May 5, 2018





New York's American Chemical Society – Student Activities Committee 66th Annual Undergraduate Research Symposium York College - CUNY Jamaica, NY

Saturday, May 5, 2018

8:00	Registration and Continental Breakfast	The Performing Arts Center (PAC) Lobby
9:00	Welcoming Remarks	PAC Auditorium
	Dr. Paul Sideris Dr. Panayiotis Meleties Dr. Avrom Caplan Dr. Joseph Serafin Dr. Ruel Desamero	Co-Chair, NY ACS, Student Activities Committee Provost of York College – CUNY Associate University Dean of Research – CUNY 2018 Chair, NY ACS Chair, York College - CUNY Department of Chemistry
9:20	Keynote Address	PAC Auditorium
	Dr. Dhabih V. Chulhai	University of Minnesota
	Understanding Chemistry Using Theoretical Embedding Methods	

10:20	Instructions for the day Dr. Yolanda Small	Co-Chair, NY ACS, Student Activities Committee
10:30	Group Photo	Courtyard of the Academic Core Building
11:00	Presented Papers Analytical Chemistry Biochemistry Chemical Education Environmental/Green Chemistry Inorganic Chemistry Nano and Surface Chemistry Organic Chemistry Physical Chemistry Polymer Chemistry	Academic Core (AC) Building 2A05, 2B01 3H16, 3H15, 3H11-A, 3H11, 3A04 1E04 2B02, 2B04, 2C04, 2C05 2C02 3A05, 3B02, 3C03, 3C05 1B04, 1C04, 1C05 1M06 1M07
12:40	Luncheon / Award Reception	Health and Physical Education Complex
1:25	Chemistry Demonstrations Prof. Lawrence Johnson Dr. Daniel Robie Presentation of Certificates Dr. Ipsita Banerjee Dr. Naphtali O'Connor	Faculty, Dept. of Chemistry – York College Faculty, Dept. of Chemistry – York College Co-Chair, NY ACS Student Activities Committee Co-Chair, NY ACS Student Activities Committee
1:45	Sponsor Exhibit & Kaplan Raffle The raffle includes a Kaplan Test Prep Package valued at more than \$2K	Health and Physical Education Complex

KEYNOTE SPEAKER



Dr. Dhabih V. Chulhai University of Minnesota

Dhabih Chulhai grew up in Guyana and began his studies in chemistry at the University of Guyana. He received his B.S. in Chemistry at York College of the City University of New York (CUNY) in 2011, where he worked with Prof. Ruel Desamero, and his Ph.D. in Chemistry from Pennsylvania State University in 2016, working with Prof. Lasse Jensen. Since then, he has been working as a postdoctoral associate with Dr. Jason Goodpaster at the University of Minnesota. Dr. Chulhai was awarded the Eugene and Jane Apple Science Graduate Fellowship at Penn State University for his contributions to the National Science Foundation's (NSF), Center for Chemical Innovation (CCI) entitled Center for Chemistry at the Space-Time Limit (CaSTL). In CaSTL he worked with a team to develop and use theoretical methods to understand chemistry at the smallest possible length and time scales. He is currently a part of the Department of Energy's Nanoporous Materials Genome Center, where his research is focused on developing and using highly accurate quantum chemical methods to guide the discovery of novel materials.

KEYNOTE ADDRESS

Understanding Chemistry Using Theoretical Embedding Methods

All of chemistry may be understood by solving the time-dependent Schrödinger equation for the relevant system, although exact solutions are often impossible or computationally too expensive. Theoretical and computational chemists seek to find and use shortcuts that are both accurate and computationally tractable to solve this equation. Luckily, most of chemistry often occurs in a small region of an otherwise complex environment. As such, we are interested in using embedding methods—where we use a highly accurate method to describe the small region of interest but describe the rest of the environment using less accurate methods—to model systems. Experiments are now able to observe chemistry happening one molecule at a time, using techniques like surface-enhanced and tip-enhanced Raman scattering. We will show how using these embedding methods allows us to gain insights into these experimental findings.

ANALYTICAL CHEMISTRY I

Room: AC-2B01 Moderators: Ahmer Riaz/Sam Roth

- 11:00 CALCULATION OF THE IONIZATION CONSTANT OF CARBOXYLIC ACIDS IN MIXED SOLVENTS VIA FREEZING POINT DEPRESSION MEASUREMENTS. Edison Mera and Paris Svoronos Department of Chemistry, Queensborough Community College, Bayside NY 11364
- 11:15 SPECTROSCOPIC STUDY OF THE INTERACTION BETWEEN NOVEL ANTICANCER DRUG CANDIDATES AND HUMAN SERUM ALBUMIN. Ewa Swiechowska and Dr. Jianwei Fan Department of Chemistry, Manhattan College, Riverdale, NY 10471
- 11:30 LIPOBEADS ON HYDROPHOBICALLY MODIFIED GLASS SLIDES THROUGH TEMPERATURE-CONTROLLED MICROSCOPY.

 Gregory Vance and Sergey V. Kazakov Department of Chemistry & Physical Sciences, Pace University, Pleasantville, NY 10570
- 11:45 DETERMINATION OF THE REFRACTIVE INDEX OF CALCIUM NITRATE MEASURED BY THE EXTENSION METHOD. Jiweon Park and Jun H. Shin, Department of Chemistry, Queensborough Community College, Bayside, NY 11364
- 12:00 OPTIMIZATION OF SALT AND pH TO GENERATE HIGHLY SPECIFIC APTAMER AGAINST BURKITT'S LYMPHOMA. John Bradshaw, Hasan Ekrem Zumrut, Prabodhika Mallikaratchy Department of Chemistry, Lehman College, The City University of New York, Bronx NY, 10468
- 12:15 THERMODYNAMIC STUDY OF EXTERIFICATION OF ACETIC ACID AND ISO-AMYL ALCOHOL USING A MICROWAVE REACTOR. Keiann Simon and Jun H. Shin Department of Chemistry, Queensborough Community College, Bayside, NY 11364

ANALYTICAL CHEMISTRY II

Room: AC-2A05 Moderator: Aastha Bhandari/Alexis Lashley

- 11:00 ELEMENTAL ANALYSIS OF ARSENIC IN RICE SPECIATION.

