

## 2023 Brown Symposium Poster Session

| No. | Presenting Author           | Poster Title and Authors                                                                                                                                                                                                                                                    | Affiliation                                                                                                                                                 |
|-----|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Ashutosh Agrahari           | Metal-Promoted Higher-Order Assembly of Disulfide Stapled Helical Bundles<br><br>Ashutosh Agrahari and Jean Chmielewski                                                                                                                                                     | Department of Chemistry, Purdue University                                                                                                                  |
| 2   | Mustafa Ahmed               | Synthesis and Reduction of Nitrogen-Substituted Diaryl Dihydrophenazine Diradical Dications<br><br>Mustafa Ahmed, Yukun Wu, Matthew R. Schiavone*, Zhiyang Wang, Kuluni Perera, Jagrity Chaudhary, Ke Chen, Kai Lang, Liyan You, Mattias Zeller, and Jianguo Mei            | Purdue University                                                                                                                                           |
| 3   | Ruth Anyaeche               | Determination of the First Iodine Atom Abstraction Site for Quinoline-Based Biradicals<br><br>Ruth Anyaeche, Jaskiran Kaur, Yue Fu, Duanchen Ding, and Hilkka Kenttämä                                                                                                      | Purdue University                                                                                                                                           |
| 4   | Juan C. Arango              | Inkjet Printing-Assisted Generation of Hierarchical Nanometer-Scale Functional Patterns on 2D Crystalline and Amorphous Soft Materials<br><br>Juan C. Arango <sup>1</sup> , Chris Pintro <sup>1</sup> , Anamika Singh <sup>1</sup> , and Shelley A. Claridge <sup>1,2</sup> | <sup>1</sup> Department of Chemistry, Purdue University<br><br><sup>2</sup> Weldon School of Biomedical Engineering, Purdue University                      |
| 5   | Cristina Ascenzi Pettenuzzo | Photoinduced Carbon Radical Generation from Boronic Acid Catalyzed by Pyridine N-Oxides<br><br>Cristina Ascenzi Pettenuzzo and Yongming Deng                                                                                                                                | IUPUI                                                                                                                                                       |
| 6   | Pankaj Bhattarai            | A Deoxyfluoroalkylation Strategy to Access Highly Substituted Trifluoromethylated Arenes and Heteroarenes<br><br>Pankaj Bhattarai <sup>1</sup> , Suvajit Koley <sup>1</sup> , Mohammed Khalifa <sup>1</sup> , and Ryan Altman <sup>1,2</sup>                                | <sup>1</sup> Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University<br><br><sup>2</sup> Department of Chemistry, Purdue University |
| 7   | Hayden Bishop               | Cobalt-Catalyzed Asymmetric Reductive Coupling of Alkynes and Imines<br><br>Hayden Bishop, Qiang Zhao, Peter Bedford*, and Christopher Uyeda                                                                                                                                | Purdue University                                                                                                                                           |

