

# 46<sup>th</sup> National Organic Chemistry Symposium

## Poster Sessions

Indiana University  
Alumni Hall & Solarium: IMU

*For each night's poster sessions, prizes for the two best graduate student/ post doc posters and one for the best undergraduate poster will be awarded. On Thursday we will also present three journal subscription prizes for superior posters from chosen from all poster sessions.*

**Sunday:** Poster Awards will be presented Monday morning by Jeffery Aubé (DOC Chair), *University of North Carolina, Chapel Hill*

**Monday:** Poster Awards will be presented Tuesday morning by Silas Cook (NOS Local Co-Organizer), *Indiana University—Bloomington*

**Tuesday:** Poster Awards will be presented Wednesday morning by Cristina Nevado (Senior Editor, ACS Central Science), *University of Zürich*

**Wednesday:** Poster Awards will be presented Thursday morning by Paul Hanson (NOS Co-Executive Officer), *University of Kansas*

### Sunday, June 23, 2019 8-11PM

Poster #	Title	Authors (Presenting*)	Affiliation(s)
S- 1	Aurone : Possible anti-fungal dyeing agent for fabric	Shrijana Bhattarai*, Mary B. Farone, Scott T. Handy	Middle Tennessee State University
S- 2	Tetrazole-Mediated Ring Expansion: A Mild Approach to Strained Cyclooctynes	Panagiotis D. Alexakos*, Mariana C. F. C. B. Damião, Duncan J. Wardrop	University of Illinois at Chicago
S- 3	Site-Selective Copper-Catalyzed Azidation of Benzylic C–H Bonds	Sung-Eun Suh*, Si-Jie Chen, Shannon S. Stahl	University of Wisconsin–Madison
S- 4	Development of Long Wavelength Voltage Sensitive Dyes for Imaging Neuronal Activity	Gloria Ortiz*, Pei Liu, Ashley Nensel, Evan W. Miller	University of California, Berkeley

S- 5	Total Synthesis of Isomalabaricanes and a Blueprint for Stereochemically Diverse Terpenoid Architectures	Yaroslav D. Boyko*, Christopher J. Huck, Alexander S. Shved, David Sarlah	University of Illinois at Urbana-Champaign
S- 6	Tricyclic Imidazolidin-4-ones by Witkop Oxidation of Tetrahydro- $\beta$ -carboline	Derek A. Leas*, Yuxiang Dong, Jered C. Garrison, Xiaofang Wang, Edward L. Ezell, Douglas E. Stack, and Jonathan L. Vennerstrom	University of Nebraska Medical Center, University of Nebraska at Omaha
S- 7	Oxypyridinium salt derivatives: advancement of allyl and t-butyl electrophilic transfer reagents	Jose G. Rodriguez*, Madeline M. Stephens*, and Philip A. Albiniak	Ball State University
S- 9	Hydrogenation of Borylated Arenes	Marco Wollenburg*, Daniel Mook, Frank Glorius	Organisch-Chemisches Institut, Westfälische Wilhelms-Universität Münster
S- 10	Synthesis of Isocarbostyryl Alkaloids from Benzene	Lucas W. Hernandez*, Tanner W. Bingham, Jola Pospesch, Ulrich Kloeckner, Lilian Hauss, David Sarlah	University of Illinois at Urbana-Champaign
S- 11	Redox-Neutral Decarboxylative Xanthylation via Amidyl Radical O-H Abstraction	Christina G. Na*, Erik J. Alexanian	University of North Carolina at Chapel Hill
S- 12	Catalyst-controlled Site- and Stereoselective Functionalization of Unactivated C-H Bonds: Catalyst Design and Applications	Wenbin Liu*, Huw M. L. Davies	Emory University
S- 13	Enantioselective $\alpha$ -Arylation of Benzamides using Synergistic Metallaphotoredox Catalysis	Alexander W. Rand* and John Montgomery	University of Michigan

S- 14	HAT Initiated Polyene Cyclizations	Darius Vrubliauskas*, Christopher D. Vanderwal	University of California, Irvine
S- 15	New Avenues in Ni-Catalysis: Stereoselective Difunctionalization of Alkenes	Stephen R. Sardini*, Ali Lambright, Grace Trammel, M. Kevin Brown	Indiana University
S- 16	Radical Cascade Synthesis of Azoles via Tandem Hydrogen Atom Transfer: Method Development and Computational Validation	Andrew Chen*, David Nagib	The Ohio State University, Department of Chemistry and Biochemistry
S- 17	Palladium Catalyzed Decarboxylative Cross-Coupling of (Hetero)Aryl Chlorides	Ryan A. Daley*, En-Chih Liu, Joseph J. Topczewski	University of Minnesota
S- 18	Optimization of a Negishi Cross- Coupling to Synthesize $\beta,\beta$ - Disubstituted $\alpha,\beta$ -Unsaturated Ketones	Cameron B. Berlin*, Heather R. Rensch, Michael R. Krout	Bucknell University
S- 19	Ortho-Selective Iridium Catalyzed C– H Borylation of Phenols and Anilines: A path from an unusual result to exquisite selectivity	Jonathan E. Dannatt*, Ivonne L. Andujar-De Sanctis, Ranjana Bisht, Buddhadeb Chattopadhyay, Behnaz Ghaffari, Kristen A. Gore, Chabush Haldar, Gajanan Pandey, Robert E. Maleczka Jr., Daniel A. Singleton, Milton R. Smith III	Michigan State University, Texas A&M University, Centre of Bio- Medical Research SGPGIMS Campus, Babasaheb Bhimrao Ambedkar Univesity
S- 20	Cu-Catalyzed Three-Component Carboamination of Electron Deficient Alkenes	Grace Trammel*, Dr. Daniel Kohler, and Prof. Kami Hull	University of Illinois at Urbana- Champaign
S- 21	Synthesis of guaipyridine alkaloids cananodine and rupestines G and D	James R. Vyvyan*, Patrick M. M. Shelton, Samantha M. Grosslight, Hope V. Spargo, Briana J. Mulligan	Western Washington University