 Khushpreet Kaur, Lori Aleo, Sominique Stutts and Paris Svoronos

 Department of Chemistry, Queensborough Community College, Bayside NY 11364 Northeast Regional Laboratory, Food and Drug Administration, Jamaica, NY 11431
- 11:15 BIOREMEDIATION OF TEXTILE DYES WITH MUSSEL SHELLS.

 <u>Logan Graney</u> and Dr. Yelda Balkir Department of Environmental Science,
 Manhattan College, Bronx, NY 10471
- 11:45 CATALYTIC CONVERSION OF CARBON DIOXIDE VIA HYDROGENATION OVER A NOVEL PD BASED HETEROGENEOUS CATALYST. Qing Zhao and Cheng Zhang Department of Medical Imaging, School of Health Professions and Nursing, Long Island University (Post), Brookville, NY 11548
- 12:00 PREPARATION OF BIO-ORGANIC DERIVATIVES FOR SENSING CIRCULATING TUMOR CELLS IN VITRO. Sara K. Hurley and Ipsita A. Banerjee Department of Chemistry, Fordham University, Bronx, NY 10458
- 12:15 METABOLIC PROFILING OF GENETICALLY MODIFIED POTATO PERIDERM TISSUES. Stephan Smith, Liqing Jin, Qing Cai, Keyvan Dastmalchi and Ruth E. Stark Department of Chemistry and Biochemistry, The City College of New York, City University of New York and CUNY Institute for Macromolecular Assemblies, New York, NY 10031

BIOLOGICAL CHEMISTRY I

Room: AC-3H16 Moderator: Amanda Segarra

- 11:00 SINGLE AMINO ACID INSERTION INCREASES CATALYTIC EFFICIENCY OF P99 CEPHALOSPORINASE. Anthony Sica, Jenn Kim, and Scott T. Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11459
- 11:15 EVOLUTION OF CEPHAMYCINASE ACTIVITY IN CLASS C BETA-LACTAMASES. <u>Hardler Servius</u>, Liliana Hinojos Madrid and Scott T. Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11549
- MAPPING 11:30 FUNCTIONAL OF THE **O-POLYPEPTIDE** N-ACETYLGALACTOSAMINYL TRANSFERASES (GALNT) VIA HIGH-THROUGHPUT ANALYSES **MIRNA-MRNA** OF INTERACTIONS. Deepika Dhawan and Lara K. Mahal Department of Chemistry, New York University, New York, NY 10003
- 11:45 CHARACTERIZATION OF KINASE SPECIFIC PHOSPHORYLATION SITES ON HIV PEPTIDES. Chowdhury Sajid, Emmanuel Chang and Pratikkumar Rathod Department of Chemistry, York College-CUNY, Jamaica, NY 11451
- 12:00 IDENTIFICATION OF PHOSPHORYLATED SITE OF HIV-1 RNA.

 <u>Dennis Baidoo</u>, <u>Adrian Chamorro</u> and Emmanuel Chang Department of Chemistry, York College, Jamaica, NY 11451
- 12:15 COMPLEMENT OF HIV PHOSPHORYLATION SITES. Alejandra Calcagno, Pratikkumar Rathod and Prof. Emmanuel Chang Department of Chemistry, CUNY York College, Queens, NY 11451

BIOLOGICAL CHEMISTRY II

Room: AC-3H15 Moderators: Amber Ali/Ashef Ameer

- 11:00 EXPLORING CHROMATIN DYNAMICS WITHIN THE DNA DAMAGING RESPONSE PATHWAY IN LIVING CELLS. Bright Shi, Joseph Mozdzierz and Bryan J. Wilkins Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- 11:15 FUNCTIONAL AND STRUCTURAL INSIGHTS INTO RSC-MEDIATED NUCLEOSOME REMODELING VIA IN VIVO CROSSLINKING. Brian Evans and Bryan J. Wilkins Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- 11:30 UNDERSTANDING THE FORMATION OF A FLUID-LIKE, NON-MEMBRANE BOUND UNFOLDED PROTEIN INCLUSION. Djeneba Kone, Sarah Singh, Sen Pei and Lesley Emtage Department of Biology, York College, City University of New York, Jamaica, NY 11451
- 11:45 DEVELOPMENT OF AN ULTRASENSITIVE FLUORESCENT PROBE FOR FUNCTIONAL INVESTIGATION OF CATHEPSIN L AT THE PROTEOME LEVEL. Emmad Gabbar, Ashif I Bhuiyan and Sanjai Kumar Department of Chemistry and Biochemistry, Queens College CUNY, Queens, NY 11367
- 12:00 A STUDY OF PEPTIDE CONJUGATES AS POTENTIAL AGONISTS OR ANTAGONISTS OF AMYLIN AGGREGATION. Hannah G. Goldman, 1 Jayson Vedad2 and Ruel Z. B. Desamero2 1 Department of Chemistry, Hofstra University, Hempstead, NY 11549 2 Department of Chemistry, York College and The Institute for Macromolecular Assemblies, Jamaica, NY 11451
- 12:15 PROSTATE CANCER METABOLISIM AND ITS IMPACT ON CHRIMERIC ANTIGEN RECEPTOR (CAR) T-CELL IMMUNOTHERAPY. Avi S. Albeg, 1,4,5 Mayuresh Mane, 1,4 Ivan J. Cohen, Khalid Shalaby, 1,4 Joshua I. Albeg, 1,4 Anna Moroz, 3,4 Juan Zurita, 1,4 Larissa Shenker, 3,4 Ekaterina Moroz, 1,4 Maxim Moroz, 1,4 Masatomo Maeda, 1,4 Masahiro Shindo, 1,4 Myat Ko, 1,4 Inna Serganova, 1,4 Vladimir Ponomarev 1,4 and Ronald Blasberg 1,3,4 Department of Neurology 2GSK Graduate School Department of Radiology Molecular Pharmacology and Chemistry Program Memorial Sloan Kettering Cancer Center, New York, NY 10021 Department of Biological Sciences at Hunter College (CUNY), New York, NY 10065