\*Indicates undergraduate student authors

|    |                    |                                                                                                                                                                                                                                                                                           |                                                                                                                     |
|----|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 8  | Sourish Biswas     | Vinylidene Addition to Alkyne via Zinc Transmetalation<br><br>Sourish Biswas, Abigail Soliven, Abigail Soliven*, and Christopher Uyeda                                                                                                                                                    | Department of Chemistry,<br>Purdue University                                                                       |
| 9  | Nickolas Brauer    | Biological and Computational Evaluation of Pyrazolo-[4,3f]-quinoline Based Hydroxamic Acid Containing Kinase Inhibitor Library<br><br>Nickolas Brauer, Neetu Dayal, and Herman Sintim                                                                                                     | Department of Chemistry,<br>Purdue University                                                                       |
| 10 | Kyle B. Brook      | Dinuclear Cobalt-Catalyzed Dimerization of Tertiary Alkyl Azides<br><br>Kyle B. Brook, Sumeet R. Sahoo, Lexi Fresh*, and Christopher Uyeda                                                                                                                                                | Department of Chemistry,<br>Purdue University                                                                       |
| 11 | Douglas S. Chan    | Development of Gefitinib Prodrugs Targeting Non-Small Cell Lung Cancer Brain Metastases via Inhibition of P-glycoprotein at the Blood-Brain Barrier<br><br>Douglas S. Chan, Christine A. Hrycyna, and Jean Chmielewski                                                                    | Department of Chemistry,<br>Purdue University                                                                       |
| 12 | Yu-Che Chang       | Strain-Release $[2\pi + 2\sigma]$ Cycloadditions of Housanes and Azahousanes via Energy Transfer<br><br>Yu-Che Chang <sup>1</sup> , Renyu Guo <sup>1</sup> , Loic Herter <sup>2</sup> , Christophe Salome <sup>2</sup> , Thomas C. Fessard <sup>2</sup> , and M. Kevin Brown <sup>1</sup> | <sup>1</sup> Department of Chemistry,<br>Indiana University<br><br><sup>2</sup> SpiroChem AG, Basel,<br>Switzerland |
| 13 | Andrew Encinas     | Investigating the Nucleation and Growth Mechanism of Coiled-Coil Peptide Crystals<br><br>Andrew Encinas and Jean Chmielewski                                                                                                                                                              | Purdue University                                                                                                   |
| 14 | Daria Galaktionova | Iron-Catalyzed Gamma–Gamma Dimerization of Siloxydienes<br><br>Daria Galaktionova and Justin T. Mohr                                                                                                                                                                                      | Department of Chemistry,<br>University of Illinois at<br>Chicago                                                    |
| 15 | Kuang Gu           | Transition-Metal Selective Migratory C-H Functionalization of Indole-3-Carboxamide<br><br>Kuang Gu, Gregory Durling, and Brandon Ashfeld                                                                                                                                                  | University of Notre Dame                                                                                            |

|    |                    |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                        |
|----|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16 | Jennifer Mishevich | Exploration of Imatinib and Nilotinib-derived Templates as P2-Ligands for HIV-1 Protease Inhibitors<br><br>Jennifer Mishevich <sup>1</sup> , Arun K. Ghosh <sup>1</sup> , Satish Kovela <sup>1</sup> , Ryan Shaktah <sup>1</sup> , Irene T. Weber <sup>2</sup> , and Hiroaki Mitsuya <sup>3</sup>             | <sup>1</sup> Purdue University<br><sup>2</sup> Georgia State University<br><sup>3</sup> Kumamoto Health Science University                                                                                                                                                                                                                                             |
| 17 | Saayak Halder      | Design, Synthesis and Application of Bifunctional Molecules to Stimulate the 20S Proteasome<br><br>Saayak Halder <sup>1</sup> and Darci Trader <sup>2</sup>                                                                                                                                                   | <sup>1</sup> Department of Chemistry, Purdue University<br><sup>2</sup> Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University                                                                                                                                                                                                                |
| 18 | Timothy J. Harris  | Perturbing the Proteasome and Protein Degradation via Small Molecules<br><br>Timothy J. Harris and Darci Trader                                                                                                                                                                                               | Department of MCMP, Purdue University                                                                                                                                                                                                                                                                                                                                  |
| 19 | Haylie Hennigan    | Total Synthesis of gamma-Butyrolactone and Butenolide Signaling Molecules from Streptomyces Species<br><br>Haylie Hennigan <sup>1</sup> , Lauren Wilbanks <sup>2</sup> , Christina D. Martinez-Brokaw <sup>1</sup> , Gracie Saunders <sup>1*</sup> , and Elizabeth I. Parkinson <sup>1</sup>                  | <sup>1</sup> Department of Chemistry, Purdue University<br><sup>2</sup> PULSe, Purdue University                                                                                                                                                                                                                                                                       |
| 20 | Ryan M. Herrick    | Hydrofunctionalization Reactions of gem-Difluoroalkenes<br><br>Ryan M. Herrick <sup>1</sup> , Jacob P. Sorrentino <sup>2</sup> , Mohammed K. Abd El-Gaber <sup>1,3</sup> , Ahmed Z. Abdelazem <sup>1,4</sup> , Ankit Kumar <sup>1,5</sup> , Gabriela Coy <sup>1,6,*</sup> , and Ryan A. Altman <sup>1,7</sup> | <sup>1</sup> Department of MCMP, Purdue University<br><sup>2</sup> University of California, Los Angeles<br><sup>3</sup> Assiut University, Egypt<br><sup>4</sup> Beni-Suef University, Egypt<br><sup>5</sup> University of Delhi, India<br><sup>6</sup> Universidad Nacional de Colombia, Bogotá, Colombia<br><sup>7</sup> Department of Chemistry, Purdue University |
| 21 | Kai-Hung Huang     | Accelerated Reaction in Microdroplets for High-throughput Synthesis<br><br>Kai-Hung Huang, Nicolas M. Morato, Yunfei Feng, Eric T. Dziekonski, and R. Graham Cooks                                                                                                                                            | Department of Chemistry, Purdue University                                                                                                                                                                                                                                                                                                                             |