S- 22	The Development of Copper-Catalyzed Alkene Carbofunctionalization Reactions	Travis L. Buchanan*, Alexander M. Veatch, Samuel N. Gockel, Kami L. Hull	University of Illinois at Urbana-Champaign; University of North Carolina at Chapel Hill ; University of Texas at Austin
S- 23	Stereoselective C-Glycosylation of Glycosyl Sulfonates	Jesse Ling*, Clay S. Bennett	Tufts University
S- 24	Sterically-controlled Arene Acylation by Sequential C–O/C–H Bond Activation	Steven J. Underwood*, Constance B. Anderson, Philipp M. Gemmel, Nicholas A. Serratore, Grant B. Frost, Truong-Giang Hoang, Melissa A. Hardy, Christopher J. Douglas	University of Minnesota–Twin Cities
S- 25	Site-Selective C-H Functionalization of Silyl Ethers	Yannick T. Boni*, Huw M.L. Davies	Emory University
S- 26	alpha-Chloroaldoximine O-Mesylates as Useful Reagents for the Efficient Synthesis of 5-Amino-1,2,4-Thiadiazoles	Ronald J. Hinklin*	Array BioPharma
S- 27	Enantioselective Dearomative Hydroamination of Benzene and Application Toward the Synthesis of Aminoglycosides	Chad N. Ungarean*, Petra Galer, Sungjong Lee, David Sarlah	University of Illinois at Urbana-Champaign
S- 28	The intermediacy of well-defined copper(I) species in the aerobic copper-catalyzed decarboxylative thiolation of benzoic acids	Kerry-Ann Green*, Jessica M. Hoover	West Virginia University
S- 29	Investigation in nickel-catalyzed oxidative cyclization / reductive cross-electrophile couplings	Amie R. Frank*, John Montgomery	University of Michigan - Ann Arbor

S- 30	Discovery and Exploration of Phosphopantetheinyl Transferase Inhibitors	Elaine Ballinger, John Mosior, Travis Hartman, Kristin Burns-Huang, Ben Gold, Roxanne Morris, Laurent Goullieux, Isabelle Blanc, Julien Vaubourgeix, Sophie Lagrange, Laurent Fraisse, Stéphanie Sans, Cedric Couturier, Eric Bacqué, Kyu Rhee, Sarah M. Scarry, Samantha Ottavi, Matthew Bowler, Remya Ramesh, Jeffrey Aubé*, Guangbin Yang, Ouathek Ouerfelli, Dirk Schnappinger, Thomas R. Ioerger, Curtis A. Engelhart, Jennifer A. McConnell, Kathrine McAulay, Allison Fay, Christine Roubert, James Sacchettini, Carl Nathan	Weill Cornell Medicine, Texas A&M University, Sanofi-Aventis, University of North Carolina, Memorial Sloan Kettering Cancer Center
S- 31	Iron-Catalyzed Fluorination of Unactivated C-H Bonds	Emily N. Pinter*, Deyaa I. AbuSalim, and Silas P. Cook	Indiana University
S- 32	Chemical Defenses in the Seeds of Pioneer Species	Elizabeth M. Sanford*, K. Greg Murray, Eleda V. Plouch, Elliott J. Berens, Nicholas T. Weigle,	Hope College
S- 33	Aqueous Benzylic C–H Trifluoromethylation for Late-Stage Functionalization	Shuo Guo*, Deyaa I. AbuSalim, Silas P. Cook	University of Indiana
S- 34	Carbohydrate based spiro-fused PHOX ligands	Michael Imrich*, Thomas Ziegler	University of Tuebingen
S- 35	Mechanistic insight into rhodium-catalyzed asymmetric hydroborations and hydrogenations	Andrew Bochat*, Veronika Shoba, James Takacs	University of Nebraska Lincoln
S- 36	Concise Enantioselective Syntheses of Akuammicine and Strychnine Enabled by a Cooperative Catalysis-based Homoallylic Amine Synthesis.	Luke Hutchings-Goetz*, Thomas N. Snaddon	Indiana University

S- 37	Purine Scaffolds Toward a New Class of Antibacterial Agents Against Gram-Negative Drug Resistant Bacteria	Tirtha Bhattarai*, Katalina Rodrigues*, Timothy Miller, Phillip Wittel, and Roslyn Lampkins, Ph.D.	University of Evansville
S- 38	Asymmetric Synthesis of Beta- and Gamma-borylated Amines via Rh-Catalyzed Hydroboration of Allylamines	Rukshani Wickrama-Arachchi*, Tanner L. Metz, James M. Takacs	University of Nebraska-Lincoln
S- 39	Dynamic covalent chemistry of thiols in cross-linked polymers	Jacob S. A. Ishibashi*, Julia A. Kalow	Northwestern University
S- 40	Borylation of Aryl Iodides and Bromides Using a Pd/Cu Dual Catalysis	Amara Spencer*, Jack Floreancig, Sebastien Lauhle	Indiana University-Purdue University Indianapolis
S- 41	Synthesis Towards Lissoclimide Natural Product Analogues Featuring Site-Selective Aliphatic C-H Bond Halogenations	Sierra Nguyen*, Sharon E. Michalak, Christopher D. Vanderwal	University of California Irvine
S- 42	New monodentate directing group for copper-mediated sp <sup>2</sup> C-H amination	Sehun Kwak*, Olafs Daugulis	University of Houston
S- 43	Development of Photoactivatable Sensors for Detecting Mobile Zinc	Fang Wang*, Jacob M. Goldberg, Chanan D. Sessler, Nathan W. Vogler, Daniel Y. Zhang, William H. Loucks, Thanos Tzounopoulos, Stephen J. Lippard	Massachusetts Institute of Technology
S- 44	Gamma Functionalization of Enones via Nitroso Diels Alder Reaction	Sruthi Mohan*, Dr. Justin Mohr	University of Illinois at Chicago

