



## SPRING 2017 SEMINAR SERIES

3:00 p.m. in Julian Hall room 225

- April 7 Mark Oblazny, "Chemical Fluorescence Probe for Detection and Diagnosis of Toxic Amyloid  $\beta$ -Aggregates"
- April 14 Jade Katinas, "The Inhibitory Effects of Unique Sulfonamides on *Leishmania tarentolae* and Potential Pathways of Inhibition"
- April 21 Ramzi Farran (Fenwick H.S. – retired), Bernard L. Ryder Distinguished Alumni Lecture
- April 28 Austin Penn, "Copper Dye-Based Solar Cells"
- May 5 Erasmus Jugovic, "Synthesis and Characterization of Mixed Donor Ligands and Their Corresponding Effect on the Chemical Properties of Metal Ions"
- Finals Week (details TBD) Craig Haynes, "An Asymmetric Glycolate Aldol Addition Reaction Pathway Employing an  $N_3$ -(methoxyphenoxyacetyl)oxazolidine-2-thione as Chiral Auxiliary and the Computational Study of Select Glycolate Aldol Adducts"
- Sayed Habibul Gafur, "A Conia-Ene-Type Cyclization Under Basic Conditions and Its Application in an Efficient Synthesis of (-)-Lycoposerramine R"
- Mollie Metallo, "Total Synthesis of Vinblastine, Related Natural Products, and Key Analogues and Development of Inspired Methodology Suitable for the Systematic Study of Their Structure-Function Properties"
- Navneet Sahota, "Development of New Routes for the Synthesis of Carbaporphyrins and Carbachlorins"

## UPCOMING EVENTS!

- April 2-6 253<sup>rd</sup> ACS National Meeting (San Francisco, CA)
- April 11 Spring College Address – 3:30 p.m., Old Main Room

## DATES AND DEADLINES

- April 3 -Deadline to file final dissertation copies with the Graduate School for May 2017 graduates.  
-Deadline to file Right to Defend MFA materials with the Graduate School for May 2017 graduates.  
-Spring 2018 class schedules requested. Due July 1<sup>st</sup>.
- April 7 -Transfer Day  
-Last day for undergraduate students to apply for August 2017 graduation and still be eligible to participate in May Commencement.  
-Deadline for Thesis Oral Defense for May 2017 graduates.
- April 10 Deadline (2 p.m.) to file final thesis with the Graduate School for May 2017 graduates.
- April 14 -Transfer Day  
-Deadline for MFA Oral Defense for May 2017 graduates.

- Last day to withdraw from a second-half semester course. A withdrawal grade of WX is assigned. No adjustment of charges or financial aid.
- Last day to remove the Credit/No Credit (Pass/Fail) option from a second-half semester course.
- Last day to officially withdraw from the University.

## STUDENT, FACULTY and STAFF ACTIVITIES

### Grants

1. **Jean M. Standard**, "Computational Modeling of the Binding of Sulfur Dioxide to Amine-Functionalized Polyethylene Glycols," XSEDE National Supercomputing Resource, Request CHE140045, 40,000 service units, 4/1/17-3/31/18.

### Publications

1. **Craig C. McLauchlan**, Jan Florián, <sup>(G)</sup>**Daniel S. Kissel**, Albert W. Herlinger, "Metal Ion Complexes of N,N'-Bis(2-Pyridylmethyl)-trans-1,2-Di-aminocyclohexane-N,N'-Diacetic Acid, H<sub>2</sub>bpcd: Lanthanide(III)- bpcd<sup>2-</sup> Cationic Complexes," *Inorganic Chemistry*. **2017**, *56*, 3556-3567.
2. <sup>(G)</sup>**Calvin D. Quilty**, Maxim Avdeev, **Jeremy D. Driskell**, **Eirin C. Sullivan**, "Structural Characterization and Photoluminescence in the Rare Earth-Free Oxy-fluoride Anti-perovskites Sr<sub>3-x</sub>Bi<sub>2x/3</sub>AlO<sub>4</sub>F and Sr<sub>3-x</sub>Bi<sub>2x/3</sub>GaO<sub>4</sub>F," *Dalton Transactions*, **2017**, *46*, 4055-4065 (DOI: 10.1039/c7dt00310b).
3. Stephen R. Hughes, Nasib Qureshi, Juan Carlos Lopes Nunez, **Marjorie A. Jones**, <sup>(G)</sup>**Joshua M. Jarodsky**, Luz Angela Galindo-Leva, Mitchell R. Lindquist, "Utilization of Inulin-containing Plants for Industrial Fermentations to Product Biofuels and Bio-based Chemicals," *World Journal of Microbiology and Biotechnology* **2017**, *33*:78-93 (DOI: 10.1007/s11274-017-2241-6). This was an invited review article.

