

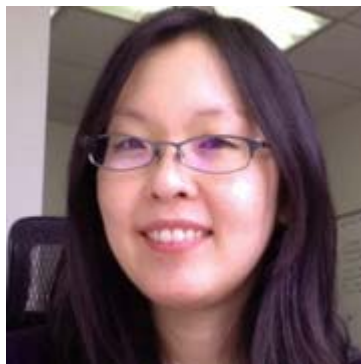
**New York's American Chemical Society – Student Activities Committee  
65<sup>th</sup> Annual Undergraduate Research Symposium  
Fordham University  
Bronx, NY  
Saturday, May 6, 2017**

- 8:00    **Registration and Continental Breakfast**    **Keating Rotunda**
- 9:00    **Welcoming Remarks**    **Keating 1<sup>st</sup>**
- Dr. Paul Sideris    Co-Chair, NY ACS, Student Activities Committee  
Dr. Ipsita Banerjee    Co-Chair, NY ACS, Student Activities Committee  
Dr. John P. Harrington    Associate Vice President and Dean, Faculty of Arts and Sciences
- Dr. Robert H. Beer    Chair, Fordham University Department of Chemistry  
Dr. Brian Gibney    2017 Chair, NY ACS
- 9:20    **Keynote Address**    **Keating 1st**
- Dr. Jin K. Montclare**    **NYU Tandon School of Engineering**

***Intelligent Self-Assembling Biomaterials***

- 10:20    **Instructions for the day**    Dr. Ipsita Banerjee
- 10:30    **Group Photo**    **Keating Staircase**
- 11:00    **Presented Papers**    **Keating Hall, John Mulcahy Hall**
- Analytical Chemistry    Keating Hall, Basement  
Biochemistry    Keating Hall, 1<sup>st</sup> Floor  
Chemical Education    Keating Hall, 3<sup>rd</sup> Floor  
Environmental/Green Chemistry    Keating Hall, 2<sup>nd</sup> Floor  
Inorganic Chemistry    Keating Hall, 1<sup>st</sup> Floor  
Nano and Surface Chemistry    John Mulcahy Hall, 1<sup>st</sup> Floor  
Organic Chemistry    Keating Hall, 2<sup>nd</sup> Floor  
Physical Chemistry    Keating Hall, 3<sup>rd</sup> Floor  
Polymer Chemistry    Keating Hall, 3<sup>rd</sup> Floor
- 12:40    **Luncheon / Award Reception**    **McGinley Ballroom**
- 1:25    **Presentation of Certificates**
- Dr. Meredith Foley**    Co-Chair, NY ACS Student Activities Committee  
**Dr. Naphtali O'Connor**    Co-Chair, NY ACS Student Activities Committee
- 1:45    **Ice Cream Social & Raffle**    **McGinley Ballroom**
- The raffle includes a Kaplan Test Prep  
Package valued at more than \$2K

## KEYNOTE SPEAKER



**Dr. Jin K. Montclare**

**NYU Tandon School of Engineering**

Jin Kim Montclare is an Associate Professor in the Department of Chemical and Biomolecular Engineering (CBE) at NYU Tandon School of Engineering (NYU SoE), who is performing groundbreaking research in engineering proteins to mimic nature and, in some cases, work better than nature. Prior to joining NYU SoE, Jin was an NIH postdoctoral fellow at the California Institute of Technology in the Division of Chemistry and Chemical Engineering in the Tirrell lab. She received a Bachelor of Science in Chemistry from Fordham University as a Goldwater and Clare Boothe Luce undergraduate fellow, a PhD in Bioorganic Chemistry from Yale University as an NSF and Pfizer predoctoral fellow. In 2015 began serving as Graduate Studies Director for CBE and Associate Director for Technology Advancement for the NYU Materials Research Science and Engineering Center, while leading the multidisciplinary Center for Innovation and Entrepreneurship at NYU SoE. Among her many honors and awards are the 2016 ACS WCC Rising Star Award, 2015 Agnes Faye Morgan Research Award from Iota Sigma Pi, 2014 Executive Leadership in Academic Technology and Engineering Fellowship, and 2014 Distinguished Award for Excellence, Dedication to Invention, Innovation and Entrepreneurship.

## KEYNOTE ADDRESS

### **Intelligent Self-Assembling Biomaterials**

Through centuries of evolution, nature has developed biopolymers capable of folding and assembling into discrete structures with a functional consequence. Inspired by this, our lab focuses on engineering “intelligent” protein materials with entirely new properties and function. In particular, our lab has fabricated protein-derived nanomaterials: helix-elastin block polymers and coiled-coil fibers. We investigate the fundamental self-assembly and molecular recognition capabilities of these systems. More importantly, we are able to harness these structure as well as others to interface with small molecule therapeutics, genes, cells and inorganic metals. Central to this work is the integration of stimuli-responsive domains through rational design.

## SESSION MODERATORS

<b>Moderator</b>	<b>Representing</b>	<b>Room</b>	<b>Section</b>
Yianni Flouskakos Edward Haarmann	Fordham University Fordham University	Keating B16 Keating B16	Analytical Chemistry I Analytical Chemistry I
Jacqueline Tobin Xiaoyurui Wang	Fordham University Fordham University	Keating B19 Keating B19	Analytical Chemistry II Analytical Chemistry II
Anthony Costa Jennifer Lei	Fordham University Fordham University	Keating 104 Keating 104	Biological Chemistry I Biological Chemistry I
Charles Seaks Khushpreet Kaur	Fordham University Queensborough CC	Keating 105 Keating 105	Biological Chemistry II Biological Chemistry II
Brigid Morgan Simranjeet Kaur	Fordham University Queensborough CC	Keating 110 Keating 110	Biological Chemistry III Biological Chemistry III
Chaudhary Harris Yifan Guan	Fordham University Queensborough CC	Keating 114 Keating 114	Biological Chemistry IV Biological Chemistry IV
Adam Agababayev Johnny Chan	Fordham University Queensborough CC	Keating 116 Keating 116	Biological Chemistry V Biological Chemistry V
Nicole Porco James Mercado	Fordham University Lehman College	Keating 204 Keating 204	Green Chemistry I Green Chemistry I
Laxshika Raveendran Jennifer Guzman	Fordham University Lehman College	Keating 205 Keating 205	Green Chemistry II Green Chemistry II
Stephanie Giordano Bryan Obregon	Fordham University Queensborough CC	Keating 206 Keating 206	Green Chemistry III Green Chemistry III
Nina Le Zuraitza R. Moreno	Fordham University Queensborough CC	Keating 208 Keating 208	Green Chemistry IV Green Chemistry IV
Patrick Jennings Leslie J. Ramirez	Fordham University Queensborough CC	Keating 209 Keating 209	Green Chemistry V Green Chemistry V
Louis Moskovitz Nnonym Sappleton	Fordham University Pace University	Keating 120 Keating 120	Inorganic Chemistry I Inorganic Chemistry I
Nicole Smina Rochile Khan	Fordham University Adelphi University	Keating 121 Keating 121	Inorganic Chemistry II Inorganic Chemistry II

## SESSION MODERATORS

<b>Moderator</b>	<b>Representing</b>	<b>Room</b>	<b>Section</b>
Ricardo M. Valencia Kelly Zhu	Fordham University Adelphi University	Mulcahy 108 Mulcahy 108	Nano/Surface Chemistry I Nano/Surface Chemistry I
Margaret Sullivan Aduke Saibu	Fordham University Pace University	Mulcahy 112 Mulcahy 112	Nano/Surface Chemistry II Nano/Surface Chemistry II
Michael Gleeson Samantha Wynter	Fordham University Adelphi University	Mulcahy 132 Mulcahy 132	Nano/Surface Chemistry III Nano/Surface Chemistry III
Gurpreet Singh Joseph J. Almasri	Fordham University St. John's University	Mulcahy 140 Mulcahy 140	Nano/Surface Chemistry IV Nano/Surface Chemistry IV
Roland Correa Chandini Pillai	Fordham University St. John's University	Keating 214 Keating 214	Organic Chemistry I Organic Chemistry I
Farjahan Akhter Sarah S. Khan	Fordham University Queensborough CC	Keating 215 Keating 215	Organic Chemistry II Organic Chemistry II
Brian El Zokm Daniel Vreeland	Queensborough CC Queensborough CC	Keating 218 Keating 218	Organic Chemistry III Organic Chemistry III
Ahef Ameer Ike Ariza	Queensborough CC Queensborough CC	Keating 219 Keating 219	Organic Chemistry IV Organic Chemistry IV
Momoka Nagamine Ismailov Temurjon	Adelphi University Adelphi University	Keating 317 Keating 317	Physical Chemistry I Physical Chemistry I
Yveline Lamothe Maty Sembene	College of New Rochelle College of New Rochelle	Keating 318 Keating 318	Physical Chemistry II/Chem.Ed. Physical Chemistry II/Chem.Ed.
Grisel Medrano Snove-tia Cape Isabella Jean-charles	College of New Rochelle College of New Rochelle College of New Rochelle	Keating 312 Keating 312 Keating 312	Polymer Chemistry Polymer Chemistry Polymer Chemistry