BIOLOGICAL CHEMISTRY III

Room: AC-3H11-A Moderator: Ataya K. Horn

- 11:00 DEVELOPMENT **OF FUNCTIONALIZED BIOMIMETIC CARDIAC** SCAFFOLDS **FOR** TISSUE **ENGINEERING—AN** INVESTIGATION PHYSICO-CHEMICAL, OF **MECHANICAL** PROPERTIES OF CYTOCOMPATIBILITY. Harrison T. Pajovich, Mindy M. Hugo, Sara K. Broas, Andrew M. Smith and Ipsita A. Banerjee Department of Chemistry, Fordham University, Bronx, NY 10458
- 11:15 COBALT (II) ION: DIRECT ACTIVATOR OF ANTIHYPOXIC AND ANTIOXIDANT PROGRAMS. Jessica Zhinin-Yanqui, Ellen Weiser, Nancy Krucher and Irina Gazaryan Department of Chemistry & Physical Sciences Department of Biology, Pace University, Pleasantville, NY 10570
- 11:30 TIN (II) ION: A POTENT ACTIVATOR OF ANTIOXIDANT GENETIC PROGRAM. John Caperella, Ellen Weiser, Nancy Krucher and Irina Gazaryan Department of Chemistry & Physical Sciences and Department of Biology, Pace University, Pleasantville, NY 10570
- **11:45 SCREENING OF BIOFILM PRODUCING GENES IN WILD ISOLATES OF** *BACILLUS SUBTILIS.* Ryan Torres and Sarah Wacker Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- **12:00 INVESTIGATING THE ROLE OF THE MED PROTEIN IN BIOFILM FORMATION.** <u>Juan C. Lara-Garcia</u> and Sarah Wacker Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471
- 12:15 INVESTIGATION OF BIOFILM PROMOTING MOLECULES. Nadeen Moawiah and Sarah Wacker Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471

BIOLOGICAL CHEMISTRY IV

Room: AC-3H11 Moderator: Binyamin Simkhaev

- 11:00 SYNTHESIS OF GPR171 RECEPTOR ANTAGONISTS AS NOVEL ANTI-OBESITY AGENTS. Matania Yehounatan, Chris Johnson, Ashif Bhuiyan and Sanjai Kumar Department of Chemistry and Biochemistry, Queens College CUNY, Queens, NY 11367
- 11:15 A NEEDLE IN A HAYSTACK: ANTIBACTERIAL ACTIVITY-GUIDED FRACTIONATION OF POTATO WOUND TISSUE EXTRACT. Mathiu Perez Rodriguez, Keyvan Dastmalchi and Ruth E. Stark. Department of Chemistry and Biochemistry, The City College of New York, City University of New York and CUNY Institute for Macromolecular Assemblies, New York, NY 10031
- 11:30 INTERACTION OF IONOPHORIC POLYPHENOLS WITH HUMAN SERUM ALBUMIN (HSA). Miguel A. Gomez, Sinji Shibutani and Alberto Martínez Department of Chemistry, NYC College of Technology, Brooklyn, NY 11201
- 11:45 SYNTHESIS AND BIOLOGICAL EVALUATION OF HISTONE ACETYLTRANSFERASE ACTIVATORS FOR THE TREATMENT OF ALZHEIMER'S DISEASE. Maria Balabanian, Shi-Xian Deng, Donald Landry, Ottavio Arancio and Jole Fiorito Department of Life Sciences, New York Institute of Technology, Old Westbury, NY 11568 Department of Medicine, Columbia University Medical Center, New York, NY 10032 TAUB Institute, Columbia University Medical Center, New York, NY 10032
- 12:00 CRYSTALLIZATION OF LYSOZYME IN THE PRESENCE OF DIFFERENT CONCENTRATIONS OF POLYETHYLENE GLYCOL.

 Rigoberto Gomez Jr. and Dr. Moriamou K. Antwi Department of Chemistry, St. Joseph's College, Brooklyn, NY 11205
- 12:15 CRYSTALLIZATION OF LYSOZYME USING PEG AND SALT SOLUTIONS. Tasnim Faruque and Moriamou Kone Department of Chemistry, St. Joseph's College, Brooklyn, NY 11205

BIOLOGICAL CHEMISTRY V

Room: AC-3A04 Moderator: Davendra Ramnarain

- 11:00 RNAi SILENCING OF THE *StNAC103* GENE IN POTATO TUBERS: HOLISTIC VIEW OF COMPOSITIONAL CHANGES BY MONITORING POLAR AND NONPOLAR METABOLITE PROFILES AND SOLID-STATE NMR ANALYSIS OF SUBERIN-ENRICHED TISSUES. Oseloka Chira, Keyvan Dastmalchi and Ruth E. Stark Department of Chemistry and Biochemistry, The City College of New York, City University of New York and CUNY Institute for Macromolecular Assemblies, New York, NY 10031
- 11:15 MODELING POTENTIAL BACE1 INHIBITORS. Johnny Guevara, ¹ Miguel Gomez, ² Mai Zahran ¹ and Alberto Martinez ² ¹Department of Biological Sciences and ²Department of Chemistry, New York City College of Technology, Brooklyn, NY 11201
- 11:30 BAMBOO ROOT MICROBES AS A SOURCE OF NOVEL METABOLITE PRODUCTION. Andy Moyal and Akira Kawamura Ph.D. Department of Chemistry, Hunter College, New York, NY, 10065
- 11:45 MOLECULAR MECHANISM OF FEEDBACK REGULATION BY RNASE E. Salah Eldein Elkattawy, Jamie Richards and Joel G. Belasco Department of Chemistry, New York University, New York, NY 10003 Skirball Institute of Biomolecular Medicine, NYU Langone Medical Center, New York, NY 10016
- 12:00 DESIGN OF A DIMERIC APTAMER AGAINST B-CELL RECEPTOR.