S- 45	Supramolecular Capsules via Pnictogen Bonding	Brian M. Karl*, Thomas J. Polaske, Shiva Moaven, Miranda C. Andrews, Daniel K. Unruh, Eric Bosch, Anthony F. Cozzolino, Nathan P. Bowling	University of Wisconsin-Stevens Point; Texas Tech University; Missouri State University
S- 46	Rhodium-catalyzed C-C bond activation and cross coupling utilizing amide directing groups	Claire Muckian*, Constance B. Anderson, Hannah I. Barr, Jeffrey B. Johnson	Hope College
S- 47	Peptide-Catalyzed Derivatization of Natural Products	Margaret J. Hilton*, Scott J. Miller	Yale University
S- 48	Rational Design and Facile Synthesis of Fluorescent Small Molecule Probes for Biological Studies in Live Cells	Joomyung V. Jun, * Sung-Eun Suh, Conor M. Haney, Richard J. Karpowicz, Jr., Sam Giannakoulis, Elen Hernandez, Mai N. Tran, J. Nicholas Betley, Virginia M.-Y. Lee, E. James Petersson, David M. Chenoweth	University of Pennsylvania
S- 49	Synthesis of HIV NNRTI Doravirine analogs via visible-light photoredox decarboxylative cross-coupling	David N. Hunter*, Linda M. Suen, Cheng Wang, Helen J. Mitchell, Antonella Converso, Abdellatif ElMarrouni	Department of Discovery Chemistry, MRL, Merck & Co., Inc
S- 50	Utilizing High Throughput Experimentation to Gain Insight into the Reactivity and Mechanism of Salen/salan Catalysts in the Oxidative Homocoupling of Phenols	Adriana L. Jemison*, Cristian Ochoa, Marisa C. Kozlowski	University of Pennsylvania
S- 51	Expanding the eNTRY Rules for Small Molecule Accumulation in Gram-negative Bacteria	Sarah Perlmutter*, Emily Geddes, Paul Hergenrother	University of Illinois at Urbana-Champaign

S- 52	Regio- and Stereoselective Conjugate Addition of Extended Nitroalkanes and Alkyl Thiols to Enone Diesters via Bifunctional Iminophosphorane Organocatalysis	Jennifer L. Fulton*, Matthew A. Horwitz, Ericka L. Bruske, Jeffrey S. Johnson	University of North Carolina at Chapel Hill
S- 53	Chincona Thiourea-Catalyzed Enantioselective Synthesis of Atropisomeric Pyrrolopyrimidines via Nucleophilic Aromatic Substitution	Mirza A. Saputra*, Angela Weng, Jeffrey L. Gustafson	San Diego State University
S- 54	Diastereoselective Synthesis of Functionalized-delta-Valerolactone via Cascade Beckman Acylation and Michael Addition	Joshua Van Houten*, Rendy Kartika, Frank Fronczek	Louisiana State University
S- 55	Brønsted Acid-Catalyzed Synthesis of Highly Functionalized Tetrahydrobenzofurans via Silyloxyallyl Cations.	Fatimat O. Badmus*, Joshua A. Malone and Rendy Kartika.	Louisiana State University
S- 56	Investigation of the inverse Electron Demand Diels-Alder Chemistry with Pyridoxal HCl	Marie X. Bozor*, Gregory R. Boyce	Florida Gulf Coast University
S- 57	Conformationally Constrained Bicyclic Sulfones as Novel Scaffolds for Drug Discovery	Jeremy E. Wulff*, Michael G. Brant, Jordan Fridmann, Andy Un, Allen G. Oliver	University of Victoria
S- 58	Accessing N-Hydroxydiketopiperazine Natural Products	Kyle M. Lambert*, Amy C. Jackson*, John L. Wood	Department of Chemistry and Biochemistry, Baylor University
S- 59	Total Synthesis of Caesalpinnone A and Caesalpinflavan B	Noah J. Sims*, Jacob C. Timmerman, John L. Wood	Baylor University