## ANALYTICAL CHEMISTRY I

**Room: Keating B16**

**Moderators:** Yianni Flouskakos/Edward Haarmann

**11:00 USING THE HARD AND SOFT, ACIDS AND BASES THEORY TO PREDICT ORGANOPHOSPHATE- TARGET INTERACTIONS.** Aicha Bendia, Urs Jans Department of Chemistry, City College of New York. 160 Convent Ave, New York, NY 10031

**11:15 MALDI MS-PHOSPHORYLATION STUDY OF HIV PROTEIN-P6.** Celenne Santana<sup>1</sup>, Pratikkumar Rathod<sup>2,3</sup> Hsin-Pin Ho<sup>2,3</sup> Kevin Mark<sup>1,2</sup> Dr. Mathias Lichterfeld<sup>4,5</sup> and Emmanuel Chang<sup>2,3</sup> Department of Natural Sciences, <sup>1</sup>LaGuardia Community College; Department of Chemistry, York College and the <sup>3</sup>Graduate Center/city University of New York <sup>4</sup>Ragon Institute of MGH, MIT and Harvard <sup>5</sup>Infectious Disease Division- MGH

**11:30 A MULTI-PRONGED STRATEGY TO IDENTIFY HIV PROTEIN PHOSPHORYLATION SITES.** Kathleen Rowe,<sup>1</sup> Pratikkumar Rathod,<sup>2,3</sup> Hsin-Pin Ho,<sup>2,3</sup> Kevin Mark<sup>1,2</sup> and Emmanuel Chang<sup>2,3</sup> Department of Natural Sciences, <sup>1</sup>LaGuardia Community College; Department of Chemistry, 31-10 Thomson Avenue, Long Island City, NY 11101. <sup>2</sup>York College and the <sup>3</sup>Graduate Center/City University of New York

**11:45 DEVELOPMENT OF COPPER-NICKEL BIMETALLIC AND COPPER-NICKEL-PALLADIUM TRIMETALLIC HETEROGENEOUS CATALYSTS ILLUSTRATE CO<sub>2</sub> REDUCTION THROUGH DRY REFORMING REACTION WITH METHANE.** Luyun Jiao and Cheng Zhang Department of Chemistry, Long Island University Post Campus, Greenvale, NY 11548

**12:00 CHARACTERIZATION OF COMPOSITION AND PHYSICAL PROPERTIES OF UNEQUILIBRATED ORDINARY CHONDRITE NWA8709.** Juliette W. Strasser,<sup>1</sup> John M. Friedrich,<sup>1,2</sup> and Mark L. Rivers<sup>3</sup> <sup>1</sup>Department of Chemistry, Fordham University, Bronx, NY 10458 USA <sup>2</sup>Department of Earth and Planetary Sciences, American Museum of Natural History, New York, NY 10024 USA <sup>3</sup>Center for Advanced Radiation Sources, University of Chicago, Argonne, Illinois 60439

**12:15 INVESTIGATION OF LUMINESCENCE RESPONSE OF RU(PHEN)<sub>3</sub><sup>2+</sup> TO POLYANIONIC CARRAGEENANS AND HEPARINS.** Sophia Prentzas and Jianwei Fan Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471

## ANALYTICAL CHEMISTRY II

**Room: Keating B19**

**Moderators:** Jacqueline Tobin/Xiaoyurui Wang

**11:00 DETERMINATION OF THE IONIZATION CONSTANT OF CARBOXYLIC ACIDS IN MIXED SOLVENTS USING MICROSCALE FREEZING POINT DEPRESSION MEASUREMENTS AND THE VAN'T HOFF FACTOR.** David Kwun and Paris Svoronos Department of Chemistry, Queensborough Community College, Bayside NY 11364.

**11:15 DETERMINATION OF THE IONIZATION CONSTANT OF CARBOXYLIC ACIDS IN AQUEOUS SOLUTIONS USING FREEZING POINT DEPRESSION MEASUREMENTS.** Edison Mera, David Kwun, Tian Xu and Paris Svoronos. Queensborough Community College, Department of Chemistry, Bayside NY 11364

**11:30 DETERMINATION OF THE TOTAL AMOUNT OF ANTIOXIDANTS PRESENT IN COMMERCIALY AVAILABLE BEVERAGES VIA THE FOLIN CIOCALTEAU MICROSPECTROPHOTOMETRIC ANALYSIS.** Julie Leong, Margaret de los Santos, Pedro Irigoyen, Gobind Vaswani, Soraya Svoronos and Paris Svoronos, Queensborough Community College, Chemistry Department, Bayside NY 11364

**11:45 QUANTITATIVE DETERMINATION OF THE ANTIOXIDANT GALLIC ACID IN JUICE BEVERAGES.** Margaret de los Santos, Julie Leong, Bruce Montalbano and Paris Svoronos, Queensborough Community College, Chemistry Department, Bayside NY 11364

**12:00 REFRACTIVE INDEX OF OXALIC ACID MEASURED BY ZOOM-IN METHOD AND EXTENSION METHOD.** Ha Eun Kim, Jun H. Shin, Department of Chemistry, Queensborough Community College, Bayside, NY 11364

## **BIOLOGICAL CHEMISTRY I**

**Room: Keating 104**

**Moderators: Anthony Costa/Jennifer Lei**

**11:00 USING SITE SATURATION MUTAGENESIS TO IDENTIFY RESIDUES THAT CONTRIBUTE TO CEPHAMYCINASE ACTIVITY IN FOX-4.** Jennifer Kim and Scott T. Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11549

**11:15 STRUCTURAL AND FUNCTIONAL CHARACTERIZATION OF FOX-4 CEPHAMYCINASE.** Christina Mary Joseph, Anthony Sica, and Scott Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11549

**11:30 NOVEL GROUP OF OXYQUINOLINE INHIBITORS OF HIF PROLYL HYDROXYLASE.** Olya Besedina,<sup>1</sup> Ellen Weiser,<sup>1</sup> Nancy Krucher<sup>2</sup> and Irina Gazaryan<sup>1</sup> <sup>1</sup>Department of Chemistry & Physical Sciences <sup>2</sup>Department of Biology, Pace University, Pleasantville, New York 10570

**11:45 EXPLORING THE ROLE OF GLN120 IN ENTEROBACTER CLOACAE P99 CEPHALOSPORINASE BY SITE-SATURATION MUTAGENESIS.** Anastasia Brodovskaya and Scott Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11549

**12:00 STRUCTURE-FUNCTION RELATIONSHIPS IN P99 CEPHALOSPORINASE.** Anthony Sica, Jenn Kim, and Scott Lefurgy Department of Chemistry, Hofstra University, Hempstead, NY 11549

## **BIOLOGICAL CHEMISTRY II**

**Room: Keating 105**

**Moderators: Charles Seaks/Khushpreet Kaur**

**11:00 STRUCTURAL STUDIES OF ADENOVIRAL E4ORF1 GENE PRODUCT AND ANGIOGENIC IMPLICATIONS.** Carolyn Allain and Paul Smith, Department of Chemistry, Fordham University, Bronx, NY 10458



**11:15 MOLECULAR DYNAMICS SIMULATION TO INVESTIGATE STABILITY OF AMYLOID-AMYLOID AND AMYLOID-HCC COMPLEXES IN ALZHEIMER'S DISEASE.** Ermin Tale, Joseph Persichetti, and Arun Sharma Department of Chemistry, Wagner College, Staten Island, NY 10301