 Sana Batool,² Kimon Argyropoulos,³ Rigzin Dekhang¹ and Prabodhika Mallikaratchy^{1,2} ¹Ph.D. Program in Chemistry and Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016 ²Department of Chemistry, Lehman College, The City University of New York Bronx, NY 10468³Lymphoma Memorial Sloan Kettering Cancer Center, New York, NY 10022
- 12:15 DESIGN AND SYNTHESIS OF NOVEL ACYLHYDRAZONES AS NEXT-GENRATION ANTIFUNGAL AGENTS. Senuri Pathiranage, Krupanandan Haranahalli, Cristina Lazzarini, Maurizio Del Poeta, Iwao Ojima^{1,2} Department of Chemistry, Stony Brook University, Stony Brook, NY 11794 Institute of Chemical Biology & Drug Discovery, Stony Brook University, Stony Brook, NY 11790-3400 Department of Molecular Genetics and Microbiology, Stony Brook University, Stony Brook, NY 11794-5222

CHEMICAL EDUCATION

Room: AC-1E04 Moderator: Waseem Sheikh

- 11:00 INITIATING INQUIRY-BASED FIRST SEMESTER CHEMISTRY LABORATORY. Victoria Pirulli, Alexandra Kaziyeva, Arwa El-Rowmeim, Aryeh Itzkowiz, Stephen Farenga and Gopal Subramaniam Department of Chemistry and Biochemistry, Secondary Education and Youth Services, Queens College, Flushing, NY 11367
- 11:15 FIRST YEAR EXPERIENCE OF CHEMISTRY PEER MENTORS AT QUEENS COLLEGE. Angie Calle, Victoria Pirulli, Stephen Farenga and Gopal Subramaniam Department of Chemistry and Biochemistry, Secondary Education and Youth Services, Queens College, Flushing, NY 11367
- 11:30 PEER MENTORS FOR STUDENT SUCCESS IN SCIENCE COURSES LESSONS FROM A COMMUNITY COLLEGE SETTING. Arlind Kacirani, 1,2 Paul Sideris, 1 Peter Novick, 2 Stephen Farenga, 3 Gopal Subramaniam 1 Department of Chemistry and 2 Department of Biological Science and Geology, Queensborough Community College, Bayside, NY 11364 3 Department of Chemistry and Biochemistry and SEYS, Queens College, Flushing, NY 11367
- 11:45 DEVELOPMENT AND DEPLOYMENT OF AN ONLINE MOTIVATED STRATEGIES FOR LEARNING QUESTIONNAIRE. Nishal Kayharee and Kevin Kolack Department of Chemistry, Queensborough Community College CUNY, Bayside, NY 11364
- 12:00 INVESTIGATING STUDENT MISCONCEPTIONS IN UNDERSTANDING ACID-BASE REACTIONS IN UNDERGRADUATE ORGANIC CHEMISTRY COURSES USING VARIOUS FORMATIVE AND SUMMATIVE ASSESSMENT TOOLS. Heba Shaaban, Leah Katz and Manashi Chatterjee Department of Chemistry, CUNY Hunter College, New York, NY 10065
- 12:15 INVESTIGATING STUDENT MISCONCEPTIONS IN APPLYING RESONANCE CONCEPTS IN UNDERGRADUATE ORGANIC CHEMISTRY COURSES USING VARIOUS FORMATIVE AND SUMMATIVE ASSESSMENT TOOLS. Leah Katz, Heba Shaaban and Manashi Chatterjee Department of Chemistry, CUNY Hunter College, New York, NY 10065

GREEN CHEMISTRY I

Room: AC-2B04 Moderator: Genesis Narvaez/Zoe Nikolopoulos

- **11:00 SYNTHESIS OF FUNCTIONALIZED IONIC LIQUIDS.** <u>Fei Li</u>, Rawlric Sumner, Jasodra Ramdihal, Tirandai Hemraj-Benny and Sharon Lall-Ramnarine Department of Chemistry, Queensborough Community College, Bayside, NY, 11364
- 11:15 TRANSPORT PROPERTIES OF IONIC LIQUID MIXTURES WITH SINGLE-WALLED CARBON NANOTUBES. Rawlric Sumner, James Wishart, Tirandai Hemraj-Benny and Sharon Lall-Ramnarine Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364 Chemistry Division, Brookhaven National Laboratory, Upton, NY 11973
- 11:30 HOW DOES VARIATION IN THE LENGTH AND FLUORINATION OF ANION SIDE CHAINS AFFECT IONIC LIQUID PROPERTIES?

 Jasodra Ramdihal, Chanele Rodriguez, Kristina Papacostas, Eddie Fernandez, Edward Castner, James Wishart and Sharon Lall-Ramnarine Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364 Department of Chemistry and Chemical Biology, Rutgers University, Piscataway, NJ 08854 Chemistry Division, Brookhaven National Laboratory, Upton, NY 11973
- 11:45 THE EFFECT OF VARYING THE ALKYL CHAIN LENGTH OF IONIC LIQUIDS ON CELLULOSE DISSOLUTION. Adam Agababayev, Chaudhary Harris and Marie F. Thomas Department of Natural Science, Fordham University, New York, NY 10023
- **12:00 BIOREMOVAL OF DIBENZOTHIOPHENE FROM SYNTHETIC FUELS BY MODIFIED CLAYS.** Adkhamjon Soliev, Tesfamichael Demeke, and Abel E. Navarro Department of Science, Borough of Manhattan Community College, New York, NY 10007
- 12:15 ENVIRONMENTALLY BENIGN SYNTHESIS OF BIODIESEL FROM ALGAE OIL AND BIOWASTE. Cedric Adams, Zoe Nikolopoulos and Yelda Hangun-Balkir Department of Chemistry, Manhattan College, Bronx, NY 10471

GREEN CHEMISTRY II

Room: AC-2B02 Moderator: Jacob Sokol

- 11:00 DEVELOPMENT OF IRON BASED HETEROGENEOUS CATALYSTS FOR CARBON DIOXIDE HYDROGENATION TO VALUE-ADDED PRODUCTS. Alessandro Tripoli and Cheng Zhang Department of Chemistry, Long Island University, Brookville NY 11548
- 11:15 CARBON DIOXIDE CONVERSION BY A NOVEL PD-PT BASED HETEROGENEOUS CATALYST. Anam Salzano, Qing Zhao and Cheng Zhang Department of Chemistry and Department of Nursing, Long Island University Post, Brookville, NY 11548
- 11:30 CARBON DIOXIDE CONVERSION BY HYDROGENATION OVER A NOVEL COBALT-NICKEL BASED HETEROGENEOUS CATALYST.

