sebastien Pradel*

11:30 am Investigation of PAH Photochemistry in Octanol using Reaction Progress Monitoring *Sharon L Neal*

11:45 am Food Purity Analysis of Adulterated Natural Oil (neem and flaxseed oil) Compositions by FTIR Spectroscopy and Partial Least-Squares Regression *Brianda Elzey*

Technical Session 6: Engineering - Process and Chemical

10:15 am Study Of Glycerol For Use As Renewable Biomass Fuel In Iron-Ion/Glycerol Redox Flow Battery *James Akrasi*

10:30 am Anion effects on the Structure and Ion Transport Properties of Surface-Tethered Poly(Ionic Liquids) *Ian Njoroge*

10:45 am Applications of Shear Thickening Fluids(STF) for Transtibial Prostheses *Jehnae Linkins*

11:00 am Influence of Zeolite 4A/SiO2 on the Transport Behavior of O2, N2, CO2 and CH4 through Polydimethylsiloxane Nanocomposite Membrane *Emmanuel Ogbole*

11:15 am Pseudocapacitance for Early Transition Metal Nitrides in Protic Ionic Liquid Electrolytes *Jean Yves Ishimwe*

11:30 am Miniature device for molar mass analysis by combination of SAW and capacitance sensor *Thisara Walpita*

11:45 am Pay attention to mixing for successful process research, development and scale-up *Victor Atiemo-Obeng*

Technical Session 7: Computational Chemistry 1

Sponsored by Science Gateway Institute

10:15 am Paraphenylene Based Ruthenium (II) Polypyridyl Polymers: Computational and Processing Studies | *Sponsored by Science Gateway Institute* *Jamel White*

10:30 am Proton-coupled Electron Transfer in $[C5H5N{\cdot}(H2O)n = 3,4]^{-}$ *Kaye Archer*

10:45 am Nature of π-Stacking Interactions of Aromatic Nitro Compound Derivatives on Boron Nitride Nanosheets *Christopher Copeland*

11:00 am Chlorophenols Sorption On Multi-Walled Carbon Nanotubes: Dft Modeling And Structure-Property Relationship Analysis *Marquita Watkins*

Technical Session 8: Organic Chemistry: Synthesis and Characterization

1:45 pm Toward the Total Synthesis of Amphidinolide C *Daniel Akwaboah*

2:00 pm Diazo-Heteroatom Insertion/Conia-Ene Cascade: The Synthetic Blueprint to Building Spirocores *Arianne Hunter*

2:15 pm Synthesis and characterization of the gelation properties of a Series of peracetylated disaccharide triazoles *Ifeanyi Okafor*

2:30 pm A Modular Approach Toward Chondroitin Sulfate Oligosaccharides *Josette Wilkes*

2:45 pm Synthesis of A3B-type Phthalocyanine Analogues and Their Biological Evaluation *Elizabeth Okoth*

3:00 pm Synthesis of disaccharides via acid-catalyzed activation of a 4-aryl-3-butenylthioglycoside glycosyl donor *Kristina Deveaux*

3:15 pm B'Ønsted Acid-Catalyzed Disaccharide Formation Using Thioglycosides *Rashanique Quarels*

Technical Session 9: Nanoscience

1:45 pm Measuring ultrafast dynamics of single ZnO nanostructures by Ultraviolet femtosecond Kerr-gated wide-field fluorescence microscopy *Jolie Blake*

2:00 pm Organometallic Halide Perovskites in Photovoltaic Devices: Perspectives and Prospects *Trishelle Copeland-Johnson*

2:15 pm Deposition of porphyrins within alkanethiol nanostructures prepared with particle lithography *Ashley Taylor*

2:30 pm Capturing fast processes in live cells with 3D Multi-resolution microscopy *Kevin Welsher*

2:45 pm ALD-Functionalized Plasmonic Nantennas: Toward Single-Molecule Investigations of Photocatalysis *Stephanie Jean*

3:00 pm Electrospun Tri-layer Nanofiber Composite Membranes for H2/Air Fuel Cells *Devon Powers*

3:15 pm Selective detection of protein homologues by outer membrane protein G nanopore *Bib Yang*

Technical Session 10: Chemistry: Analytical Characterization

1:45 pm Combining Gas Chromatography, Gas Chromatography Mass Spectrometry and Principal Component Analysis to Facilitate Complete Detection and Identification of Fire Accelerants *Victoria Sedwick*