**11:30 DEFINING THE YEAST NUCLEOSOMAL PROTEIN INTERACTOME UTILIZING A PCR-BASED STRATEGY.** Gabriela Bukanowska and Bryan J. Wilkins Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471

**11:45 SYSTEMATIC OPTIMIZATION AND MODIFICATION OF A DNA APTAMER WITH 2'-O-METHYL RNA ANALOGUES.** George E. Maio<sup>2</sup>, Osita Enweronye<sup>2</sup>, Hasan E. Zumrut<sup>1</sup>, Sana Batool<sup>2</sup>, Nabeela Van<sup>2</sup>, Prabodhika Mallikaratchy<sup>1,2</sup>. <sup>1</sup>Biochemistry PhD Program, City University of New York, The Graduate Center, New York, NY, 10016; <sup>2</sup>Department of Chemistry, City University of New York: Lehman College, Bronx, NY 10468

**12:00 EXPLORING CHROMATIN DYNAMICS WITHIN THE DNA DAMAGE RESPONSE PATHWAY IN LIVING CELLS.** Joseph Mozdierz, Bright Shi, and Bryan Wilkins Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471

**12:15 TEMPORAL RESISTANCE IN POTATO TUBERS: ANTIBACTERIAL ACTIVITY OF WOUND-HEALING TISSUE EXTRACTS FROM CONTRASTING POTATO CULTIVARS.** Mathiu Perez Rodriguez,<sup>1</sup> Keyvan Dastmalchi,<sup>1</sup> Aaron Mychak,<sup>2</sup> Janni Lin,<sup>1</sup> Anuradha Janakiraman,<sup>2</sup> and Ruth E. Stark<sup>1</sup> <sup>1</sup>Department of Chemistry and Biochemistry, The City College of New York (CCNY), City University of New York Ph.D. Programs and CUNY Institute for Macromolecular Assemblies, New York, NY, 10031 USA. <sup>2</sup>Department of Biology, CCNY and CUNY Ph.D. Programs.

### **BIOLOGICAL CHEMISTRY III**

**Room: Keating 110**

**Moderators:** Brigid Morgan/Simranjeet Kaur

**11:00 EXAMINING THE EFFECT OF OXIDATIVE STRESS ON THD11, A SIRTUIN FOUND IN *TETRAHYMENA THERMOPHILA*.** Kabir Omolaja and Ralph Alcendor Department of Biological Sciences, New York City College of Technology, Brooklyn, New York 11201

**11:15 DIRECT ACTIVATION OF ANTIOXIDANT PROGRAM WITH TRANSITION METALS.** Linh Nguyen<sup>1</sup>, Ellen Weiser<sup>1</sup>, Nancy Krucher<sup>2</sup> and Irina Gazaryan<sup>1</sup> <sup>1</sup>Department of Chemistry & Physical Sciences, and <sup>2</sup> Department of Biology, Pace University, Pleasantville, NY 10570

**11:30 MALE SEX HORMONES REGULATE HUMAN ENDOTHELIAL NITRIC OXIDE SYNTHASE SYSTEM THROUGH THE MODULATION OF CATIONIC AMINO ACID TRANSPORTER-1.** Lior Levy<sup>1</sup>, Tamara Chernichovski<sup>2</sup>, and Idit Schwartz<sup>2</sup> <sup>1</sup>Stern College for Women, Yeshiva University, New York, NY, <sup>2</sup>Department of Nephrology, Sackler School of Medicine, Tel Aviv Sourasky Medical Center, Tel Aviv University, Tel Aviv, Israel, 64239

**11:45 COPPER BINDING PROPERTIES AND ANTI-AMYLOIDOGENIC ABILITY OF MULTI-TARGET LIGANDS.** Miguel A. Gomez and Alberto Martínez. Department of Chemistry, NYC College of Technology, Brooklyn, NY 11201

**12:00 NOVEL TI-AU AND RU-AU HETERO-BIMETALLIC COMPOUNDS AS POTENTIAL CANCER CHEMOTHERAPEUTICS.** Mike Cornejo,<sup>1</sup> Benelita T. Elie,<sup>1,2</sup> Yiu Fung Mui,<sup>1,3</sup> and Maria Contel<sup>1-3</sup> <sup>1</sup>Department of Chemistry, Brooklyn College, The City University of New York, Brooklyn, NY, 11210, US. PhD Program in Biology<sup>2</sup> and Chemistry<sup>3</sup> The Graduate Center, The City University of New York, 365 Fifth Avenue, New York, NY, 10016, US.

**12:15 INVESTIGATION OF EFFECT OF MONOVALENT SALTS ON APTAMER FOLDING.** Nabeela Van,<sup>2</sup> Sana Batool,<sup>2</sup> Hazan Zumrut,<sup>1</sup> Shanell George,<sup>2</sup> Sanam Bhandari,<sup>2</sup> and Prabodhika Mallikaratchy<sup>1,2</sup> <sup>1</sup>Ph.D. Program in Chemistry and Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016, <sup>2</sup>Department of Chemistry, Lehman College, The City University of New York Bronx, NY 10468

## **BIOLOGICAL CHEMISTRY IV**

**Room: Keating 114**

**Moderators:** Harris Chaudhary /Yifan Guan

**11:00 ANTIBACTERIAL ASSESSMENT AND SOLID-STATE NMR ANALYSIS OF NATIVE PERIDERM FROM RNAi-SILENCED *StNAC103* POTATO TUBERS.** Oseloka Chira, Keyvan Dastmalchi, and Ruth E. Stark Department of Chemistry and Biochemistry, The City College of New York, (CCNY), City University of New York Ph.D. Programs and CUNY Institute for Macromolecular Assemblies, New York, NY 10031

**11:15 INVESTIGATION OF SPECIFICITY OF AN APTAMER SELECTED AGAINST A B-CELL MARKER.** Sana Batool,<sup>2</sup> Hazan Zumrut<sup>1</sup>, Nabeela Van,<sup>2</sup> Shanell George,<sup>2</sup> Sanam Bhandari,<sup>2</sup> and Prabodhika Mallikaratchy<sup>1,2</sup> <sup>1</sup>Ph.D. Program in Chemistry and Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016, <sup>2</sup>Department of Chemistry, Lehman College, The City University of New York Bronx, NY 10468

**11:30 DESIGN OF A DIMERIC APTAMER AGAINST B-CELL RECEPTOR.** Sanam Bhandari,<sup>2</sup> Hazan Zumrut,<sup>1</sup> Sana Batool,<sup>2</sup> Nabeela Van,<sup>2</sup> Shanell George,<sup>2</sup> and Prabodhika Mallikaratchy<sup>1,2</sup> <sup>1</sup>Ph.D. Program in Chemistry and Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016, <sup>2</sup>Department of Chemistry, Lehman College, The City University of New York Bronx, NY 10468

**11:45 DEVELOPMENT OF NANOSCALE ASSEMBLIES FROM HETEROCYCLIC BIOMIMICS FOR DNA BINDING AND FOR ANTIOXIDANT ACTIVITY.** Sarah A. Lundell, Alexandra M. Brown and Ipsita A. Banerjee Department of Chemistry, 441 E. Fordham Road, Fordham University, Bronx, NY 10458

**12:00 LIPOBEADS: MANIPULATION OF PHOSPHOLIPID BILAYER COMPOSITION TO FORM UNILAMELLAR COATING ON MICROGELS.** Sarah Rahni and Sergey V. Kazakov Department of Chemistry & Physical Sciences, Pace University, Pleasantville, New York 10570

**12:15 PHOSPHOPROTEIN ENRICHED IN ASTROCYTES 15 (PEA-15) CHANGES CONFIRMATION UPON PHOSPHORYLATION AND INTERACTION WITH FADD.** Julissa Marrero, Sergio Crespo, Victor Leon, and Yufeng Wei Chemistry Department, New Jersey City University, Jersey City, NJ 07305