 Cecilio Velasquez and Cheng Zhang Department of Environmental Science, College of Liberal Arts and Science, Long Island University (Post), Brookville, NY 11548
- 11:45 CATALYIC CONVERSION OF CARBON DIOXIDE BY HYDROGENATION OVER A NOVEL Ni-Mo POLYOXOMETALATE BASED HETEROGENEOUS CATALYST. Mehrdad Mohtarami and Dr. Cheng Zhang Department of Chemistry, Long Island University Post Campus, Brookville, NY, 11548
- 12:00 CARBON DIOXIDE CONVERSION BY HYDROGENATION OVER A NOVEL PD-MO POLYOXOMETALATE BASED HETEROGENEOUS CATALYST. Thomas Reid and Dr. Cheng Zhang Department of Chemistry, Long Island University (Post), Brookville, NY 11548
- 12:15 TUNING AESTHETIC EFFECT OF OLEOGELS BY FORMULATING ENZYMATICALLY SYNTHESIZED MOLECULAR GELATORS. Riliwan Sanni, ¹ Cindy A Chee, ¹ Polina Tsupko, ¹ Ruth M Fernandez, ¹ Daisy Polido, ¹ Malick Samateh, ^{1,2} Sai Sateesh Sagiri ¹ and Dr. George John ^{1,2} ¹Department of Chemistry & Center for Discovery and Innovation (CDI), the City College of New York, New York, NY 10031 ²Ph.D. Program in Chemistry, the Graduate Center of the City University of New York, New York, NY 10016

GREEN CHEMISTRY III

Room: AC-2C04 Moderator: Laraib Tariq

- 11:00 EXPLORATION OF A POSSIBLE CHROMIUM (VI) CAPTURING CALIX[4]ARENE HYDROXAMIC MOLECULE. Christopher Kim, John Regan and Joseph Capitani Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- **11:15 FROM SOLUTION TO ADSORPTION: INNOVATIVE METHOD FOR REMOVING TOXIC CHROMATE.** <u>Dominick Rendina</u> and John Regan Department of Biochemistry and Chemistry, Manhattan College, Bronx, NY 10471
- 11:30 REMARKABLY RAPID REDUCTION OF TOXIC CHROMIUM(VI) LEVELS. Patsy Griffin and Dr. John Regan Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471
- 11:45 THE REDUCTION OF CHROMIUM(VI) USING ASCORBIC ACID ABSORBED ONTO GRANULATED ACTIVATED CARBON: A KINETICS STUDY. Twinkle Saini and John Regan, Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471
- 12:00 REMOVING CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS (PAH) BY USING MODIFIED SILICA GEL SURFACE. Michael Gualano and Jianwei Fan Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- 12:15 USING UV/VISIBLE ABSORPTION SPECTROSCOPY TO QUANTITATIVELY MONITOR THE LOADING OF LIPOPHILIC CARBOXYLIC ACIDS ON THE SILICA GEL SURFACE. Jessi Dolores and Jianwei Fan Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471

GREEN CHEMISTRY IV

Room: AC-2C05 Moderator: Lushan Toney

- 11:00 OPTIMIZING A GC-MS/MS METHOD FOR WASTEWATER-BASED EPIDEMIOLOGY. Gianna Kroening and Kevin J. Bisceglia Department of Chemistry, Hofstra University, Hempstead, New York 11549
- 11:15 THE EFFECT OF MOLECULAR SIEVES IN BIODIESEL PRODUCTION. <u>Kizzy Nelson</u> and Jihyun Kim, Ph.D. CUNY Guttman Community College, New York, NY 10018
- 11:30 A POTENTIAL ROLE FOR GNETIN C IN CHEMOPREVENTION OF PROSTATE CANCER. Gabriela Sikorska, Kshiti Dholakia, Urvi Kolhatkar, Avinash Kumar, and Anait S. Levenson Arnold and Marie Schwartz College of Pharmacy and Health Sciences, Long Island University, Brooklyn, NY 11201
- 11:45 NITROGEN CONCENTRATION TRENDS IN LONG ISLAND SOUND.

 Leslie Ramirez Medrano, Paris Svoronos¹ and Paul Marchese² ¹Department of Chemistry and ²Department of Physics, CUNY Queensborough Community College, Bayside NY 11364
- 12:00 EQUILIBRIUM STUDIES ON THE ADSORPTION AND DESORPTION OF MALACHITE GREEN DYE BY SPENT TEALEAVES. Younes Zerhouni, Zead Elzoeiry and Dr. Abel Navarro Department of Science, Borough of Manhattan Community College, New York, NY 10007
- 12:15 PHOTODEGRADATION OF VANILLIN WITH NITROGEN DOPED TITANIUM DIOXIDE. Edruce Edouarzin, Anhay Hernandez, Laura Kuhlman Mihaela Jitianu and Naphtali O'Connor Department of Chemistry, Lehman College, City University of New York, Bronx, NY 10468 Department of Chemistry, William Paterson University, Wayne, NJ 07470

INORGANIC CHEMISTRY

Room: AC-2C02 Moderator: Stivi Qehaja/Mamataz Rubab

- 11:00 CRYSTAL HABITS OF ROCHELLE SALT IN DIFFERENT COPPER (II) ACETATE CONCENTRATIONS IN A GROWING SOLUTION OF ROCHELLE SALT. Ahra Sung and Daniel Robie Department of Chemistry, York College City University of New York, Jamaica, NY 11451
- 11:15 STRUCTURAL DETERMINATION OF ALUMINOSILICATE ZEOLITE ZSM-18. Christopher Kim and Richard M. Kirchner Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471
- 11:30 CHARACTERIZATION OF A NOVEL COBALT COMPLEX CONTAINING QUINOLINE AND DIMETHYL SULFOXIDE. <u>Kaltrina Mulosmani</u> and Rita K. Upmacis Department of Chemistry & Physical Sciences, Pace University, New York, NY 10038
- 11:45 SYNTHESIZE II-VI SEMICONDUCTOR CADMIUM SELENIDE NANOPARTICLES. Lie Ling Jauw and Yolanda Small Department of Chemistry, York College, City University of New York, Jamaica, NY 11451
- 12:00 IMPROVEMENTS ON ELECTROCHEMICAL PROCESSES THAT IMPACT BATTERY TECHNOLOGY. Jahaziah Staggers, Evgeniy Slinin, Yolanda Small Department of Chemistry, York College, City University of New York, Jamaica, NY 11451
- 12:15 SODIUM DODECYLBENZENESULPHONATE CONCENTRATION EFFECTS ON THE SURFACTANT-ASSISTED HYDROTHERMAL SYNTHESIS OF LiFePO₄ CATHODE MATERIALS. <u>Hui Zhu</u> and Paul J. Sideris Department of Chemistry, CUNY Queensborough Community College, Bayside, NY 11364