S- 60	Amine Dependent Conformational Preference in Anchimeric Assisted Hydrolysis of Norcantharidine Derived Dicarboxamides	Chandrakant S Gholap*, Rekha Singh, Mukesh Kumar, Sunil K. Ghosh	Bhabha Atomic Research Centre
S- 61	Synthesis of novel derivatives of 4-methoxy-6-phenyl-2-pyrone	Grace Obi*, Fanie R. van Heerden	University of KwaZulu-Natal
S- 62	Synthesis of Pyrrolodiketopiperazine and Related Derivatives	Susanna Maisto*, Angela Leersnyder, Jonathan Scheerer	The College of William and Mary
S- 63	Progress Towards the Total Syntheses of Impatien A and Ochotensimine: Utilizing a Novel Cyclization	Katerina M. Korch*, Donald A. Watson	University of Delaware
S- 64	Distortion controlled reactivity of 2-pyridyl-1,2,4,5-tetrazines	Dennis Svatoněk*, Martin Wilkovitsch, Lea Hartmann, Kendall N. Houk, Hannes Mikula	University of California Los Angeles and TU Wien
S- 65	Kinase-catalyzed crosslinking and immunoprecipitation (K-CLIP) is a substrate and interactome identification tool: Application to p53	Satish Garre, Aparni Gamage*, Todd Faner, Pavithra Dedigama-Arachchige, Mary Kay Pflum	Wayne State University
S- 66	Enantioselective Syntheses of Chelidonium Alkaloids by a Cooperative Lewis base/Iridium Catalyzed Homoallylic Amine Synthesis	Chao Yang*, Thomas N. Snaddon	Indiana University, Bloomington
S- 67	Synthesis and Biological Evaluation of Indole-Substituted Furanones and Pyrrolinones	Kaitlynn A. Sockett*, Roslyn R. Patel, Marissa A. McFadden, Megan M. Lafferty, Brianna Hurysz, Andrew Hermann, Patricia Mowery, Erin T. Pelkey	Hobart and William Smith Colleges
S- 68	The Development of Radical Reactions Mediated by an Organic Photoredox Catalyst	Julia D. Ganson*, A. Edward Allen, Caitlin E. Topi, Ian J. Rosenstein	Hamilton College

S- 69	Oxaquinonacyclophanes binding with Pyridine-N-oxides	Emily O'Brien*, Jay Wackerly	Central College
S- 70	Inter- and Intramolecular Alkylation of 1,3-Dicarbonyl Radicals to Olefins via Photoredox Catalysis	Yuri Lee*, Marc Kawada, Anne Marie Crooke, Katherine Forbes, Jeffrey Cannon	Occidental College
S- 71	Synthesis of Terpenoid Natural Product Frameworks via [3,3] Sigmatropic Rearrangements	Ouidad Lahtigui*, Alexander J. Grenning	University of Florida
S- 72	Advances in Silicon-Tethered Carbon-Carbon Bond Forming Reactions	Gregory W. O'Neil*, Paul Spaltenstein, Christopher R. Myers, Elizabeth J. Cummins, Timothy B. Clark	Western Washington University
S- 73	Alkynamides, Cyanamides, and Triflates, Oh My! Undergraduate Research in Organic Chemistry at Providence College	Seann P. Mulcahy*, Yazan A. Al-Issa, Caroline A. Foley, Kathryn P. Hiller, Kyle M. Medas, Robert W. Lesch, Gersham J. Rainone	Providence College
S- 74	Regiocontrol for Allylic C H Amination and Amidation via Group IX MCP*- $\pi$ -Allyl Intermediates	Jacob S. Burman*, Robert J. Harris, Caitlin M. B. Farr, John Bacsá, Simon B. Blakey	Emory University
S- 75	Aminoxy-Functionalized Metal Monolayer-Protected Clusters (MPCs) for Sensing and Catalysis Applications	Tirtha R. Sibakoti*, Francis P. Zamborini, Michael H. Nantz	University of Louisville
S- 76	Epoxy isonitriles, a unique class of antibiotics – Synthesis of their metabolites and biological investigations	Wilt, Ingrid K. *, BA; Ernouf, Guillaume, PhD; Zahim, Sara, PhD; Wuest, William M., PhD	Emory University
S- 77	Nickel-Catalyzed Cross Coupling of C–O Electrophiles with Organostannanes	John Russell*, Emily Entz, Ian Joyce, Sharon Neufeldt	Montana State University

S- 78	Oxidative Photo-Catalyzed Sulfenylation of Substituted Indoles and Benzothiamides	Andrew N. Dinh, Ashley D. Nguyen*, Ernesto Millan*, Samuel T. Albright, Jeffrey L. Gustafson	San Diego State University
S- 79	Using a Photoswitch to Change and Quantify the Preorganizational Energy of Anion-Binding Foldamers	Fred C. Parks*, Sydney Stutsman, Yun Liu, Siblai Debnath, Kathering VanDenburgh, Xinfeng Gao, Krishnan Ragavachari, Amar H. Flood	Indiana University - Bloomington; University of Illinois at Urbana-Champaign
S- 80	Catalyst-Controlled Regiodivergent Hydroamination of Homoallylic Amines for the Synthesis of 1,3- and 1,4-Diamines	Evan P. Venable*, Seth C. Ensign, Gregory D. Kortman, Xujia Zhong, Kami L. Hull	University of Illinois at Urbana-Champaign, University of Texas at Austin
S- 81	Enantioselective Total Synthesis of (+)-Fendleridine and (+)-Acetylaspidoalbidine	Joshua R. Born*, Luke A. Kassekert, Arun K. Ghosh	Purdue University
S- 82	A nitroalkane-based approach to one-pot threecomponent synthesis of isocryptolepine and its analogs with potent anti-cancer activities	Georgii Griaznov* <sup>^</sup> , Alexander V. Aksenov <sup>~</sup> , Nicolai A. Aksenov <sup>~</sup> , Michael Rubin <sup>^~</sup>	<sup>^</sup> University Of Kansas, <sup>~</sup> North Caucasus Federal University
S- 83	Progress Towards the Synthesis of Amorfrutin A	Daria Galaktionova*, Gennadii Grabovyi, Justin Mohr	University of Illinois at Chicago
S- 84	Macrocyclic Stereocontrol in Transannular Re2O7-catalyzed Bis-spiroketalization Reactions	Austin H. Asari* Paul E. Floreancig	University of Pittsburgh
S- 85	Progress towards Synthesis of Serantrypinone	Xiye Wang, Devin Mickles*	College of William & Mary