|    |                      |                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                             |
|----|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22 | Jinhyo Hwang         | Copper-Catalyzed Synthesis of Highly Conductive n-Type Organic Semiconductor n-PBDF<br><br>Jinhyo Hwang, Zhifan Ke, and Jianguo Mei                                                                                                                                                                                                                          | Purdue University                                                                                                                                           |
| 23 | Nosa B. Idahagbon    | Biorenewable Composite Films Based on Cellulose Nanofibers (CNF): Enhancing the Mechanical Properties of Pectin<br><br>Nosa B. Idahagbon and Alexander Wei                                                                                                                                                                                                   | Department of Chemistry, Purdue University                                                                                                                  |
| 24 | Andrew J. Intelli    | Peroxide-Initiated Hydrophosphination of gem-Difluoroalkenes<br><br>Andrew J. Intelli <sup>1</sup> , Ryan Lee <sup>1,*</sup> , and Ryan A. Altman <sup>1,2</sup>                                                                                                                                                                                             | <sup>1</sup> Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University<br><br><sup>2</sup> Department of Chemistry, Purdue University |
| 25 | Michael D. Jorgensen | Self-assembled Coiled-coil Peptide Nanotubes with Enhanced Stability and Metal-dependent Cargo Loading<br><br>Michael D. Jorgensen and Jean Chmielewski                                                                                                                                                                                                      | Department of Chemistry, Purdue University                                                                                                                  |
| 26 | Vibha Kanale         | Enantioselective Cobalt-Catalyzed Ring-Opening of Unstrained Heterocyclic Alkenes<br><br>Vibha Kanale, Courtney Nuyen, and Christopher Uyeda                                                                                                                                                                                                                 | Department of Chemistry, Purdue University                                                                                                                  |
| 27 | Jaskiran Kaur        | Chemical Characterization of Radical closo-Borate Anion Fragments via Ion-Molecule Reactions and Collision-Activated Dissociation (CAD) in a Linear Quadrupole Ion Trap Mass Spectrometer<br><br>Jaskiran Kaur <sup>1</sup> , Judy Kuan-Yu Liu <sup>1</sup> , Markus Rohdenburg <sup>2</sup> , Jonas Warneke <sup>2</sup> , and Hilkka Kenttämä <sup>1</sup> | <sup>1</sup> Department of Chemistry, Purdue University<br><br><sup>2</sup> Department of Chemistry, University of Leipzig, Germany                         |
| 28 | Allison L. Kempen    | Haspin and CDK Kinase Inhibitors, Synthesized via Multi-Component Reaction, with Anticancer Activities<br><br>Allison L. Kempen, Nickolas R. Brauer, and Herman O. Sintim                                                                                                                                                                                    | Department of Chemistry, Purdue University                                                                                                                  |