### Student Presentations

Illinois State University Research Symposium, March 31, 2017

1. <sup>(G)</sup>**Taylor J. Arledge**, **Jean M. Standard**, "Density Functional Theory Analysis of SO<sub>2</sub> Capture by Amine-functionalized Polyethylene Glycols."
2. <sup>(UG)</sup>**Emilee K. Baldwin**, <sup>(UG)</sup>**Kyle A. Lieberum**, Sarah B. Boesdorfer, "Students' Response to Standards-based Grading in a Non-majors General Chemistry Course."
3. <sup>(UG)</sup>**Kamaljit Braich**, **Craig C. McLauchlan**, **Marjorie A. Jones**, "Synthesis of Vanadium Complexes to Test as Inhibitors of Secreted Acid Phosphates."
4. <sup>(UG)</sup>**Scott R. Cleary**, <sup>(UG)</sup>**Alessandra M. Bruno**, Michael C. Gizzi, **Christopher C. Mulligan**, "The Utility and Legality of Using Portable, Ambient Sampling Mass Spectrometers in Traffic Stops."
5. <sup>(UG)</sup>**William T. Darrow**, **Timothy D. Lash**, "Synthesis and Metalation of Adj-dicarbaporphyrins."
6. <sup>(G)</sup>**Matthew C. Drummer**, **Jean M. Standard**, "Alkyne Combustion: Experimental and Theoretical Studies of HCO Product Pathways."
7. <sup>(UG)</sup>**Rachel Epplin**, **T. Andrew Mitchell**, "Investigation of Oxidopyrylium-alkene [5+2] Cycloadditions."
8. <sup>(UG)</sup>**William L. Fatigante**, <sup>(G)</sup>**Zachary E. Lawton**, <sup>(UG)</sup>**Alessandra M. Bruno**, <sup>(G)</sup>**Shahnaz Mukta**, Michael C. Gizzi, **Christopher C. Mulligan**, "Paper Cone Spray Ionization Sources Featuring Integrated Extraction and Filtration for On-site Forensic Applications."

9. <sup>(G)</sup>Sayed Habibul Gafur, T. Andrew Mitchell, "Synthesis of Polycyclic Ether Utilizing Oxidopyrylium-alkene [5+2] Cycloaddition – Total Synthesis of Toxicodenane-A."
10. <sup>(UG)</sup>Chanse Hoagland, Eirin C. Sullivan, "Characterization of  $SR_{3-3X/2}GA_{1-X}M_XO_4F$  ( $0 \leq X \leq 0.25$ ) Oxyfluoride Anti-perovskites."
11. <sup>(G)</sup>Erasmus Jugovic, Christopher G. Hamaker, "Synthesis of Novel Mixed O, N, S Donor Ligands."
12. <sup>(UG)</sup>Riley H. Kaufman, T. Andrew Mitchell, "Investigation of Acetoxypyranone-alkene [5+2] Cycloadditions."
13. <sup>(UG)</sup>Alissa N. Latham, Timothy D. Lash, "Synthesis and Metalation of N-methylbenzocarbaporphyrins."
14. <sup>(UG)</sup>Macie Markello, <sup>(UG)</sup>Casey Gahrs, Eirin C. Sullivan, "Investigation of  $NA_2MO_{1-X}W_XO_4$  and  $CE^{3+}$ -doped  $NA_3MO_{1-X}W_XO_4F$  as Phosphor Materials."
15. <sup>(G)</sup>Mollie E. Metallo, Timothy D. Lash, "Synthesis of Azuliporphyrin Dyads."
16. <sup>(G)</sup>Shahnaz Mukta, <sup>(G)</sup>Zachary E. Lawton, <sup>(UG)</sup>William L. Fatigante, Herbert Oberacher, Christopher C. Mulligan, "Analytical Validation of a Portable MS System Featuring Interchangeable, Ambient Ionization Sources During Field Operation."
17. <sup>(G)</sup>Mark Oblazny, Jon A. Friesen, "Kinetic Characterization of *Listeria Monocytogenes* 2-C-methyl-D-erythritol-4-phosphate Cytidylyltransferase."
18. <sup>(G)</sup>Austin S. Penn, Christopher G. Hamaker, "Synthesis and Characterization of Novel Sulfonamide Ligands."
19. <sup>(UG)</sup>Yasminda R. Ruiz, Christopher C. Mulligan, Jamie R. Wieland, Michael C. Gizzi, "Viability and Economic Assessment of Portable Mass Spectrometric Instrumentation and Standard Forensic Science Methods."
20. <sup>(G)</sup>Navneet Sahota, Timothy D. Lash, "Development of New Routes for the Synthesis of Carbaporphyrins and Carbachlorins."
21. <sup>(UG)</sup>Jessica L. Shaw, T. Andrew Mitchell, "Exploration of Oxidopyrylium-alkene [5+2] Cycloaddition Reactions."
22. <sup>(UG)</sup>Tyler J. Smolczyk, Timothy D. Lash, "Synthesis of Heterocarbaporphyrins from Carbatripyrrin Intermediates."
23. <sup>(UG)</sup>Cole W. Terry, Jean M. Standard, "Effects of SO<sub>2</sub> and SO<sub>3</sub> in the Atmosphere."
24. <sup>(UG)</sup>Lucas T. Tesar, Jean M. Standard, "Computational Studies of the Reaction of Atomic Oxygen with Propargyl Chloride."
25. <sup>(UG)</sup>Rachel A. Tomlovich, Timothy D. Lash, "Synthesis of 3-alkoxybenzporphyrins."
26. <sup>(G)</sup>Kiran Tripathi, Jeremy D. Driskell, "Quantifying the Activity of Antibody Conjugated to Gold Nanoparticles."
27. <sup>(G)</sup>Craig A. Wallace, Craig C. McLauchlan, Marjorie A. Jones, "Incubation of *Leishmania tarentolae* with Vanadium Complexes to Assess Their Potential as Therapeutic Drugs."