## Monday, June 24, 2019 8:35-11PM

M- 1	Aurone as a Fluorescent Probe for the Selective Detection of H <sub>2</sub> S in Environmental and Biological Systems	Arjun Kafle*, Shrijana Bhattarai, Justin M. Miller, Scott T. Handy	Middle Tennessee State University
M- 2	Near Infrared fluorescent tags for no wash live cell imaging	Rahele Esmatpour Salmani*, Mehdi Moemeni, Elizabeth Santos, Daniela Odenthal, Alireza Ghanbarpour, Nona Ehyaei, James Geiger, Chrysoula Vasileiou, Babak Borhan.	Michigan State University
M- 3	Organic chemistry educational resources: Community of organic chemistry educators	Matthew Casselman, Justin Houseknecht, Alexey Leontyev, Vincent Maloney*, Jennifer Muzyka, Joshua Ring, Robert Rossi, Cathy Welder, Leyte Winfield	University of California, Riverside, Wittenberg University, North Dakota State University, Purdue University Fort Wayne, Centre College, Lenoir-Rhyne University, Rowan College Gloucester County, Dartmouth College, Spelman College
M- 4	Development of flavin-dependent biocatalytic methods and applications in total synthesis	Summer A. Baker Dockrey*, Alison R. H. Narayan	University of Michigan
M- 5	Synthesis of 2,4,5-trisubstituted furans with activity against a pro-metastatic cytokine	Joseph Tuccinardi*, Thaaer Muhammed, Kelsey Skluzacek, Thomas Conrad, Matthew King, PhD, Cheryl L. Jorcyk, PhD, Lisa Warner, PhD, Don L. Warner, PhD	Boise State University Department of Chemistry and Biochemistry, Department of Biological Sciences

M- 6	Novel Catalysts for the Practical and Selective Functionalization of Hydrocarbons	Benjamin Wertz* and Huw M. L. Davies	Emory University
M- 7	Iron-catalyzed benzylic C-H borylation of N-chloroamides	Hanbin Lee*, Tiancheng He, Silas P. Cook	Indiana University
M- 8	Merged cycloaddition/cycloreversion sequences for the synthesis of heterocycles	Jonathan R. Scheerer*, Nicholas H. Angello, Robert E. Wiley, Jill B. Williamson	College of William & Mary
M- 9	Synthesis of ortho-substituted benzamides through nickel mediated cross-coupling	Rebecca L. Johnson*, Ethan M. Heyboer, Jeffrey B. Johnson	Hope College
M- 10	Facile Access to Functionalized Chiral Secondary Benzylic Boronic Esters via Catalytic Asymmetric Hydroboration	Suman Chakrabarty*, Hector Palencia, Martha D. Morton, Ryan O. Carr and James M. Takacs	University of Nebraska-Lincoln, University of Nebraska-Kearney, Nebraska Center for Integrated Biomolecular Communication
M- 11	One step synthesis of chiral C2 symmetric 1,5-cyclooctadienes and their evaluation as chiral ligands	Bowen Zhang*, Michael.Robson.Hollerbach, Huw M. L. Davies, Simon Blakey	Emory University
M- 12	Optimizing Cycloadditions & Improving Therapeutics via Stereoelectronic Insights	Brian Gold*, Matthew R. Aronoff, Eileen G. Burke, Trish T. Hoang, Ian W. Windsor, Jennifer M. Schomaker, Ronald T. Raines	Department of Chemistry, Massachusetts Institute of Technology; Departments of Chemistry and Biochemistry, University of Wisconsin-Madison

M- 13	1-Aryl-3-alkyne-2,6-diols: Precursors for Electrophilic Cascade Reactions to Naphthylidonium salts and Benzo[f]isochromenes	Robert J. Hinkle,* Youzhou Chen, Colieen P. Nofi, Sarah E. Bredenkamp, Seong ik Cheon & Shane E. Lewis	College of William & Mary
M- 14	Synthesis of Idarubicinone via Global Functionalization of Tetracene	David G. Dennis*, Mikiko Okumura, David Sarlah	University of Illinois Urbana Champaign
M- 15	Asymmetric Heterocyclic Synthesis via Electrophile Initiated Cyclizations of Homoallylic Carbamate and Guanidine Derivatives.	Gavin J. Rustin*, Matthew G. Donahue	University of Southern Mississippi
M- 16	Exploiting the Redox Versatility of Flavin Semiquinone in a Biocatalytic Redox-Neutral Radical Cyclization	Michael J. Black*, Andrew J. Meichan, Kyle F. Biegasiewicz, Bryan J. Kudisch, Daniel G. Oblinsky, Gregory D. Scholes, Todd K. Hyster	Princeton University
M- 17	Synthesis of Novel Bile Acids for Micellar Chiral Recognition	Sophie Kong*, Michael R. Krout, Timothy G. Strein, David S. Rovnyak	Bucknell University
M- 18	Continuous-Flow Synthesis of Advanced Glucose Derivatives and Oligosaccharides	Keevan C. Marion*, Nicola Pohl	Indiana University
M- 19	Gamma-Haloalkylation and Haloalkenylation of Enone Substrates	Douglas Yarbrough*, Cole Wagner, Justin Mohr	University of Illinois at Chicago
M- 20	Host-guest templated two-dimensional polymerization	Christopher Eckdahl*, Julia Kalow	Northwestern University
M- 21	Investigation of Polarization Effects on Intramolecular Oxidopyrylium-Alkene [5+2] Cycloadditions	Samantha Rokey*, John Goodell, T. Andrew Mitchell	University of Illinois
M- 22	Copper catalyzed fluoramide directed trifluoromethylthiolation of unactivated SP <sup>3</sup> - C-H bond	Atanu Modak*, Silas Cook	Indiana University