## **BIOLOGICAL CHEMISTRY V**

**Room: Keating 116**

**Moderators:** Adam Agababayev/Johnny Chan

- 11:00 SYSTEMATIC INVESTIGATION OF EFFECT OF TEMPERATURE ON AN APTAMER FOLDING.** Shanell George,<sup>2</sup> Sana Batool,<sup>2</sup> Hazan Zumrut<sup>1</sup>, Nabeela Van,<sup>2</sup> Sanam Bhandari,<sup>2</sup> and Prabodhika Mallikaratchy<sup>1,2</sup>  
<sup>1</sup>Ph.D. Program in Chemistry and Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016, <sup>2</sup>Department of Chemistry, Lehman College, The City University of New York Bronx, NY 10468
- 11:15 ANTIVIRAL ACTIVITY OF HERBAL FORMULATION AGAINST HUMAN IMMUNODEFICIENCY VIRUSES.** Tiffany Garcia, Reese Long, Revathi Iyengar and José A. Fernández Romero Science Department, Borough of Manhattan Community College, 199 Chambers Street, New York, NY 10007
- 11:30 A STUDY IN NUTRIGENOMICS: HOW DO DIETARY VARIATIONS INFLUENCE EPIGENETIC STATUS?** Tiffany Rodriguez, Matthew Nardini and Bryan Wilkins Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY, 10471
- 11:45 EXAMING THE EFFECT OF OXIDATIVE STRESS ON TETRAHYMENA THERMOPHILE SIRTUINS, THD17.** Victor O. Adedara and Ralph Alcendor Department of Biology, New York City College of Technology, Brooklyn, NY 11201
- 12:00 CHARACTERIZATION OF THE PUTATIVELY HETERODIMERIC PROTEINACEOUS ICHTHYOTOXIN OF PTEROIS VOLITANS.** Zachary F. Mattes, Nina A. Le and Paul Smith Department of Chemistry, Fordham University, Bronx, NY 10458
- 12:15 THE ENCAPSULATION OF TETRA TOLYL PORPHYRIN MOLECULES INTO MEMBRANOUS VESICLES.** Shadi Khayyo, Jameel Batarseh, Jose Mendoza, Arian Novaj, Steven Maio, Rita Guglielmo, Valerie Khayyo, and Pamela K. Kerrigan College of Mount Saint Vincent, Bronx, New York, 10471

## GREEN CHEMISTRY I

**Room: Keating 204**

**Moderators:** Nicole Porco/James Mercado

**11:00 ACTIVATED CHARCOAL-BOUND ASCORBIC ACID: REDUCTION OF CR(VI) TO CR(III) AND RECYCLING.** Analisse Rosario and John Regan, Department of Chemistry and Biochemistry, Manhattan College, Riverdale, New York 10471

**11:15 REMOVAL OF MN(II) IONS FROM WATER BY A CHELATION-ABSORPTION STRATEGY.** Ashley Abid, Kaitlyn Rooney and John Regan, Department of Chemistry and Biochemistry, Manhattan College, Riverdale, New York 10471

**11:30 CORRELATION OF DENSITY FUNCTIONAL THEORY WITH EXPERIMENTAL RESULTS FOR REACTIONS BETWEEN BIDENTATE CHELATING AGENTS AND CHROMATE.** Douglas Huntington, Joseph F. Capitani and John Regan Department of Chemistry and Biochemistry, Manhattan College, Riverdale, New York 10471

**11:45 POLYOLS AS BIDENDTATE CAPTURE REAGENTS FOR CR(VI) ION REMOVAL.** Mary Cacace and John Regan, Department of Chemistry and Biochemistry, Manhattan College, Riverdale, New York 10471

**12:00 2,2'-BIPHENOL AS AN INSOLUBLE REAGENT FOR THE REMOVAL OF CR(VI) FROM WATER.** Twinkle Saini and John Regan, Department of Chemistry and Biochemistry, Manhattan College, Riverdale, New York 10471

**12:15 ASSESSING THE SOURCE AND FATE OF NITRATE IN GROUNDWATER OF UPPER GLACIAL AQUIFER OF SOUTHEAST QUEENS NEW YORK CITY.** Ality Aghedo, Phillip Frank and Ratan Dhar Department of Earth and Physical Sciences, York College – CUNY, Jamaica, NY 11451

## GREEN CHEMISTRY II

**Room: Keating 205**

**Moderators:** Laxshika Raveendran/Jennifer Guzman

- 11:00 SYNTHESIS AND CHARACTERIZATION OF PYRROLIDINIUM IONIC LIQUIDS BEARING SYMMETRICAL AND ASYMMETRICAL FLUOROUS ANIONS.** Jasodra Ramdihal,<sup>1</sup> Chanele Rodriguez,<sup>1</sup> Edward Castner,<sup>2</sup> James Wishart<sup>1</sup> and Sharon Lall-Ramnarine<sup>1</sup>. <sup>1</sup>Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364. <sup>2</sup>Department of Chemistry and Chemical Biology, Rutgers University, Piscataway, NJ, 08854. <sup>1</sup>Department of Chemistry, Brookhaven National Laboratory, Upton, NY 11973.
- 11:15 CONNECTING STRUCTURAL AND TRANSPORT PROPERTIES OF IONIC LIQUIDS WITH CATIONIC OLIGOETHER CHAINS.** Chanele Rodriguez,<sup>1,2</sup> Man Zhao,<sup>2</sup> Nicole Zmich,<sup>3</sup> Dr. Suraj Dhiman,<sup>3</sup> Dr. Edward Castner,<sup>2</sup> Dr. James F. Wishart<sup>3</sup> and Dr. Sharon Lall-Ramnarine,<sup>1</sup> <sup>1</sup>Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY, 11364; <sup>2</sup> Rutgers University, Piscataway, NJ 08854; <sup>3</sup>Chemistry Department, Brookhaven National Laboratory, Upton, NY, 11973
- 11:30 PHYSICAL PROPERTIES OF IMIDAZOLIUM IONIC LIQUIDS BEARING SYMMETRICAL AND ASYMMETRICAL FLUORINATED SULFONAMIDE ANIONS.** Kristina Papacostas,<sup>1</sup> Jasodra Ramdihal,<sup>1</sup> Eddie Fernandez<sup>1</sup>, Dr. Edward Castner,<sup>2</sup> Dr. James Wishart<sup>3</sup> and Dr. Sharon Lall-Ramnarine,<sup>1</sup> <sup>1</sup>Department of Chemistry, Queensborough Community College, Bayside, NY, 11364; <sup>2</sup>Department of Chemistry and Chemical Biology, Rutgers University, Piscataway, NJ, 08854; <sup>3</sup>Department of Chemistry, Brookhaven National Laboratory, Upton, NY 11973.
- 11:45 IONIC LIQUID MIXTURES WITH SINGLE-WALLED CARBON NANOTUBES AS ELECTROLYTES FOR DYE-SENSITIZED SOLAR CELLS.** Rawlric Sumner,<sup>1</sup> Eddie Fernandez,<sup>2</sup> Tirandai Hemraj-Benny,<sup>1</sup> and Sharon Lall-Ramnarine,<sup>1</sup> <sup>1</sup>Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY 11364. <sup>2</sup>Department of Chemistry and Biochemistry, Queens College, CUNY, Flushing, NY 11367
- 12:00 THE SYNTHESIS OF IONIC LIQUIDS THAT RESEMBLE NEUROTRANSMITTERS.** Juliet Mengaziol, Marie Thomas, Fordham University, 113 W 60th St, New York, NY 10023.

### GREEN CHEMISTRY III

**Room: Keating 206**

**Moderators:** Stephanie Giordano/Bryan Obregon

**11:00 GREEN SYTHESIS OF BIOFUEL FROM COFFEE OIL AND WASTE SHELLS.** Chris de la Bastide, Yelda Hangun-Balkir Department of Chemistry & Biochemistry, Manhattan College, Riverdale NY, 10471

**11:15 PREPARATION AND CHARACTERIZATION OF CHEMICALLY-MODIFIED BIOMATERIALS AND THEIR APPLICATION AS ADSORBENTS OF PENICILLIN G.** Jacqueline Baah Twum and Abel Navarro. Science Department, Borough of Manhattan Community College, New York, NY 10007

**11:30 IRON AND OXYGEN CYCLING IN A SIMULATED EUROSPAN OCEAN.** Jovan Mirkovic, Robin J. Schneider Department of Chemistry, St. John's University, Queens, NY 11439

**11:45 USING ELECTROLYTE SOLUTIONS TO DISSOLVE CELLULOSE.** Anne Chen, Mike Yuan, Marie Thomas, Fordham University, 113 W 60th St, New York, NY 10023.