|    |                        |                                                                                                                                                                                                                                                                                                                  |                                                                                             |
|----|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 29 | Khomidkhodzha Kholikov | Effect of Chelating Ligands on 5'-(p-hydroxyphenyl)pyridylthiazole as Ratiometric Fluorescence Probes for Metal-ion Sensing Based on Intramolecular Charge Transfer<br><br>Khomidkhodzha Kholikov <sup>1</sup> , Yuichiro Watanabe <sup>2</sup> , Abidemi Aregbe <sup>1,*</sup> , and Alexander Wei <sup>1</sup> | <sup>1</sup> Purdue University<br><sup>2</sup> Kyoto University, Japan                      |
| 30 | Arman Khosravi         | Design and Synthesis of Open-Ring $\alpha$ -Cyano Containing Analogs of Ipomoeassin F<br><br>Arman Khosravi, Robert Sammelson, and Wei Shi                                                                                                                                                                       | Ball State University                                                                       |
| 31 | Hanna King             | Generation of an Antigenic Prodrug for Monitoring Immunoproteasome Mediated MCH-I Loading<br><br>Hanna King <sup>1,2</sup> and Darci Trader <sup>1</sup>                                                                                                                                                         | <sup>1</sup> Department of MCMP, Purdue University<br><sup>2</sup> PULSe, Purdue University |
| 32 | Kate A. Kragness       | Relationship of Proteasome Activity on ER Stress<br><br>Kate A. Kragness and Darci J. Trader                                                                                                                                                                                                                     | Purdue University                                                                           |
| 33 | Shinaj K. Rajagopal    | Remote Steric Effect as a Facile Strategy for Tuning Emission of Tetranuclear Cu(I) Clusters<br><br>Shinaj K. Rajagopal, Yuichiro Watanabe, Benjamin M. Washer, Matthias Zeller, Sergei Savikhin, Lyudmila V. Slipchenko, and Alexander Wei                                                                      | Purdue University                                                                           |
| 34 | Mingxin Liu            | Nucleophilic Carbenes Derived from Dichloromethane<br><br>Mingxin Liu, Nguyen Le*, and Christopher Uyeda                                                                                                                                                                                                         | Department of Chemistry, Purdue University                                                  |
| 35 | Yanyao Liu             | Boron Enabled Photosensitized [2+2] Cycloadditions and Synthetic Applications<br><br>Yanyao Liu, Dongshun Ni, and M. Kevin Brown                                                                                                                                                                                 | Indiana University                                                                          |
| 36 | Cody A. Loy            | Synthesis and Characterization of a Selective Immunoproteasome-Luciferin Probe for in vivo Monitoring<br><br>Cody A. Loy and Darci J. Trader                                                                                                                                                                     | Purdue University                                                                           |

\*Indicates undergraduate student authors

|    |                    |                                                                                                                                                                                                               |                                                                                                                                        |
|----|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 37 | Mao-Yun Lyu        | Ni-Catalyzed 1,1- and 1,3-Aminoboration of Unactivated Alkenes<br><br>Mao-Yun Lyu <sup>1</sup> , Gabriel N. Morais <sup>2</sup> , Shuming Chen <sup>2</sup> , and M. Kevin Brown <sup>1</sup>                 | <sup>1</sup> Department of Chemistry, Indiana University<br><br><sup>2</sup> Department of Chemistry and Biochemistry, Oberlin College |
| 39 | Michael Maloney    | Utilizing DFT to Gain Mechanistic Insight into Nickel sp <sup>2</sup> -sp <sup>3</sup> Catalysis and [4+1] Cycloadditions<br><br>Michael Maloney, Eva Gulotty, Brandon Ashfeld, Paul Helquist, and Olaf Wiest | University of Notre Dame                                                                                                               |
| 39 | Smita Mandal       | Silicon-Guided Regioselective Asymmetric Allylic Alkylation Mediated by Pd/Photoredox Cooperative Catalysis<br><br>Smita Mandal, Sarah E. Braley, and Thomas N. Snaddon                                       | Department of Chemistry, Indiana University Bloomington                                                                                |
| 40 | Dake Mao           | Grow Tile-Based Porous DNA 2D Array on Silica Wafer for Molecular Lithography<br><br>Dake Mao, Longfei Liu, Cuizheng Zhang, and Chengde Mao                                                                   | Department of Chemistry, Purdue University                                                                                             |
| 41 | Raymond Martinez   | Asymmetric Simmons-Smith-Type Spirocyclopropanation Using a Cobalt-OIP Catalyst<br><br>Raymond Martinez, Kristen Berger, Jacob Werth, Jianhan "Johnson" Zhou*, and Christopher Uyeda                          | Department of Chemistry, Purdue University                                                                                             |
| 42 | John P. Gulliver   | Highly Diastereoselective Asymmetric syn-Aldol Reactions of (R)-(N-tosyl)phenylalaninol Propionate-derived Titanium Enolate with Bidentate Aldehydes<br><br>John P. Gulliver and Arun K. Ghosh                | Purdue University                                                                                                                      |
| 43 | Adam Mitrevski     | Synthesis and Structural Determination of a Macrocyclic HIV-1 Protease Inhibitor<br><br>Adam Mitrevski and Mark Lipton                                                                                        | Department of Chemistry, Purdue University                                                                                             |
| 45 | Robert J. Nicholas | Fabrication of Modified Cellulose Nanofiber Materials and Their Applications<br><br>Robert J. Nicholas, Nosa B. Igahagbon, Taehoo Chang, and Alexander Wei                                                    | Department of Chemistry, Purdue University                                                                                             |