M- 23	Investigations into the biosynthesis of roseophilin	Melody C. Guo*, Marvin M. Vega, Regan J. Thomson	Northwestern University
M- 24	SYNTHESIS AND STRUCTURAL ELUCIDATION OF SUBSTITUTED DIBENZALACETONE COMPOUNDS: THE STUDY OF SUNSCREEN INGREDIENTS	Miles Graham, Olivia Rogers, John Gitua*	Drake University
M- 25	Design and Synthesis of Maltosyltransferase Inhibitors for Tuberculosis Treatment	Wei-Cheng Hung*, Jim-Min Fang*	Department of Chemistry, National Taiwan University, Taipei
M- 26	New simple and convenient approach to the synthesis of dihydropyridine (quinoline) based merocyanine dyes	A. Y. Rudenko, A. A., Zubarev, I. A. Sanin-Sprague*, L. A. Rodinovskaya, A. M. Shestopalov	N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences
M- 27	Synthesis of Medium-Sized Bicyclic Systems via RCM	Pavel Yamanushki*, Michael Rubin	University of Kansas, Lawrence, KS
M- 28	Asymmetric Synthesis of Gamma-Lactones from Sulfoxonium Salts and Enediolates or Boron Enolates	Nessan J. Kerrigan*, Nicholas J. Peraino, Chrismae N. Bergado, Sven H. Kaster, Dylan J. Twardy.	Nessan J. Kerrigan* and Chrismae N. Bergado: Dublin City University. Nicholas J. Peraino, Sven H. Kaster, and Dylan J. Twardy: Oakland University.

M- 29	Synthesis and Profiling of Hetero-Aryl Sulfonamides as Isoform-Selective hNav- 1.6 Inhibitors for the Treatment of Epilepsy	Verner Lofstrand*, Mike Grimwood, Kristen Burford, Alla Zenova, Michael Wilson, Shaoyi Sun, Qi Jia, Wei Gao, Kuldip Khakh, Elaine Change, Luis Sojo, Gina de Boer, Rainbow Kwan, Stephanie Lee, Christoph Dehnhardt, Steven Wesolowski, Thilo Focken, JP Johnson Jr, James Empfield	Xenon Pharmaceuticals Inc.
M- 30	Cooperative Catalysis: An Approach to Regioselective Arylboration	Allison M. Bergmann*, Stanna K. Dorn, Stephen R. Sardini, M. Kevin Brown	Indiana University
M- 31	Synthesis of Oxazoles and Pyrrolidines through Radical and Transition metal Strategies	James Herbort*	The Ohio State University
M- 32	Development of the Enyne Cope Rearrangement for Applications in Hydroazulene Synthesis	Sarah K. Scott*, Katherine E. White, Alexander J. Grenning	University of Florida
M- 33	Efforts Toward the Total Synthesis of Toxicodenane A	Jake Grabowski*, Dr. Andrew Mitchell	Illinois State University
M- 34	Pd-Catalyzed Alkene Difunctionalization Reactions of Enolates for the Synthesis of Substituted Carbocycles	Evan C. Bornowski*, Elsa M. Hinds, Derick R. White, Yusuke Nakamura, John P. Wolfe	University of Michigan - Ann Arbor
M- 35	Organo Catalyst Controlled Diastereoselective Glycosylations	Fei Yu, Jiayi Li, Paul DeMent*, Yi-jung Tu, Bernhard Schlegel, Hien Nguyen	Wayne State University
M- 36	Structure-Activity Study of Strongly Reducing, Visible Light Absorbing Phenothiazine Catalysts.	Cameron Chrisman*, Steven Sartor, Garret Miyake	Colorado State University, Fort Collins. University of Colorado, Boulder.



M- 37	Phosphate-tether mediated synthetic studies towards 13-desmethyl lyngbouilloside and leustroducsin B	Arghya Ganguly*, Mahipal Bodugam, Salim Javed, Susanthi Jayasinghe, James McParland, Alan Whitehead, Paul R. Hanson	University of Kansas
M- 38	Continuous Flow Enables Photoredox Catalysis in a Medicinal Chemistry Setting through Accelerated Optimization and Execution of Libraries	Casey B. Ritts, Zachary G. Brill*, Hyelee Lee, Umar Faruk Mansoor, Nunzio Sciammetta	Discovery Chemistry – Merck
M- 39	Mechanistic Insights into the Iridium-Catalyzed Allylic Fluorination Reaction: Importance of the Trichloroacetimidate	Jason Mixdorf*, Alexandre Sorlin, Hien Nguyen	University of Iowa, Wayne State University
M- 40	Expanding Knowledge through Synthesis: Adventures into Naturally Occurring Alkaloids	Marvin M Vega*, Regan J. Thomson	Northwestern University
M- 41	Progress Towards the Development of a "Catch/Release" Strategy for Isolating Salvinorin A, Including Microwave Promotion	Douglas Armstrong*, Logan Smith	Olivet Nazarene University
M- 42	Total Synthesis of Malleilactone	Matthew C. Horton*, Jeffrey Aubé	University of North Carolina at Chapel Hill
M- 43	Absolute Stereochemical Determination of P-Stereogenic Phosphorus Compounds	Debarshi Chakraborty1*, Hadi Gholami1, Leo A. Joyce2, Babak Borhan1	1. Michigan State University, 2. Arrowhead Pharmaceuticals
M- 44	Synthesis of NAMPT-Targeted Small Molecule Therapeutics for Pulmonary Arterial Hypertension	Wrickban Mazumdar*, Xinyu Guan, Naijing Su, Kiira M. Ratia, Jason R. Hickok, Roberto F. Machado and Tom G. Driver	University of Illinois at Chicago, Indiana University
M- 45	Copper-catalyzed approach to indolizines, iminoquinolizines and 1,2-dihydroisoquinolines	Andre K Isaacs*, Christopher Puntasecca, Joshua Nicholson, Jessica Hendsey	College of the Holy Cross