**12:00 SYNTHESIS AND CHARACTERIZATION OF GREEN RUST: AN UNUSUAL PARTIALLY OXIDIZED IRON OXIDE HYDROXIDE.** Katherine Ferreras, John Nobleman, Aisha Ashfaq, Glen Kowach, Urs Jans. Department of Chemistry, The City College of New York, 160 Convent Avenue, New York, New York 10031

### GREEN CHEMISTRY IV

**Room: Keating 208**

**Moderators:** Nina Le/Zuraitza R. Moreno

**11:00 ENVIRONMENTALLY BENIGN SYTHESIS OF BIODIESEL FROM ALGAE OIL AND BIOWASTE.** Kristina Palmieri and Yelda Hangun-Balkir Department of Chemistry, Manhattan College, Bronx, NY, 10471

**11:15 EFFECT OF ORGANIC MATTER ON CADMIUM AND CHROMIUM MOBILITY DURING IN SITU CHEMICAL OXIDATION.** Lassana Diawara, Andrew Peck, Robin J. Schneider Department of Chemistry, St. John's University, Queens, NY 11439

**11:30 SYNTHESIS OF BIODIESEL FUEL FROM RENEWABLE FEEDSTOCK AND WASTE MATERIALS.** Lauren Onello, Dr. Yelda Balkir Department of Environmental Science, Manhattan College, 4513 Manhattan College Parkway Riverdale, NY 10471

**11:45 TACKLING EUTROPHICATION THROUGH THE ELIMINATION OF PHOSPHATES FROM SYNTHETIC AND REAL WATER.** Abel Navarro, Makini Valentine Borough of Manhattan Community College, 199 Chambers Street New York, NY 10007

**12:00 ADSORPTION OF PHENOL FROM AQUEOUS SOLUTIONS WITH NATIVE CARIBBEAN SEAWEED: PURIFY TOXICITY OF PHENOL FROM WATER.** Md Samirul Islam, Abel E Navarro Borough of Manhattan Community College, New York, NY 10007

### GREEN CHEMISTRY V

**Room: Keating 209**

**Moderators:** Patrick Jennings/Leslie J. Ramirez

**11:00 FLUORIDE IN GROUNDWATER IN SOUTH EASTERN BANGLADESH.** Regina Ismaili, Sarah Alauddin and Mohammad Alauddin, Department of Chemistry, Wagner College, Staten Island, New York 10301

**11:15 OXIDATION-INDUCED CHANGES IN MARINE BIOMASS: FROM PHYTOPLANKTON TO SEDIMENTARY ORGANIC MATTER.** Rosie Wenrich and Alessandra Leri Department of Natural Sciences, Marymount Manhattan College, New York, NY 10021

**11:30 INVESTIGATING METAL MOBILITY DURING ISCO VIA BATCH AND COLUMN LEACH TESTS.** Stefani T. Johnson, Robin J. Schneider Department of Chemistry, St. John's University, Queens, NY 11439



**11:45 DEVELOPMENT OF SUPPORTED Ni-Pd BIMETALLIC AND Ni-Mo-Pd TRIMETALLIC HETEROGENEOUS CATALYSTS FOR DRY REFORMING OF CARBON DIOXIDE WITH METHANE.** Susanna Mirabelli, Cheng Zhang Department of Chemistry, LIU Post College of Liberal Arts and Science, Greenvale, NY 11548

## INORGANIC CHEMISTRY I

**Room: Keating 120**

**Moderators:** Louis Moskovitz/ Nnonyem Sappleton

**11:00 SYNTHESIS OF NOVEL PHOSPHINE LIGANDS WITH AN IMIDIZOLIUM TETHER FOR USE IN BIPHASIC REACTION MEDIA.** Matthew ET Miller, Christopher Parnell, and Richard J. Rosso, Ph.D. Department of Chemistry, St. John's University, Queens, NY 11439

**11:15 DETERMINING THE CRYSTAL STRUCTURE OF THE MICROPOROUS ALUMINOSILICATE ZEOLITE, SUZ-9.** Jessi Dolores and Richard M. Kirchner, Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471

**11:30 SYNTHETIC APPROACHES TO NOVEL ANTIBODY-GOLD BASED DRUG CONJUGATES FOR TARGETED DELIVERY IN CANCER CHEMOTHERAPY.** Guillaume Dewaele Le Roi,<sup>1,2</sup> Benelita T. Elie,<sup>1,3</sup> Natalia Curado,<sup>1</sup> Joshua Mathew,<sup>1</sup> and Maria Contel\*,<sup>1,3</sup> <sup>1</sup>Department of Chemistry, Brooklyn College, The City University of New York, Brooklyn, NY, 11210, US. PhD Programs in Chemistry<sup>2</sup> and Biology,<sup>3</sup> The Graduate Center, The City University of New York, 365 Fifth Avenue, New York, NY, 10016, US.

**11:45 INTRACELLULAR LOCALIZATION OF A POTENTIAL ANTICANCER CHEMOTHERAPEUTIC: INCORPORATION OF A BODIPY-BASED FLUORESCENT PROBE ONTO THE SCAFFOLD OF A RUTHENIUM(II)-IMINOPHOSPHORANE COMPLEX.** Kirill Miachin<sup>1</sup>, Patricia Appelt<sup>1,2</sup>, Yiu Fung Mui,<sup>1,3</sup> and Maria Contel\*,<sup>1,3,4</sup> <sup>1</sup>Department of Chemistry, Brooklyn College, The City University of New York, Brooklyn, NY, 11210, US. <sup>2</sup>Departamento de Quimica, Universidade Federal do Parana (UFPR), Curitiba, PR, Brazil. PhD Programs in Chemistry<sup>2</sup> and Biology,<sup>3</sup> The Graduate Center, The City University of New York, 365 Fifth Avenue, New York, NY, 10016, US

**12:00 REVO TRIPEPTIDES AS A MODELS TO UNDERSTAND THE STRUCTURE AND BINDING OF <sup>188</sup>RE IN AN N<sub>3</sub>SCHLATE.** Ordy Gnewou, Bihn Nguyen, Donna McGregor, Gustavo Lopez, Benjamin Burton-Pye. Department of Chemistry, Lehman College, Bronx, NY, 10468

## INORGANIC CHEMISTRY II

**Room: Keating 121**

**Moderators:** Nicole Smina/Rochile Khan

**11:00 SYNTHESIS AND CHARACTERIZATION OF RHODIUM (III) COMPLEXES USING POLYPYRIDYL LIGANDS.** Peter Nunez, Daniel Amarante Department of Chemistry & Biochemistry, College of Mount Saint Vincent, Riverdale, NY 10471

**11:15 SYNTHESIS OF BIS(2,2'-BIPYRIDINE)-CARBONYL-OSMIUM(II) COMPLEXES WITH VARYING PYRIDINE LIGANDS.** Veronica Krasecki and Elise G. Megehee Department of Chemistry, St. John's University, Queens, NY 11439

**11:30 CO<sub>2</sub> CONVERSION VIA DRY REFORMING METHOD WITH METHANE OVER SUPPORTED CONI BIMETALLIC AND CONIPD TRIMETALLIC CATALYSTS.** Scott Bamonte and Cheng Zhang. Department of Chemistry, Long Island University-Post, Brookville, NY 11548

**11:45 SCREENING OF METAL COMPLEXES USING A DISSOLVED OXYGEN OPTICAL PROBE FOR OXYGEN DETECTION.** Genesis Renderos, Jacqueline Guevara and Yosra M. Badiel Department of Chemistry, St. Peter's University, Jersey City, NJ 07306

**12:00 SURFACTANT-ASSISTED HYDROTHERMAL SYNTHESIS AND CHARACTERIZATION OF LiFe<sub>1-x</sub>Mn<sub>x</sub>PO<sub>4</sub>.** Sindy Ferreiras, Krystal Lee and Paul J. Sideris Department of Chemistry, CUNY Queensborough Community College, Bayside, N.Y. 11364