2:00 pm Controlling Chemical Vapor Transport Synthesis Of Bismuth Telluride Nanosheets On Mica Substrates *Quentarius Moore*

2:15 pm In vitro manipulation of stimuli-responsive liposomal contents release potentially activated by overexpressed hNQO1 in cancer cells *Huy Nguyen*

2:30 pm Ratiometric Fluorescence Detection of Hydroxyl Radicals Using Binary Cyanine-Based NanoGUMBOS *Mingyan Cong*

2:45 pm Investigation of materials Through Scanning Probe Microscopy *Marisa Richardson*

3:00 pm Preparation of Highly Fluorescent Environmentally Persistent Free Radical Surrogates: Surface Modification of Silica-coated Upconversion Nanoparticles with Nickel Oxide *Ansonia Badgett*

3:15 pm Nanoscale Patterning of Proteins: Toward Biosensor Development *Zachary Highland*

3:30 pm Cyclopropanes and Cyclobutanes as Precursors for Chemical Diversity *Raynold Shenje*

3:45 pm Organic Synthesis of Fluorescent Cyanine Dyes and their Precursors *Jahnn Drigo*

4:00 pm Tetrahedral Intermediate for a nonlinear optical chromophore of tetracyanoquinodimethane *Nneamaka Ndukwe*

4:15 pm Post-Synthetic Modification of Drug Candidates via C-H Functionalization *Stacy Fosu*

4:30 pm Microwave Synthesis and Analysis of Heptamethine Cyanine Dyes *Tijesunimi Odebode*

4:45 pm The Synthesis of Azepino[1,2-a]indole and Cyclohepta[b]indole Frameworks via Lewis Acid-Catalyzed Formal [5+2] Cycloaddition *Maria Martin*

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Technical Agenda

Thursday, November 10

Technical Session 11: Organic Chemistry II: Synthesis and Characterization

3:45 pm The Synthesis of Azepino [1,2-a]indole and Cyclohepta[b] indole Frameworks via Lewis Acid-Catalyzed Formal [5+2] Cycloaddition *Maria Martin*

4:00 pm Organic Synthesis of Fluorescent Cyanine Dyes and their Precursors *Jahnn Drigo*

4:15 pm Tetrahedral Intermediate for a nonlinear optical chromophore of tetracyanoquinodimethane *Nneamaka Ndukwe*

4:30 pm Post-Synthetic Modification of Drug Candidates via C-H Functionalization *Stacy Fosu*

4:45 pm Microwave Synthesis and Analysis of Heptamethine Cyanine Dyes *Tijesunimi Odebode*

5:00 pm Industry Organic Synthesis *Raynold Shenje*

Technical Session 12: Bio-inspired Materials, Polymers and Nanoscience

3:45 pm Mechanochemical Remodeling: From New Reactions to Adaptive Materials *Stephen Craig*

4:00 pm Endothelial Glycocalyx and Cancer Metastasis: The effect of Glycosaminoglycans on 4T1 Breast Cancer Cell Attachment to the Endothelium *Solomon Mensah*

4:15 pm Elucidating Bacterial Interactions in the Vaginal Microbiome Using Microfluidic Droplet Technology *Corine Jackman*

4:30 pm Synthesis of Biodegradable Polycarbonate Nanostructures with Selective Lysis against Gram Positive Bacteria *Alekhya Nimmagadda*

4:45 pm Nonlinear Optical Imaging of Liver Cancer Cells Using Plasmon Coupled DNA-Mediated Gold Nanoprism Assembly *Jasmine Burrell*

5:00 pm Cellular Sorting and Concentration in a Direct-Current Insulator-Based Dielectrophoretic Microchannel *Ezekiel Adekanmbi*

Technical Session 13: Analytical II: Chemical Separations and Characterization

3:45 pm Electrochemically Modulated Extraction of Neodymium *Shannon Anderson*

4:00 pm Lectin affinity chromatography and Immunextraction as a tool to study the effect of glycosylation on drug binding property of Alpha1- acid Glycoprotein *Kenan Dzide*

4:15 pm Optimizing High Throughput Sieving Electrophoresis of Proteins Using Silica Colloidal Crystals *Tamika Ragland*

4:30 pm Capillary Electrophoretic Enzyme Assay of Acetyl Coenzyme A Carboxylase *Thu Nguyen*

4:45 pm Gradient Enhanced Fluidity Liquid Chromatography of Oligosaccharides and Simple Sugars *Raffeal Bennett*