M- 46	Quaternary Center Guided Synthesis	Pengfei Hu*, Hyung Min Chi, Kenneth C. DeBacker, Xu Gong, Jonathan H. Keim, Ian Tingyung Hsu and Scott A. Snyder	University of Chicago and The Scripps Research Institute
M- 47	Chemoenzymatic Approaches to the Total Synthesis of Epoxyquinoid Natural Products	Jonathan A. Collins*, Madeleine S. Duncan, William B. Kline, Christopher J. Gerry	Whitman College Department of Chemistry
M- 48	Reactions of Carbonyl Compounds and Ethyl Diazoacetate: Synthetic Scope and Mechanism	Mizzanoor Rahaman*, Md Shahnawaz Ali, Damon Hinz, Khorshada Jahan, Jawad Bin Belayet, Nicholas Hopper, Ryan Majinski, M. Mahmum Hossain	Department of Chemistry and Biochemistry, University of Wisconsin-Milwaukee
M- 49	Efforts Toward Improving the Synthesis of a Potential Monomer Derived from Biomass	Luke Steffe and Michael C. Slade*	University of Evansville
M- 50	Regioselective Chlorination of Phenol: Mechanistic Insights and Kinetic Studies of Lewis Base catalysts	Andrew Dinh*, Laleña Janke, Sean Maddox, Bennett Addison, Jeff Gustafson	San Diego State University
M- 51	The design and synthesis of RNA-targeting small molecules	Eric S. Parsons*, Ben J. Haines, Ian S. Armstrong, Jia L. Schopis, Dr. Jennifer V. Hines, Dr. Stephen C. Bergmeier	Ohio University
M- 52	A Novel Transformation using the Reducing System Et <sub>3</sub> SiH/KOtBu	Andrew J. Smith*, Allan Young, Jude N Arokianathar, Mark Allison, Darren L. Poole, John A. Parkinson, Tell Tuttle, John A. Murphy	University of Strathclyde
M- 53	Difunctionalization of N-alkyl cyclobutyl and cyclopropyl amines via photoredox catalysis	Qile Wang*, Nan Zheng	University of Arkansas
M- 54	Iron-Catalyzed Functionalization of Alcohols and Alkenes	Paul T. Marcyk* and Silas P. Cook	Indiana University

M- 55	Gold(I) Catalyzed Synthesis of 1H-Isochromenes	Julianna M. Mouat*, Zachary A. Grimm, Dakota D. Butler, Caitlin R. Lacker, Michael R. Gesinski	Southwestern University
M- 56	Synthesis and Evaluation of Archazolid Natural Product-Based Enzyme Inhibitors	Holly C. Jones*, Evan T. Long, Cooper A. Vincent, Gregory W. O'Neil	Western Washington University
M- 57	Early stage development on BMS-986095 for hepatitis C virus	Changxia Yuan*, Sarah Steinhardt, Kristy Tran, Ke Chen, Gregory Beutner, Mike Schmidt, Martin Eastgate	Bristol-Myers Squibb
M- 58	Diastereoselective One Pot Synthesis of Oxazolines Using Sulfur Ylides and Acyl Imines	Mehedi*, Md Shafaat Al; Tepe, Jetze J.	Michigan State University
M- 59	Biomimetic Synthesis of Hitorins A and B	Xiaohuan Li, Ping He, Zheng Wei, Zhang Wang*	University at Albany, State University of New York
M- 60	A novel multicomponent entry for the synthesis of highly fluorescent fused-isoquinolines: From Diversity-Oriented Synthesis to Diversity-Oriented Subcellular Localizers.	Yoarhy A. Amador-Sánchez*, Andrés Aguilar-Granda, Ricardo Flores-Cruz, Davir González-Calderón, Cynthia Orta-Sotelo, Braulio Rodríguez-Molina, Arturo Jiménez-Sánchez and Luis D. Miranda.	Instituto de Química, Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria
M- 61	Photocatalytic xanthate-based radical addition/cyclization to biphenyl isocyanides: synthesis of 6-alkylated phenanthridines	Pedro López-Mendoza*, John E. Diaz, Alix E. Loaiza, Luis D. Miranda	1. and 4. Instituto de Química, Universidad Nacional Autónoma de México, Circuito Exterior S. N., Ciudad Universitaria
M- 62	Stereospecific Synthesis of Alkenes and Allenes by Eliminative Cross-coupling of Stereodefined Carbenoids	Yang Cao, Subhash Tanpure, Zhenhua Wu, and Paul R. Blakemore*	Oregon State University