## NANO AND SURFACE CHEMISTRY I

**Room: Mulcahy 108**

**Moderators:** Ricardo M. Valencia/Kelly Zhu

**11:00 PHENYL MODIFIED ANTICORROSIVE COATINGS.** G. Rodriguez<sup>1</sup>, Jenifer Guzman<sup>1</sup>, I. Levy<sup>2</sup>, M. Aparicio<sup>3</sup>, Rana Daher<sup>4</sup>, M. Jitianu<sup>4</sup>, L.C. Klein<sup>5</sup> Andrei Jitianu<sup>1, 2</sup> <sup>1</sup>Lehman College, City University of New York, Department of Chemistry, Davis Hall, 250 Bedford Park Boulevard West, Bronx, New York 10468, <sup>2</sup>PhD. Program in Chemistry and Biochemistry, The Graduate Center of the City University of New York, New York, NY 10016, <sup>3</sup>Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas (CSIC), Kelsen 5 (Campus de Cantoblanco) 28049 Madrid, SPAIN, <sup>4</sup>William Paterson University, 300 Pompton Road Wayne, New Jersey 07470, <sup>5</sup>Department of Materials Science and Engineering, Rutgers University, 607 Taylor Road, Piscataway, New Jersey 08854, USA

**11:15 STUDY OF FORMATION OF ETHYL MODIFIED HYBRID COATINGS FOR CORROSION PROTECTION.** Grant Akalonu<sup>1</sup>, Quentin Picard<sup>1</sup>, James Mercado<sup>1</sup>, Lisa C. Klein<sup>2</sup>, Andrei Jitianu<sup>1</sup>, <sup>1</sup>Department of Chemistry, Lehman College, CUNY, Davis Hall, 250 Bedford Park Boulevard West, Bronx, New York 10468, <sup>2</sup>Department of Materials Science and Engineering, Rutgers University, 607 Taylor Road, Piscataway, NJ, 08854

**11:30 RHODANINE BASED COMPLEX AS A TEMPLATE FOR PMHS COATING.** Tao Hong<sup>1</sup>, Moni Chauhan<sup>1</sup>, Aarti Patel<sup>2</sup> and Bhanu Chauhan<sup>2</sup> <sup>1</sup>Department of Chemistry, Queensborough Community College, Bayside, NY 11364, <sup>2</sup>Department of Chemistry, William Paterson University, Wayne, NJ 07470

**11:45 MICROWAVE SYNTHESIS OF PDMS COATED POLYRHODANINE NANOCOMPOSITE.** Anjali Gaba and Moni Chauhan Department of Chemistry, Queensborough Community College, Bayside, NY 11364

**12:00 1,3,5,7-TETRAMETHYLCYCLOTETRASILOXANE POLYRHODANINE NANOTUBES.** Evens Esperance<sup>1</sup>, Moni Chauhan<sup>1</sup>, Aarti Patel<sup>2</sup> and Bhanu Chauhan<sup>2</sup> <sup>1</sup>Department of Chemistry, Queensborough Community College, Bayside, NY 11364, <sup>2</sup>Department of Chemistry, William Paterson University, Wayne, NJ 07470

**12:15 DETERMINATION OF THE CRYSTAL STRUCTURE OF ALUMINOSILICATE ZEOLITE, SUZ-9.** Daisuke Robert Kuroshima and Richard M. Kirchner Department of Chemistry and Biochemistry, Manhattan College, Riverdale, NY 10471

## **NANO AND SURFACE CHEMISTRY II**

**Room: Mulcahy 112**

**Moderators:** Margaret Sullivan/Aduke Saibu

**11:00 X-RAY PHOTOELECTRON SPECTROSCOPY OF IMMOBILIZED DNA AND MORPHOLINO.** Michael Yang<sup>1</sup>, Ursula Koniges<sup>1</sup>, Rastislav Levicky<sup>1</sup>. Department of Chemical & Biomolecular Engineering, New York University, 6 Metrotech Center, New York, NY 11201

**11:15 FABRICATION OF NEW PEPTIDE-POLYPHENOL BASED SCAFFOLD CONSTRUCTS FOR SOFT TISSUE ENGINEERING.** Harrison T. Pajovich, Andrew M. Smith, Sarah K. Hurley, Jessica R. Dorilio, Nicole M. Cutrone, and Ipsita A. Banerjee Department of Chemistry, Fordham University, Bronx, NY 10458

**11:30 MICELLE DRIVEN SELF-ASSEMBLY OF SILVER NANOPARTICLES.** Mei Wai Tsui and Deborah Berhanu, Department of Physical Science, Kingsborough Community College, Brooklyn, NY 11235

**11:45 FORMATION OF NANOSCALE DRUG DELIVERY CONSTRUCTS USING PEPTIDE AMPHIPHILE MIMICS** Nicole M Cutrone<sup>1</sup>, Sara K. Hurley<sup>1</sup>, Jessica R. Dorillio<sup>1</sup>, Harrison T. Pajovich<sup>1</sup>, Jeremy Garcia<sup>2</sup>, Karl R. Fath<sup>2</sup>, Ipsita A. Banerjee,<sup>1</sup> <sup>1</sup>Department of Chemistry, Fordham University, 441 E. Fordham Road, Bronx NY 10458, <sup>2</sup>Department of Biology, Queens College, CUNY, Kissena Boulevard, Flushing, NY 11365

**12:00 PEPTIDE-CONJUGATED NANOCOMPOSITES FOR OVARIAN CANCER CELL TARGETING.** Sara K. Hurley, Nicole M. Cutrone, Jessica R. Dorilio, Harrison T. Pajovich, Andrew M. Smith, and Ipsita A. Banerjee, Department of Chemistry, Fordham University, Bronx, NY 10458

**12:15 MMP-9 CLEAVABLE NANOPEPTIDES FOR INCREASED TUMOR SITE TARGETING AND IMPROVED DELIVERY OF METALLODRUGS.** Lina Alhanshali,<sup>1,2</sup>Jiye Son,<sup>1,2,4</sup>Rein Ulijn<sup>\*2-4</sup>and Maria Contel,<sup>\*1,4,5</sup>

<sup>1</sup>Department of Chemistry, Brooklyn College, The City University of New York, Brooklyn, NY, 11210, US. <sup>2</sup>Advanced Science Research Center, City University of New York, New York, New York 10027. <sup>3</sup>Department of Chemistry, Hunter College. PhD Programs in Chemistry<sup>4</sup> and Biology<sup>5</sup>, The Graduate Center, City University of New York, 365 Fifth Avenue, New York, NY 10016, US

### **NANO AND SURFACE CHEMISTRY III**

**Room: Mulcahy 132**

**Moderators: Michael Gleeson/Samantha Wynter**

**11:00 SYNTHESIS AND CHARACTERIZATION OF A CONDUCTIVE POLYMER HYDROGEL FOR ELECTROCHEMICAL SENSOR APPLICATIONS.** Ezer Castillo<sup>1</sup>, Veronica Grebe<sup>1</sup>, Dr. Justyna Widera-Kalinowska<sup>1</sup>, Dr. Barbara Palys<sup>2</sup> <sup>1</sup>Department of Chemistry, Adelphi University, 1 South Avenue, Garden City, NY 11530 USA <sup>2</sup>Faculty of Chemistry, University of Warsaw, Pasteur Street 1, 02-093 Warsaw, Poland

**11:15 FABRICATION OF CORE-SHELL PLATINUM COATED NICKEL NANOWIRES AS ELECTROCHEMICAL CATALYST FOR GLUCOSE SENSORS.** Ian Colliard, Alexis Kassotis, and Ricardo M. Valencia, Department of Chemistry, Fordham University, Bronx, NY, 10458

**11:30 THE PREASSOCIATION AND ITS EFFECT ON QUENCHING OF THE LUMINESCENCE OF RU (II) DIIMINE COMPLEXES BY AG-NPS CAPPED WITH CITRATE.** James Irizarry, Jianwei Fan Department of Chemistry and Biochemistry, Manhattan College, New York, NY 10471

**11:45 DESIGNING A PROTON WIRE FROM SHORT SELF ASSEMBLED TRIPEPTIDES.** Joseph Cruz, Shejla Pollozi, Donna McGregor, Gustavo Lopez, Benjamin Burton-pye. Department of Chemistry, Lehman College, Bronx, NY, 10468

**12:00 CONSTRUCTING NANOSCALE DRUG RELEASE VEHICLES FOR DUAL TARGETING TUMOR CELLS.** Jessica R. Dorilio, Nicole M. Cutrone, Sara K. Hurley, Harrison T. Pajovich, Andrew M. Smith, and Ipsita A. Banerjee. Fordham University, Department of Chemistry, 441 East Fordham Road Bronx, NY 10458