\*Indicates undergraduate student authors

|    |                           |                                                                                                                                                                                                                                        |                                            |
|----|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 46 | Ryan Oconnell             | Caged HMG-CoA for Time Resolved Crystallography<br>Ryan Oconnell, Paul Helquist, Olaf Wiest, Cynthia Stauffacher, and Nick Dolphin*                                                                                                    | University of Notre Dame                   |
| 47 | Sandra C. Ordonez-Rubiano | Rational Design and Development of Selective BRD7 Bromodomain Inhibitors with Cellular Activity<br>Sandra C. Ordonez-Rubiano, Chad Maschinot, Sijie Wang, Surbhi Sood, Bryden Strohmier, Alexander J. McQuade*, and Emily C. Dykhuizen | Department of MCMP, Purdue University      |
| 48 | Brian K. Osei-Badu        | Total Synthesis of Panaxydiol and Virol C<br>Brian K. Osei-Badu, Douglas, C. Yarbrough, and Justin T. Mohr                                                                                                                             | University of Illinois at Chicago          |
| 49 | Namuunzul Otgontseren     | Discovering Avenolide-type Hormone Inducers of Cryptic BGCs using Bioinformatics and Organic Synthesis<br>Namuunzul Otgontseren, Christina Martinez-Brokaw, Noor Owayni*, and Elizabeth I. Parkinson                                   | Department of Chemistry, Purdue University |
| 50 | Victoria E. Paluzzi       | Near Quantitative Preparation of Short, Single-Stranded DNA Circles<br>Victoria E. Paluzzi, Cuizheng Zhang, and Chengde Mao                                                                                                            | Department of Chemistry, Purdue University |
| 51 | Shashwati Paul            | Synthesis of Disubstituted Bicyclo[2.1.1]hexane Building Blocks<br>Shashwati Paul, Daniel Adelfinsky*, Christophe Salome, Thomas Fessard, and M. Kevin Brown                                                                           | Indiana University Bloomington             |
| 52 | Jarett M. Posz            | Building Rapid Molecular Complexity using Boron: Boron Enabled Photochemical Cycloadditions<br>Jarett M. Posz, Paige Royalty*, Yanyao Liu, and M. Kevin Brown                                                                          | Indiana University Bloomington             |

|    |                       |                                                                                                                                                                                                                                                                                            |                                                                                  |
|----|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 53 | Lingqi Qiu            | Spontaneous Oxidation and Reduction by Endogenous Radical Cation and Anion Pairs in Microdroplets<br><br>Lingqi Qiu, Nicolás M. Morato, Michael Daniel Psimos*, Kai-Hung Huang, and R. Graham Cooks                                                                                        | Purdue University                                                                |
| 54 | Maxim R. Radzhabov    | Iron-Promoted C-F Activation of Aryl Fluorides for C-C Coupling with Alkenes and Alkynes<br><br>Maxim R. Radzhabov and Neal P. Mankad                                                                                                                                                      | University of Illinois at Chicago                                                |
| 55 | Mica E. Schenkelberg  | Sequence-Defined Molecular Cages as Artificial Antibodies<br><br>Mica E. Schenkelberg, Olav Vestrheim, and Severin T. Schneebeli                                                                                                                                                           | Purdue University                                                                |
| 56 | Ashish Sharma         | Design, Synthesis and X-ray Structural Studies of Potent HIV-1 Protease Inhibitors Containing C-4 Substituted Tricyclic Hexahydro-furofuran Derivatives as P2 Ligands<br><br>Ashish Sharma, Satish Kovala, Dana Shahabi, Ajay K. Ghosh, Denver R. Hopkins, Monika Yadav, and Arun K. Ghosh | Purdue University                                                                |
| 57 | Anamika Singh         | Precision Nanostructured Presentation of Carbohydrates at Hydrogel Interfaces<br><br>Anamika Singh, Juan C. Arango, Anni Shi, Joseph B. d'Aliberti*, and Shelley A. Claridge                                                                                                               | Purdue University                                                                |
| 58 | Badhu Sivasubramaniam | Heme Uptake Systems and Its Utilization for Delivery of Antimicrobials to Gram-Negative Bacteria<br><br>Badhu Sivasubramaniam, Kathy Ragheb, Brianna Nicole Dowden, Paul Robinson, and Alex Wei                                                                                            | Department of Chemistry, Department of Basic Medical Sciences, Purdue University |
| 59 | Zachary St. John      | The Tyrphostin Molecular Scaffold Provides Inhibitory Activity Against Furin<br><br>Zachary St. John, Brandon Gaddis, and Jean Chmielewski                                                                                                                                                 | Department of Chemistry, Purdue University                                       |