NANO AND SURFACE CHEMISTRY I

Room: AC-3A05 Moderator: German Darnley

- 11:00 PREPARATION OF A SUSTAINABLE N-DOPED TiO₂/CdS NANOHYBRID COMPOSITE FOR THE PHOTOCATALYTIC DEGRADATION OF 4-CHLOROPHENOL. Alexander G. Aragon, Walace Kierulf-Vierira, Tomasz Lecki, Magdalena Skompska and Justyna Widera-Kalinowska Department of Chemistry, Adelphi University, 1 South Avenue, Garden City, NY 11530 Faculty of Chemistry, University of Warsaw, Ludwika Pasteura 1, 02-093 Warsaw, Poland
- 11:15 DEVELOPMENT OF Pt|POLYANILINE|CdS THIN FILM PN-JUNCTION FOR PHOTOCURRENT GENERATION. Lani Chau¹ and Dr. Justyna Widera-Kalinowska² ¹Department of Physics and ²Department of Chemistry, Adelphi University, Garden City, NY 11530
- 11:30 DEVELOPMENT OF A NOVEL BIOSENSOR FOR CATECHOL USING POLY-INDOLE AND POLY-INDOLE-5-CARBOXYLIC ACID FILMS WITH MODIFICATIONS OF TYROSINASE AND GOLD NANOPARTICLES. Rochile Khan and Justyna Widera-Kalinowska Department of Chemistry, Adelphi University, Garden City, NY 11530
- 11:45 SYNTHESIS, PHOTOCATALYTIC PROPERTIES AND LANGMUIR-BLODGETT FILM PHOTOELCTROCHEMICAL BEHAVIOR OF CdS NANOPARTICLES WITH HYDROPHILIC OR HYDROPHOBIC ORGANIC SHELL. Momoka Nagamine, Magdalena Osial, Pawel Krysinski, and Justyna Widera-Kalinowska Department of Chemistry, Adelphi University, One South Ave, Garden City, NY 11530. Faculty of Chemistry, University of Warsaw, Pastuera 1, Warsaw, 02093 Poland
- 12:00 TRANSITION METAL-BASED ALLOY AND CORE-SHELL NANOWIRE ELECTROCATALYSTS FOR THE OXIDATION OF SMALL ORGANIC MOLECULES. Brett Musialowicz, Will Beatrez, Ian Colliard and Dr. Christopher Koenigsmann Department of Chemistry, Fordham University, Bronx, NY 10458
- 12:15 PROGRESS DETERMINING THE CRYSTAL STRUCTURE OF ALUMINOSILICATE ZEOLITE, SUZ-9. <u>Daisuke Kuroshima</u> and Richard M. Kirchner Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471

NANO AND SURFACE CHEMISTRY II

Room: AC-3B02 Moderators: Michael Rupchand/Megan Pirtle

- 11:00 PHOTOCATALYTIC ACTIVITY OF PORPHYRINS AND POLYOXOMETALATE COMPOUNDS. Eduardo Bravo and Dr. Ivana Radivojevic Jovanovic. Chemistry Department, New York City College of Technology, Brooklyn, NY 11201
- 11:15 IRON OXIDE-TEMPLATED DOXORUBICIN-LOADED PROTEIN FIBERS POTENTIAL MRI-MONITORED DRUG DELIVERY. Erika Delgado-Fukushima, Lindsay K. Hill, Leba Jihad, Xuan Xiel and Jin Kim Montclare, Chemical and Biomolecular Engineering, NYU Tandon School of Engineering, Brooklyn, NY 11201 Biomedical Engineering, SUNY Downstate Medical Center, Brooklyn, NY 11201 Radiology, NYU School of Medicine, New York, NY 10016 Chemistry, New York University, New York, NY 10003. Biomaterials, New York University College of Dentistry, New York, NY 10010
- 11:30 INFLUENCE OF PH ON CONGO RED DYE DEGRADATION BY RUTHENIUM NANOPARTICLE-CARBON NANOTUBE HYBRID.

 Gariele Emeran, Leandro Pimentel and Tirandai Hemraj-Benny Department of Chemistry, Queensborough Community College, Bayside, NY 11364
- 11:45 CORE-SHELL NANOPARTICLES AS PHOTOCATALYSTS FOR WATER PURIFICATION Hannah Mabey, 1 Mohammad Makram, 2 Arvind Damodara Kannan, 2 Hossain Azam 2 and Alexander Santulli 1 1 Department of Chemistry and Biochemistry and 2 Department of Environmental and Civil Engineering, Manhattan College, Riverdale, NY 10471
- 12:00 PROTECTION AGAINST CORROSION OF 304 STAINLESS STEEL USING AN ELECTROCHEMICAL ROUTE. James Mercado, 1 Quentin Picard, 1 Jadra Mosa, 2 Mario Aparicio, 2 Lisa C. Klein, 3 Andrei Jitianu 1 Department of Chemistry, Lehman College, CUNY, Bronx, New York 10468 2 Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas (CSIC) Kelsen 5 (Campus de Cantoblanco), 28049 Madrid, Spain 3 Department of Materials Science and Engineering, Rutgers University, New Jersey 08854
- 12:15 STUDY OF INFLUENCE OF THE PROPYL GROUP OVER THE MELTING GELS PROPERTIES. Jennifer Guzman, Anhay Hernandez, Mihaela Jitianu, Lisa C. Klein and Andrei Jitianu Department of Chemistry, Lehman College, CUNY, Bronx, New York 10468 Department of Chemistry, William Paterson University, Wayne, NJ 07470 Department of Materials Science and Engineering, Rutgers University, Piscataway, New Jersey 08854