5:00 pm Improved Protein Separations Using Cationic Polyacrylamide Gel Electrophoresis with Ionic Liquid Surfactants *Punprabhashi Vidanapathirana*

5:15 pm Alterations in metabolism pathways of late-stage Alzheimer's disease mice using the quantitative proteomics technique cPILOT *Christina King*

Friday, November 11

Professional Technical Session 1: University Scientists and Their Advancements in Research and Development

9:00 am Development of a Practical Hydroamination Transform for use in Complex Synthesis *Martin Tabor*

9:15 am Stimuli-responsive materials: from photoinduced charge carriers in metallopolymers to temperature sensitive drug delivery depots *Darlene Taylor*

9:30 am Organic Dye Based Turn-On Sensors for Metal Ions and Nerve Gas Mimics in Organic Media *Fasil Abebe*

9:45 am Microwave Induced Thermal Gradients in Multiphase Systems *Alvin Kenned*

10:00 am Light Activation of a Ruthenium(II) Caged Antimicrobial *Robert Garner*

10:15 am Dual-Marker Isolation and Characterization of Pancreatic Ductal Adenocarcinoma Circulating Tumor Cells via EpCAM- and CD44- based Immunomagnetism *Rhonda Jack*

10:30 am Spectroscopic Investigation of Metal Ion Interactions with Cellulose Nanofibrils *Todd Coolbaugh*

10:45 am Designing Superhalogens: Insights and Predictions from Electron Propagator Theory *Vince Ortiz*

11:00 am Photochemical activation of metastable H2 in the universe *William ackson*

Professional Technical Session 2: Recent Advancements in Government Research

9:00 am High-Temperature, High-pressure Viscosity Reference Fluid Search: Status *Isaac Gamwo*

9:15 am Synthesis of nanoinks using novel precursors for advanced Direct Write applications *LaRico Treadwell*

9:30 am Flux Syntheses and Structural Characteriation of Cu(I)-M(V) Oxide Semiconductors *Nacole King*

9:45 am Extracting Rare Earth Elements from Coal Ash by Reactive Grinding *Murphy Keller*

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Friday, November 11

Award Session: Henry McBay Outstanding Educator Award Session - STEM Education

9:30 am STEAM Education as Activism - Social Implications of Black Productivity in Agriculture, Chemistry, Biochemistry, and Related Disciplines *Ashley Oyirifi*

9:45 am How Do Student's Experience a Project-Based Lab? *Nikita Burrows*

10:00 am Training Effective Communication to Prepare Future STEM Leaders in Chemistry *Danielle Watt*

10:15 am Gateway science pathways for STEM majors at Duke University *Canelas Canelas*

10:30 am African American Female Engineering Students Persistence in Stereotype Threatening Environments: A Critical Race Perspective *Stacie Gregory*

11:00 am Overcoming Resistance: Integrating Guided Inquiry Methods into the Traditional Lab Construct at Three Greatly Differing Laboratory Environments *ColleenTaylor*

11:15 am Successful Interventions for STEM Scholars *Aliecia McClain*

11:30 am Process Oriented Guided Inquiry Learning (POGIL) - The fundamentals *Tricia Shepherd*

11:45 am Formation of a NOBCChE and ACS Chapter *Josley Pierre-Louis*

12:00 pm The Intersection between Mentoring, Microbiome, and Mannose Binding C-Type Lectins *Charnell Long*

Technical Session 21: Computational Chemistry 2

8:00 am Composite Electron Propagator Methods: Application to C60, Benzo[a] pyrene and Mg-octaethylporphyrin *Manuel Diaz-Tinoco*

8:15 am Designing Superhalogens: Insights and Predictions from Electron Propagator Theory *Vincent Ortiz*

8:30 am Reorganization Energies, Ionization Potentials, and Electron Affinities of 4-([2,2'-bithiophene]-5-yl) pyridine and 4-[5-(furan-2-yl)thiophen-2-yl] pyridine *Alva Dillon*

8:45 am Using the iTTM model with Replica Exchange Molecular Dynamics Simulations to Analyze Alkali-Metal-Water Clusters: Structures, Interactions and Vibrational Frequencies *Achombom (Jude) Tunyi*

Technical Session 14: Biochemistry

9:00 am PH-Dependence Of Kinetic Parameters Of E109Q And H40A Mutants Of F420-Dependent Glucose-6-Phosphate Dehydrogenase From Mycobacterium Tuberculosis *Mercy Oyugi*