|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                    |
|----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 60 | William A. Swann    | Haptophilicity in Stereoselective Heterogeneous Hydrogenation<br><br>William A. Swann, Nicholas B. Colvin*, Nicole K. Freundl*, and Christina W. Li                                                                                                                                                                                                                                                                                                                                            | Purdue University                                                                                                  |
| 61 | Christopher Vennard | Utilization of HTS for the Identification of <i>Borrelia burgdorferi</i> c-di-AMP Phosphodiesterase Inhibitors<br><br>Christopher Vennard, Irina Zhilinskaya*, and Herman Sintim                                                                                                                                                                                                                                                                                                               | Department of Chemistry, Purdue University and Purdue Institute of Inflammation, Immunology and Infectious Disease |
| 62 | Ban Wang            | Photoredox Catalyzed Divergent Radical Cyclization of Ene-Yne via Facile Generation of $\beta$ -oxy pyridinium Vinyl Radical<br><br>Ban Wang, Jujhar Singh, Gavin McCabe, Mitchell Parrish, and Yongming Deng                                                                                                                                                                                                                                                                                  | Department of Chemistry and Chemical Biology, IUPUI                                                                |
| 63 | Chao Wang           | Aryl Radical Enabled, Copper–Catalyzed Sonogashira-Type Cross-Coupling of Alkynes with Alkyl Iodides<br><br>Chao Wang and Wei Liu                                                                                                                                                                                                                                                                                                                                                              | University of Cincinnati                                                                                           |
| 64 | Daniel A. Webb      | Synthesis, Biological Evaluation, and Molecular Modeling of Novel Imidazobenzodiazepines to Identify Lead Compounds for the Oral Treatment of Asthma<br><br>Daniel A. Webb <sup>1</sup> , Michelle J. Meyer <sup>1</sup> , Anika S. Tylek <sup>1</sup> , Kayode M. Medubi <sup>1</sup> , Ahmad K. Masoud <sup>1,*</sup> , Sarah A. Swartwout <sup>1,*</sup> , Gene T. Yocum <sup>2</sup> , Charles W. Emala <sup>2</sup> , Douglas C. Stafford <sup>1</sup> , and Leggy A. Arnold <sup>1</sup> | <sup>1</sup> UW-Milwaukee<br><sup>2</sup> Columbia University                                                      |
| 65 | Ruichao Xie         | Determination of Alcohols and Esters in Aqueous Solutions by Headspace Flow Injection Analysis using a Tin Oxide Electrochemical Detector<br><br>Ruichao Xie and Neil Danielson                                                                                                                                                                                                                                                                                                                | Miami University                                                                                                   |
| 66 | Wen Xiu             | [4 + 1]-Cycloaddition Logic for the Total Synthesis of Terpene Alkaloid Natural Products<br><br>Wen Xiu, Calvin Huffman*, William A. Swann, and Christopher Uyeda                                                                                                                                                                                                                                                                                                                              | Department of Chemistry, Purdue University                                                                         |

|    |                |                                                                                                                                                        |                          |
|----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 67 | Wenhao Yan     | Copper-Catalyzed Difluoromethylation of Alkyl Iodides Enabled by Aryl Radical Activation of C-I Bonds<br>Aijie Cai, Wenhao Yan, Chao Wang, and Wei Liu | University of Cincinnati |
| 68 | Cuizheng Zhang | Engineering DNA Crystals toward Studying DNA-Drug Interactions<br>Cuizheng Zhang, Jiemin Zhao, and Chengde Mao                                         | Purdue University        |