NANO AND SURFACE CHEMISTRY III

Room: AC-3C03 Moderator: Navpreet Kaur

- 11:00 HYDROPHOBIZATION OF INORGANIC OXIDE SURFACES VIA SILOXANE EQUILIBRATION. Kaleigh M. Ryan, Dr. Joseph W. Krumpfer Department of Chemistry and Physical Sciences, Pace University, Pleasantville, NY 10570
- 11:15 INVESTIGATING THE INTERACTIONS BETWEEN IONIC LIQUIDS AND SINGLE-WALLED CARBON NANOTUBES. Katelyn Urena, Rawlric Sumner, Sharon Lall-Ramnarine and Tirandai Hemraj-Benny Department of Chemistry, Queensborough Community College, Bayside, NY 11364
- 11:30 MICROWAVE SYNTHESIS OF RUTHENIUM NANOPARTICLES IN THE PRESENCE OF POLYANILINE NANOFIBERS. <u>Katherine Kim</u> and David M. Sarno Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364
- **11:45 DEVELOPMENT AND CHARACTERIZATION OF NEW GRAPHENE OXIDE COMPOSITES FOR DRUG DELIVERY.** Mindy M. Hugo and Ipsita A. Banerjee Department of Chemistry, Fordham University, 441 E. Fordham Road, Bronx, NY 10458
- **12:00 POLYRHODANINE MICROSPHERES FOR ADSORPTION OF ORGANIC DYE.** Yousif Saleh, Anjali Gaba, Moni Chauhan, Qiaxian Jhonson and Bhanu Chauhan Chemistry Department, Queensborough Community College Of CUNY, Bayside, NY,11364 Department of Chemistry, William Patterson University, Wayne, NJ 07470
- **12:15 GREEN SYNTHESIS OF POLYRHODANINE VIA REDOX REACTION.** Anjali Gaba, Moni Chauhan, Qiaxian Johnson, and Bhanu Chauhan Department of Chemistry, Queensborough Community College Of CUNY, Bayside, NY 11364 Department of Chemistry, William Patterson University, Wayne, NJ 07470

NANO AND SURFACE CHEMISTRY IV

Room: AC-3C05 Moderators: Muhabbat Ahmedova/Rayvon A. Grandison

- 11:00 SUITABILITY OF GRAPHENE OXIDE DERIVATIVES AS AN ELECTROACTIVE SURFACE FOR CYTOCHROME C OXIDASE OXYGEN REDUCTION REACTION INDUCED BY CYTOCHROME C. Oladapo Onasanya, Xiaoping Zhu, Alex Birk and Michele Vittadello Department of Chemistry and Environmental Science, Medgar Evers College CUNY, Brooklyn, NY 11225
- 11:15 SILVER NANOPARTICLE SYNTHESIS: SODIUM BOROHYDRIDE REDUCTION VS. PHOTOCHEMICAL REDUCTION. Andriele Silva, Hong Zhang and Yolanda Small Department of Chemistry, York College, The City University of New York, Jamaica, NY 11451
- 11:30 MAGNETIC QUENCHING EFFECTS ON CATALYSIS. Soyeon Kim and Daniel Torres, Science Department, Borough of Manhattan Community College, New York, NY 10007
- 11:45 ENHANCING MAGNETICALLY SEPARABLE CATALYSIS THROUGH THE ASSEMBLY OF PRESYNTHESIZED NANOPARTICLES ON Fe/SiO₂. Typher Yom, Michelle Muzzio and Shouheng Sun Department of Chemistry, Brown University, Providence, RI 02912
- **12:00 EFFECT OF PORE SIZE ON THE DENSITY OF MATRICES MADE FROM COLLAGEN NANOFIBRILS.** Amanda Peterman, Jane Alawi and Dr. Gennaro Maffia Department of Chemical Engineering, Manhattan College, Riverdale, NY 10463

ORGANIC CHEMISTRY I

Room: AC-1B04 Moderators: Tracy Kennedy Ifill/Sarah Khan

- 11:00 CALCULATING HYDROGEN SHIFTS IN DNA BASE PAIRS. Frankie Benavides and Edyta Greer Department of Natural Science, Baruch College, New York NY 10010
- 11:15 THEORETICAL STUDY OF THE BERGMAN CYCLIZATION OF 1,6DIETHYNYLCYCLOHEPTA-1,3,5-TRIENE DERIVATIVES:
 FORMATION OF 1,6-METHANO[10]ANNULENE BASED
 DIRADICALS. Thuong Tran and Edyta M. Greer Department of Natural
 Sciences, Baruch College, New York, NY
- 11:30 COMPUTATIONAL STUDY OF FIRST GENERATION DENDRON IN EXCITED TRIPLET STATE Kelly Valladolid, Yael Muladjanov and Jong I. Lee Department of Chemistry, York College of the City University of New York, Jamaica, NY 11451
- 11:45 SYNTHESIS AND CHARACTERIZATION OF NOVEL ESTRADIOL CONJUGATES IN THE DEVELOPMENT OF NEW ANTIBIOTIC ANTINEOPLASTIC AGENTS. Katherine Lloyd, Minal Jain and David P. Brown Department of Chemistry, St. John's University, Queens, NY, 11439
- 12:00 EMPLOYING NATIVE CHEMICAL LIGATION FOR THE SYNTHESIS OF A COLLAGEN-MIMETIC FIBRIL FORMING PEPTIDE. Justin Ho, Jing Wu, Yujia Xu and Mandë Holford Department of Chemistry, CUNY Hunter College, New York, NY 10065
- 12:15 THE EFFECT OF POLYDOPAMINE ON THE SWELLING OF DEXTRAN HYDROGELS. <u>Josiah Hicks</u>, Solomon Barkley, Madeline Wong and Naphtali O'Connor Department of Chemistry, Lehman College, City University of New York, New York, NY 10468

ORGANIC CHEMISTRY II

Room: AC-1C04 Moderators: Yael Abdurahmanov/ Biling Chen

- 11:00 SYNTHESIS OF THE TETRACYCLIC FRAMEWORK OF THE OXYGENATED ANGUCYCLINES. Xiaolan Wu, Abdullah Allaoa and Tony E. Nicolas Department of Chemistry, New York City College of Technology, Brooklyn, NY 11201
- 11:15 SYNTHESIS OF GLYCANS INVOLVED IN PATHOGEN INFECTION.