**12:15 CRYSTALLIZATION OF A SYMMETRIC DNA 8-TURN 3D-DX MOTIF.**  
Robert Tseng, Yoel P. Ohayon, Ruojie Sha, Nadrian C. Seeman Department of Chemistry, New York University, New York, NY 10003

### NANO AND SURFACE CHEMISTRY IV

**Room: Mulcahy 140**

**Moderators:** Gurpreet Singh/Joseph J. Almasri

**11:00 METAL OXIDE COATED TRANSITION METAL NANOWIRES WITH TUNABLE OPTICAL PROPERTIES FOR ENHANCED PERFORMANCE OF PHOTOELECTROCHEMICAL CELLS.** Josephine A. Jacob-Dolan, Brett T. Musialowicz, Christopher Koenigsmann Department of Chemistry, Fordham University, 441 East Fordham Road, Bronx, NY 10458

**11:15 POLYANILINE NANOFIBERS AS A SCAFFOLDING MATERIAL FOR RUTHENIUM NANOPARTICLES.** Katherine Kim and David M. Sarno Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY, 11364

**11:30 DEVELOPMENT AND CHARACTERIZATION OF CONDUCTIVE POLYMER POLYANILINE FILMS AND HYDROGELS MODIFIED WITH TYROSINASE FOR THE DETECTION OF PHENOLIC COMPOUNDS.** Veronica Grebe<sup>1</sup>, Ezer Castillo<sup>1</sup>, Barbara Pałys<sup>2</sup>, and Justyna Widera-Kalinowska<sup>1</sup> <sup>1</sup>Department of Chemistry and Biochemistry, Adelphi University, 1 South Avenue, Garden City, NY 11530 USA <sup>2</sup>Laboratory of Electrochemistry, Faculty of Chemistry, University of Warsaw, Pasteur Street 1, 02-093 Warsaw, Poland

**11:45 MICROWAVE IRRADIATION OF RUTHENIUM CHLORIDE IN ANHYDROUS ETHANOL.** Leandro Pimentel, Nicholas Carrero and Tirandai Hemraj-Benny. Department of Chemistry, Queensborough Community College, Bayside, NY 11364

**12:00 CONGO RED DYE DEGRADATION USING SINGLE-WALLED CARBON NANOTUBE-RUTHENIUM NANOPARTICLES CATALYST.** Nicholas Carrero, Rawlric Sumner and Tirandai Hemraj-Benny. Department of Chemistry, Queensborough Community College, Bayside, NY 11364.

**12:15 INTERACTIONS OF CONDUCTIVE NANORIBBON BIOCOMPOSITES WITH NEURAL CELLS.** Andrew M. Smith, Harrison T. Pajovich and Ipsita A. Banerjee Fordham University, Department of Chemistry, 441 E Fordham Rd, Bronx, NY 10458

### ORGANIC CHEMISTRY I

**Room: Keating 214**

**Moderators:** Roland Correa/Chandini Pillai

**11:00 PROBING THE REACTIVITY OF *O,O*-ACETALS VS. *N,O*-ACETALS: AN UNDERGRADUATE LAB EXPERIMENT COMBINING SYNTHESIS & SPECTROSCOPY AS PART OF A MECHANISTIC INVESTIGATION.** Samantha M. Bruno, John H. Bruppacher, Alexa G. McKnight, James A. Ciaccio and Shahrokh Saba Department of Chemistry, Fordham University, Bronx, NY 10458

**11:15 SYNTHESIS AND BIOLOGICAL CHARACTERIZATIONS OF PORPHYRIN-GLUCOSIDE CONJUGATES.** Avelyn Mae Delos Reyes, David R. Mootoo, Patricia Gonzales, N. V. S. Dinesh K. Bhupathiraju, Michael Drain Department of Chemistry, Hunter College 695 Park Avenue New York, NY 10065

**11:30 SYNTHETIC STUDIES ON TUMOR RECOGNIZING CARBOHYDRATE IN THE BLEOMYCIN FAMILY OF CLINICAL AGENTS.** Tarandip Singh and David R. Mootoo Department of Chemistry, CUNY-Hunter College, New York City, NY 10065

**12:00 SYNTHESIS OF A FLUORINATED ANALOG OF THE IMMUNOSTIMULATORY GLYCOLIPID KRN7000.** Khaleel Ali, Ahmad Alti, Stewart Bachan and David R. Mootoo Department of Chemistry, Hunter College, City University of New York, 695 Park Avenue New York, NY 10065

**12:15 COMPUTATIONAL INVESTIGATIONS OF ALDOL REACTIONS OF AROMATIC ENOLATES AND ALDEHYDES.** Arghavan Zolfaghari, Shivnath Mazumder, and Nannette M. Wachter. Chemistry Department, Hofstra University, Hempstead NY 11549-0151

## ORGANIC CHEMISTRY II

**Room: Keating 215**

**Moderators: Farjahan Akhter/Sarah S. Khan**

**11:00 SYNTHESIS OF BENZIMIDAZOLE DERIVATIVES FOR URIDINE NUCLEOSIDE RIBOHYDROLASE TARGETING.** Angelica Leonardo and Melissa VanAlstine-Parris, Department of Chemistry, Adelphi University, Garden City, NY 11530

**11:15 EFFECT OF NITROGEN-ATOM SUBSTITUENTS ON RING-FLIP AND GEOMETRIC ISOMERISM IN 1H-1-BENZA ZEPINES.** Bassem Ahmed, Rosen Jeong, Lukasz Bogdan, Kitae Kwon, Edyta M. Greer, David J. Szalda, and Keith Ramig. Department of Natural Sciences, Baruch College, 17 Lexington Ave, New York, NY 10010

**11:30 SYNTHESIS AND CHARACTERIZATION OF NOVEL MOLECULAR CONJUGATES IN THE DEVELOPMENT OF NEW ANTIBACTERIAL AGENTS.** Hui Yan Gan, Pooja Saklani, Jia Wei Luo and David P. Brown Department of Chemistry, St. John's University, Queens, New York, 11439

**11:45 CATALYST DESIGN FOR MICROWAVE ASSISTED HETEROGENEOUS GAS PHASE OXIDATION OF ALKYL PYRIDINES BY USING OXYGEN FROM AIR AS AN OXIDIZING AGENT.** Eltonnelle James, Yevgeniya Alkayeva Ph. D., Alexei Shutilov, Galina Zenkovets. Department of Natural Sciences, Fordham University, New York, NY 10023

**12:00 ISOMERIZATION OF IBUPROFEN.** Frankie Benavides, Edyta Greer and Mikey Kwon Department of Natural Sciences, Baruch College, New York, NY 10010

**12:15 EXPLORING THE TAUTOMERIZATION OF THIOTROPOCIN AND TROPDITHIETIC ACID.** Thuong Tran and Edyta M. Greer Department of Natural Sciences, Baruch College, New York, NY 10010



## ORGANIC CHEMISTRY III

**Room: Keating 218**

**Moderators:** Brian El Zokm/Daniel Vreeland

**11:00 SYNTHESIS OF N-HYDROXYPHENYLTRICHLOROACETAMIDE DERIVATIVES BY MICROWAVE REACTOR: POSSIBLE PRECURSOR TO POLYCARBAMATE.** Hyeon Yun, Jun H. Shin, Department of Chemistry, Queensborough Community College, Bayside, NY 11364

**11:15 OLIGOCARBAZOLE SINGLE MOLECULE WIRES.** Patrick Tuttle<sup>1</sup>, Cole Sagan<sup>2</sup>, Jiayi Xue<sup>1</sup>, Xiaofang Megan Yu<sup>1</sup>, Gina Florio<sup>2</sup> and Sujun Wei<sup>1</sup>  
<sup>1</sup>Department of Chemistry, Queensborough Community College, Bayside, NY 11364; <sup>2</sup>Department of Chemistry & Department of Physics, St. John's University, Queens, NY 11439

**11:30 SYNTHESIS OF X-SHAPE MOLECULES AS ELECTRON ACCEPTORS IN ORGANIC SOLAR CELLS.** Jiayi Xue, Francisco Caban, Yi (Jane) Jiang and Sujun Wei Department of Chemistry, Queensborough Community College, Bayside, NY, 11364