9:15 am Bioethanol production by fermentation of ionic liquidbhydrolyzed lignocellulosic biomass using genetically engineered Zymomonas mobilis *Mercy Ampaw-Asiedu*

9:30 am Towards Rapid Inhibitor Screening And Mechanistic Evaluation Of TB Sikimate Kinase: Targeted Intrinsic Protein Fluorescence *Rene Fuanta*

9:45 am Mechanism of Multidrug Resistant Efflux Pumps *Abigail T. Ntreh*

10:00 am Analysis of the Binding Affinity, Thermodynamic Properties and Determinations of Propanil and Bromoxynil Herbicide Concentrations in Human Serum Albumin Using Fluorescence Spectroscopy *Eric Appah*

10:15 am Homogeneous Thermofluorimetric Assays for Measuring Both Second Messenger Signaling and Hormone Secretion *Juan Hu*

10:30 am Development of DC-SIGN Probes for Identification of Gut Microbial Species *Chariesse Ellis*

10:45 am Structrual Characterization of Bat Coronavirus HKU9 non structural protein 3 - M domain *Pamlea Brady*

11:00 am Blood Coagulant Factor Xiii Cross-Links Reactive Glutamines In Disordered Regions Of Fibrinogen Ac *Kelly Njine Mouapi*

11:15 am Optimizing the Protein Yield of TsrM, a Class B Radical SAM Methylase *Brianne Jones*

Technical Session 15: Environmental Science & Engineering

Sponsored by Freeport LNG

9:15 am Uranyl Sensing Using 2-Quinoxalinol Salen Ligands *Maya West*
Sponsored by Freeport LNG

9:30 am Application of Environmental Pill for Remediating Surface Water *Niya King*

9:45 am Crop Protection Utilizing Integrated Pest Management through Early Detection and Identification of Pathogens and Predators *Alexia Moore*

10:00 am Utilizing SO2/CO and SO2/CO2 Mixing Ratios to Determine the Effective Oxidative Strength of the Wintertime Atmosphere on SO2 *Jaime Gree*

10:15 am Carbon Capture with Polyethylenimine (PEI) Functionalized Titanate Nanotubes *Melisa Stewart*

10:30 am Isolation And Identification Of The Phytochemicals From The Leaf Etract Of Tabernaemontana Longipes *Simira Carothers*

10:45 am Fabrication of Ultra-Filtration Membrane to Mitigate Organic Fouling During Water Treatment *Efosa Igbinigun*

11:00 am Hydraulic fracturing fluid and pyrite surface reactions of selected biocides: dazomet and DBNPA *Nizette Consolazio*

11:15 am Quest for the Greener Boom: Accessing Explosive High-Nitrogen Cocrystals *Rosalyn Kent*

The Effect Of Different Extraction Techniques And Solvent System On The Antioxidant Activity Of Pyrus Pyrifolia Fruit Peel Extracts *Priyesh Dwivedi*

Friday, November 11

Technical Session 16: Bio-inspired II - Materials, Polymers and Nanoscience

1:30 pm Chemical Modification of Functionalized Polyhydroxyalkanoates via "Click" Chemistry: A Proof of Concept *Samuel Nkrumah-Agyeefi*

1:45 pm Diversifying the Chitin Economy: Different Sources of Biomass for Chitin Extraction and Biomaterial Formationg *Ezinne Achinivu*

2:00 pm Electroactive Polymeric Nanofibers as Active Component in Biosensors *Genefine Sapateh*

2:15 pm Effects of Metal Ions on the Antimicrobial Properties of Silver Nanoparticles *Chartanay Bonner*

2:30 pm Comprehensive mutagenesis on yeast cytosine deaminase to increase its sensitivity for 5-fluorocytosine for suicide-gene therapy *Tiana Warren*

2:45 pm Artificial Photosynthesis: Modulation of Photo-induced Events in Palladium Porphyrin-Fullerene Donor-Acceptor Systems *Christopher Otara bondi*

3:00 pm Exploring Advanced Amphiphilic Arylazopyrazole Molecular Photo-switches for Fabrication into Micellar Hydrophobic Drug Carriers with an Advantageous Photo-Triggered Delivery *Stefan Cooper*

3:15 pm Experimental Studies of Jamming in Colloidal Systems using Confocal Microscopy *Eru Kyeyune-Nyombi*

Technical Session 17: Biochemistry and Chemical Biology

12:00 pm The Intersection between Mentoring, Microbiome, and Mannose Binding C-Type Lectins *Henry McBay*