 Yasir Naeem, Adam Braunschweig and David Mootoo Department of Chemistry, Hunter College, New York, NY 10065 Advanced Science Research Center, New York, NY 10031
- 11:30 SYNTHESIS OF POLYSUBSTITUTED PYRROLES. Michelle Qu, ¹ Biling Chen, ¹ Sasan Karimi, ¹ Shuai Ma² and Gopal Subramaniam ² ¹Department of Chemistry, Queensborough Community College, Bayside, NY 11364 ²Department of Chemistry and Biochemistry, Queens College, Flushing, NY 11367
- 11:45 SYNTHESIS AND BIOLOGICAL ACTIVITY OF SUBSTITUTED PYRROLES. Shuai Ma, 1 Michelle Qu, 2 Sasan Karimi, 2 Zahra Zakeri 1 and Gopal Subramaniam 1 Department of Chemistry and Biochemistry and Department of Biology, Queens College, Queens, NY 11367 2 Department of Chemistry, Queensborough Community College, Bayside, NY 11364
- 12:00 SYNTHESIS AND URIDINE NUCLEOSIDE RIBOHYDROLASE (UNH) ACTIVITY OF 2-SUBSTITUTEDBENZIMIDAZOLE DERIVATIVES.

 Zaafir Dulloo and Melissa A. VanAlstine-Parris, Department of Chemistry, Adelphi University, Garden City, NY 11530
- 12:15 ABSORPTION PROPERTIES OF DEXTRAN-POLYDOPAMINE HYDROGELS. Won Sik Park and Naphtali O'Connor Department of Chemistry, Lehman College, City University of New York, New York, NY 10468

ORGANIC CHEMISTRY III

Room: AC-1C05 Moderators: Stivi Qehaja/Ivana Gutierrez

- 11:00 SYNTHESIS OF UNIQUE LUBRICANTS MADE OF EXOTIC BUTTERS INFUSED WITH INDIGENOUS OILS TO PROMOTE INHIBITION OF BACTERIA AND PROTECTION AGAINST UV RADIATION. Rudra Persaud, Keanna McLeod, Karin Melkonian and JaimeLee Rizzo Department of Chemistry and Physical Sciences, Pace University, New York, NY 10038 Department of Biology, Long Island University C.W. Post, Brookville, NY 11548
- 11:15 REMOVAL OF POLYAROMATIC HYDROCARDONS FROM WATER.

 Megan Lepore and Dr. John Regan Department of Chemistry, Manhattan College, Bronx, NY 10471
- 11:30 SILICA GEL-BOUND DNA IS AN ABSORBANT OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH). Sumaiya Sabrina and John Regan Department of Biochemistry & Chemistry, Manhattan College, Bronx, NY 10471
- 11:45 MODIFYING AMBERLITE ION EXCHANGE RESIN AS A STRATEGY TO REMOVE POLYAROMATIC HYDROCARBONS FROM WATER. Mariel Taveras and John Regan Department of Chemistry, Manhattan College, Bronx, NY 10467
- 12:00 FORMATION OF FUROXANS VERSUS RING NITRATION WHEN SUBSTITUTED ACETOPHENONES REACT WITH NITRIC ACID.

 Haley Tarbox and Nanette Wachter Department of Chemistry, Hofstra University, Hempstead, NY 11549
- 12:15 PHYTOCHEMICAL ANALISYS OF SPERMACOCE REMOTA LAM, IN SEARCH OF UNDERSTANDING ITS PHYTOCHEMICAL AND ETHNO-PHARMACEUTICAL PROPERTIES. Gabriel Cruz, Lolita Rodriguez, Odalis Ramirez, Bryan Padua and Bryan Medina Department of Chemistry, Department of Chemical Engineering, Department of Biology, and Department of Agricultural Engineering, University of Puerto Rico Recinto de Mayagüez, PR-108, Mayagüez, 00682, Puerto Rico

PHYSICAL CHEMISTRY

Room: AC-1M06 Moderator: Prinkal Pallan

- 11:00 MODELING ATMOSPHERIC NANOPARTICLES: CHARACTERIZING INTRASYSTEM PROTON TRANSFER IN AMMONIUM FLUORIDE NANOCLUSTERS. Anna J. Lomboy and Robert Q. Topper Department of Chemistry, The Cooper Union for the Advancement of Science and Art, New York, NY 10003
- 11:15 STUDY OF POLYMERS EFFECT ON NUCLEATION AND GROWTH OF ACETAMINOPHEN CRYSTALS FROM SOLUTION. Karishma Gopaul and Daniele Musumeci Department of Chemistry, York College City University of New York, Jamaica, NY 11451
- 11:30 ENERGY TRANSFER IN COLLOIDAL PHOTONIC CRYSTAL.

 Shahjada Al Shahrear, Tiffany Garcia and Luis Gonzalez Urbina Department of Science, Borough of Manhattan Community College, New York, NY 10007
- 11:45 ORTHO-PARA NUCLEAR SPIN STATES AND SELF-BROADENING IN THE SPECTRUM OF WATER. Thomas Perry and Trevor Sears Department of Chemistry, Stony Brook University, Stony Brook, NY 11790

POLYMER CHEMISTRY

Room: AC-1M07 Moderator: Zahra Alkaifi

- 11:00 ELECTROSTATICALLY CROSSLINKED HYDROGELS FROM DEXTRAN SULFATE AND POLYETHYLENE IMINE. Madeline Wong and Naphtali O'Connor Department of Chemistry, Lehman College, City University of New York, New York, NY 10468
- 11:15 THE EFFECT OF POLYDOPAMINE ON THE COMPRESSIVE MODULUS OF DEXTRAN HYDROGELS. Solomon Barkley, Josiah Hicks, Madeline Wong and Naphtali O'Connor Department of Chemistry, Lehman College, City University of New York, New York, NY 10468
- 11:30 METAL-ORGANIC HYBRIDS COMPOSED OF POROUS POLY(*O*-TOLUIDINE) MICROSPHERES AND GOLD NANOPARTICLES.

 <u>Ashley Smith</u> and David M. Sarno Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364
- 11:45 POLY(ACRYLAMIDE-co-ACRYLONITRILE) HYDROGEL AS A "THERMOPHILIC" CORE OF LIPOBEADS. Cesar Ramirez and Sergey Kazakov Department of Chemistry and Physical Sciences, Pace University, Pleasantville, NY 10570