**11:45 A NEW SYNTHESIS OF PYRROLES USING THE CADOGAN APPROACH.** Mei Sze Lai,<sup>1</sup> Yanan Liu,<sup>1</sup> Sasan Karimi,<sup>1</sup> Shuai Ma,<sup>2</sup> Gopal Subramaniam<sup>2</sup>  
<sup>1</sup>Department of Chemistry, Queensborough Community College, Bayside, NY 11364. <sup>2</sup>Department of Chemistry and Biochemistry, Queens College, Flushing, NY 11367

**12:00 SELENIUM DIOXIDE OXIDATION OF N-ALKYLATED-1-BENZAZEPINES TO QUINOLINE.** Michelle Qu,<sup>1</sup> Sasan Karimi,<sup>1</sup> Shuai Ma,<sup>2</sup> Gopal Subramaniam,<sup>2</sup> (1) Department of Chemistry, Queensborough Community College, Bayside, NY 11364. (2) Department of Chemistry and Biochemistry, Queens College, Flushing, NY 11367

**12:15 SYNTHESIS OF A MODEL OF THE BC RING SYSTEM OF OXYGENATED ANGUICYCLINES.** Abdullah Allaoa, Tony E. Nicolas. Department of Chemistry, New York City College of Technology, 300 Jay Street, Brooklyn, NY 11201

## ORGANIC CHEMISTRY IV

**Room: Keating 219**

**Moderators:** Ahef Ameer/Ike Ariza

**11:00 SYNTHESIS AND ANALYSIS OF NITRIC OXIDE RELEASING FUROXANS** Haley Tarbox, Dr. Nanette Wachter and Aweon Richards. Department of Chemistry, Hofstra University, Hempstead, NY 11549

**11:15 SYNTHESIS & CHARACTERIZATION OF MIXED SHORT AND MEDIUM CHAIN FATTY ACID TRIACYLGLYCEROLS.** Gabrielle Cabrera, William F. Nirode, Ling Huang, Ronald P. D'Amelia\* Department of Chemistry, Hofstra University, Hempstead, NY, 11549

**11:30 SYNTHESIS OF 2-SUBSTITUTEDBENZIMIDAZOLE DERIVATIVES FROM 1,2-DIAMINO BENZENE TO TEST FOR THEIR INHIBITORY EFFECT ON THE ENZYME URIDINE NUCLEOSIDE RIBOHYDROLASE.** Zaafir Dulloo and Melissa A. Van-Alstine Parris, Department of Chemistry, Adelphi University, Garden City, NY 11530.

**11:45 PREVENTING TURBURCULOSIS THROUGH TREATED SURFACES.** Eddie Fernandez, and Robert Engel. Department of Chemistry and Biochemistry, Queens College, Queens, NY 11367

## PHYSICAL CHEMISTRY I

**Room: Keating 317**

**Moderators:** Momoka Nagamine/Ismailov Temurjon

**11:00 CRYSTAL STRUCTURE DETERMINATION OF ALUMINOSILICATE ZEOLITE, SUZ-9.** Christopher Kim and Richard M. Kirchner, Department of Chemistry and Biochemistry, Manhattan College, Bronx, NY 10471

**11:15 CONCENTRATION EFFECT OF KCL ON SIZE, SHAPE, AND IONIC PARTITIONING IN AOT REVERSE MICELLES.** Gent Prelvukaj, Tyler Cropley, Dr. Arun Sharma Department of Chemistry, Wagner College, Staten Island, NY 10301

**11:30 SURFACE RAMAN OF *BIS*-PYRIDYL-ACETYLENE ADSORBED AT SILVER.** Jean Marie Gizzo, Dannielle Garceau, Zubair Shabbir and John J. McMahon Department of Chemistry, Fordham University, Bronx, NY 10458

**11:45 GALVANOSTATIC MEASUREMENTS OF PHOTOCATALYSIS AT BPA-COVERED SILVER.** Nahian Sadique, Zubair Shabbir, and John J. McMahon Department of Chemistry, Fordham University, Bronx, NY 10458

**12:00 USING FORCE SPECTROSCOPY TO DETERMINE BINDING STRENGTH.** Laura Williams and Joseph Serafin. Department of Chemistry, St John's University, Queens, NY 11439

### PHYSICAL CHEMISTRY II/CHEMICAL EDUCATION

**Room: Keating 318**

**Moderators:** Yveline Lamothe/Maty Sembene

**11:00 ZINC SULFIDE SHELL GROWTH ON CADMIUM SELENIDE QUANTUM DOTS.** Kevin Dominguez, Megan Webster and Kristi Pepa City College of New York, New York, NY 10031

**11:15 DESIGN AND CONSTRUCTION OF A HIGH-MASS ELECTROSPRAY IONIZATION (ESI) QUADRUPOLE MASS SPECTROMETER.** Wenjing Zhou, Jendri Morocho, Yan Sun and Jianbo Liu. Department of Chemistry and Biochemistry, Queens College of the City University of New York, 65-30 Kissena Blvd., Queens, NY 11367

**11:30 HYDROGEN BONDING NETWORKS IN HIV-1 PROTEASE WITH A BOUND INHIBITOR DRUG – A MOLECULAR DYNAMICS SIMULATION ANALYSIS.** Hong Zhang,<sup>1</sup> Dennis Lam<sup>2</sup> and Yolanda A. Small<sup>1,2</sup> Department of Chemistry, <sup>1</sup>York College CUNY, Jamaica, NY 11451, <sup>2</sup>Ph.D. Program in Biochemistry, The Graduate Center of the City University of New York, New York, 10016

**11:45 EVALUATION AND IMPROVEMENT OF ONLINE HOMEWORK FOR FOUNDATIONS OF INORGANIC CHEMISTRY.** Marissa Strumolo and Sabrina Sobel Department of Chemistry, Hofstra University, Hempstead, NY 11549

**12:00 EFFECT OF CHEMICAL DEMONSTRATIONS IN A NON-MAJOR CHEM COURSE.** Victoria Pirulli, Arwa El-Rohmeim, Fahema Patwari and

Gopal Subramaniam. Department of Chemistry and Biochemistry, Queens College - CUNY, Queens, NY 11580

## POLYMER CHEMISTRY

**Room: Keating 312**

**Moderators:** Grisel Medrano/ Snove-tia Cape/  
Isabella Jean-charles

**11:00 POROUS MICROSPHERES OF POLYANILINE AND ITS DERIVATIVES PREPARED FROM W/O/W DOUBLE EMULSIONS.**

Jean Hwang and David M. Sarno Department of Chemistry, Queensborough Community College of CUNY, Bayside, NY, 11364

**11:15 NOVEL LINEAR BLOCK COPOLYMER SYSTEMS PREPARED FROM  $\epsilon$ -CAPROLACTONE AND L-LACTIDE THAT REMOVE SOLUBLE ORGANIC POLLUTANTS FROM AQUEOUS ENVIRONMENTS.**

Katrina T. Bernhardt<sup>1</sup> and Amy M. Balija<sup>1,2</sup> <sup>1</sup>Department of Chemistry, Fordham University, Bronx, NY 10458, <sup>2</sup>Department of Chemistry, Radford University, Radford, VA 24142

**11:30 PH-RESPONSIVE DEXTRAN HYDROGELS BY CROSSLINKING WITH AMINO ACID DIAMINES.**

Madeline Wong<sup>1</sup>, Greisly Nunez<sup>1</sup>, David Akpatsu<sup>2</sup>, Kerwin Clement<sup>2</sup>, Mihaela Jitianu<sup>2</sup> and Naphtali O'Connor<sup>1</sup>

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<sup>2</sup>Department of Chemistry, William Paterson University, New Jersey 07470

**11:45 PHOTO-CROSSLINKABLE SELF-ASSEMBLING PROTEIN TRIBLOCK POLYMERS FOR HYDROGEL FABRICATION.**

Nicole L. Schnabel<sup>1</sup>, Yao Wang<sup>1</sup>, Andrew Olsen<sup>1</sup> and Jin K. Montclare<sup>1,2,3,4</sup> <sup>1</sup>Department of Chemical and Biomolecular Engineering, NYU Tandon School of Engineering, Brooklyn, NY, 11201 <sup>2</sup>Department of Chemistry, New York University, New York, NY, 10003 <sup>3</sup>Department of Biochemistry, SUNY Downstate Medical Center, Brooklyn, NY, 11203 <sup>4</sup>Department of Biomaterials, NYU College of Dentistry, New York, NY 10010