1:30 pm Analysis of DNA damage induced by mono-functional quinone methide intermediates *Blessing Deeyaa*

1:45 pm Pharmacological investigations of angiotensin II type 1 receptor blockers reveal effective physiological concentrations in the eye after administration via drinking water *Ralph Hazlewood*

2:00 pm Structural and Biochemical Analysis of Bat-CoV HKU9 C Nonstructural Protein 3 Domain *Robert Hammond*

2:15 pm The Ferrous Iron (Fe2+) Effect on Prebiotic Phosphorylation of Nucleosides *Mischael Daniel*

3:00 pm Nitrosylation Reactions of the [4Fe-4S] Cluster Regulatory Proteins WhiD and NsrR Probed with Nuclear Resonant Vibrational Spectroscopy, Mössbauer Spectroscopy, and Density Function Theory Calculation *Pauline Serrano*

3:15 pm Molecular design and biological evaluation of disulfide-masked prochelation strategies targeting iron in malignant cells *Eman Aka*

Biochemical Studies of a Capsule Producing Glycosyltransferase from Neisseria meningitidis *Pumtiwitt McCarthy*

Selective molecular recognition using acyclic cucurbiturils *Sandra Zebaze Ndendjio*

Harnessing Cyclic AMP Signaling for Bone Regenerative Engineering *Guleid Awale*

Technical Session 18 Inorganic Material and Synthesis (InOrgMatSyn)

1:45 pm Small gold nanoparticles interfaced to electrodes through molecular linkers: A platform to enhance electron transfer and increase electrochemically active surface area *Jaclyn Kellon*

2:00 pm Investigating the use of some Pt-group inorganic compounds for biological applications *Regina Akhimie*

2:15 pm Visual Detection of Degraded Glutathione Peptides via the Prevention of Gold Nanoparticle Dipole-Dipole Interactions *Monique Farrell*

2:30 pm Alkali-Metal Capped Cerium(IV)-Imido Complexes *Lukman Solola*

2:45 pm Syntheses And Binding Studies Of Novel Trisamine-Based Thiosemicarbazide Receptors For Anions *Corey Johnson*

3:00 pm Cage Opening Of The Carborane Ligand, Closo-O-(1-SCH3)C2B10H11 By Triosmium Carbonyl Cluster Complexes *Joseph Kiprotich*

3:15 pm Synthetic and Structural Comparisons Between Group 14 Dithiolato Metalylenes and First Row Transition Metal Dithiolato Complexes *Jade Pratt*

Technical Session 19: Functional Materials, Electrochemistry, Nanoscience (FMEN)

1:30 pm High Capacity, Long Cycling Lithium Iron Phosphate (Lifepo4) Electrode Fabrication For Lithium Ion Battery *Venroy Watson*

1:45 pm Keratin Films as a Substrate for Hair Dye Studies *Tova Williams*

2:00 pm Investigation of Rheological and Cure Kinetics Graphite/Graphene dispersed in Phenylethynyl Terminated Imide Resins *Lionel Cross*

2:15 pm Inhibiting Interfacial Recombination Events in Dye Sensitized Solar Cells using Self-Assembled Bilayers *Omotola Ogunsolu*

2:30 pm Enhancing Solution Processed Solar Cell Photocurrents via Plasmonic Nanoparticles *Ebuka Arinze*

Technical Session 20: Medicinal Chemistry, Pharmacology, Pharmaceutical chemistry. (MCPPC) *Sponsored by GSK*

1:30 pm Design and Synthesis of Potential CXCR4 Modulators *Theresa Gaines*
Sponsored by GSK

1:45 pm Discovery And Characterization Of Aryl Isonitriles As A New Class Of Compounds Versus Methicillin- And Vancomycin-Resistant
2:00 pm Staphylococcus Aureus *Kwaku Kyei-Baffour*

Investigation of Clickable Peptidic-BODIPY Conjugates *Tyrslai Williams*

2:15 pm Synthesis Of Indole-Based Allosteric Hiv-1 Integrase Inhibitors *Janet Antwi*

2:30 pm Late-stage C-H Functionalization of Phyllanthusmin Natural Products *Chido Hambira*

2:45 pm NanoGUMBOS: Tunable Nanomaterials for Biomedical Applications *Isiah Warner*

4:00 pm - 5:00 pm Symposium 5: NOBCChE "2- Minute Drill" Research Pitch
204