M- 63	Triphosgene and DMAP as mild reagents for chemoselective dehydration of tertiary alcohols	Moshood O. Ganiu*, Jarrod L. Paul, Alexander H. Cleveland, and Rendy Kartika	Louisiana State University
M- 64	Mechanisms and Origins of Stereoselectivity of NHC-Catalyzed Enantioselective Decarboxylative Annulations – Access and Selective Reaction of the Elusive Aza-O-Quinone Methide Intermediate	Taisiia Feoktistova*, Alexander Brueckner, Ansoo Lee, Joshua Zhu, Karl Scheidt, and Paul Cheong	Oregon State University, Northwestern University
M- 65	The Other SiO <sub>2</sub> : Investigating Oxidation of Alcohols using (NH <sub>4</sub> ) <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> in Sand	John Lepore*, Emily Toy, Robert Torregrosa	State University of New York at Geneseo
M- 66	Pursuing Challenging Fluorinated Motifs with Photoredox Catalysis	Rebecca J. Wiles*, James P. Phelan, Simon B. Lang, Christopher B. Kelly, Gary A. Molander	University of Pennsylvania
M- 67	Convergent Annulative Synthesis of Ring-Fused Quinolones via pK <sub>a</sub> -Guided Base Selection	Muhammad M. Khalifa*, Satish Chandra Philkhana, Jennifer E. Golden	1Pharmaceutical Sciences Division, University of Wisconsin-Madison School of Pharmacy
M- 68	Rearrangement of 2-Chloroquinazolin-4(3H)-ones to Afford Cyclic Guanidines	Gang Yan*, Bereket Zekarias, Victor Jaffett, Xiaoyu Li and Jennifer E. Golden	Pharmaceutical Sciences Division, School of Pharmacy, University of Wisconsin-Madison
M- 69	Electrochemical Proton-coupled Oxidation of a (TAML)Fe-aqua Complex and Its Application to Electrocatalytic C–H Oxygenation and Alcohol Dehydrogenation	Jordan E. Nutting*, Amit Das, Shannon S. Stahl	University of Wisconsin-Madison

M- 70	2nd-Generation Oxypyridinium Salts as Powerful Electrophiles: Fine-tuning Reactivity and Solubility	Madelaine P. Thorpe*, Sean E. Dunlap, Philip A. Albiniak	Ball State University
M- 71	Process Chemistry Development of a Small Molecule	Greg Cizio, Kathy Dao, Edward Doerffler, Nolan Griggs, Elizabeth Horstman, Michael Ischay*, Matt Logan, Adam Weinstein, Lawrence Yu	Gilead Sciences
M- 72	Investigation of a Pentafluorobenzyl Isothiocyanate as a Chiral Derivatizing Agent for NMR	Emily B. Crull, Matthew G. Donahue*	University of Southern Mississippi
M- 73	Synthesis and host-guest binding of oxaquinonacyclophane macrocycles	Jay Wm. Wackerly*	Central College
M- 74	Chemoselectivity for Alkene Cleavage by Palladium-Catalyzed Intramolecular Diazo Group Transfer from Azide to Alkene	Grant B. Frost*, Michaela N. Mittelstaedt, Christopher J. Douglas	University of Minnesota-Twin Cities
M- 75	Synthesis of Highly Functionalized N-Alkylated 2-Pyridones and Indolizines	Carolyn E. Anderson*	Calvin College
M- 76	Synthetic Access to an Unprecedented Azatricyclic Ring System via aza-Michael and Intramolecular Diels-Alder Reactions	Zaki K. Phelan, Zhiyuan Huang, Daniel R. Griffith*	Lafayette College
M- 77	Achieving Selectivity with Triazole Bromodomain Inhibitors	Angela S. Carlson*, Huarui Cui, William C. K. Pomerantz, Joseph J. Topczewski	University of Minnesota

M- 78	Copper-Catalyzed Amination of Aryl Boronic Acids Using N-Chloroimides	Sébastien Lauhé*, Amara Spencer, Timothy B. Fulton	Indiana University-Purdue University Indianapolis
M- 79	Model Complexes for the Pd-catalyzed Transannular C-H Functionalization of Alicyclic Amines	Ellen Y. Aguilera,* Melanie S. Sanford	University of Michigan
M- 80	Biocatalyst-initiated ortho-quinone methide generation and diversification	Jonathan C. Perkins*, Tyler J. Doyon, Evan O. Romero, Summer A. Baker Dockrey, Kevin Skinner, Alison R. H. Narayan	University of Michigan, Chemistry Department, Life Sciences Institute, and Program in Chemical Biology
M- 81	Air Stability Improvement of [FeFe]-Hydrogenase Model Complexes	Mohammad K. Harb*, Lourance Borguli, Hassan Abul-Futouh.	Department of Pharmacy, Al-Zytoonah University of Jordan
M- 82	Development of Tripodal and Bipodal Ligand Frameworks and First-row Transition Metal Reagents for Selective C–N Bond Construction Methodologies	Anshika Kalra*, Suraj Sahoo*, Saidulu Gorla, Pericles Stavropoulos	Missouri University of Science and Technology
M- 83	Catalytic Hydrofunctionalization of Dienes	Justin Marcum, Tia Cervarich*, Rajith Manan, Courtney Roberts, Simon Meek	University of North Carolina at Chapel Hill
M- 84	Photo-crosslinking Diazirine Derivatives of a Selective Peptoid Probe for Rpn-13 Binding Site Identification	Christine S. Muli*, Darci J. Trader	Purdue University
M- 85	Copper-NHC mediated radiofluorination of aryl halides	Liam S. Sharninghausen*, Katarina J. Makaravage, Allen F. Brooks, Peter J. H. Scott, Melanie S. Sanford	Departments of Chemistry and Radiology, University of Michigan

## Tuesday, June 25, 2019 8-11PM

T- 1	Enhanced Pharmaceutical Process Development Using Flow Chemistry Technology	Reem Telmesani*, David Ford, Eric Fang, Matthew Bio	Snapdragon Chemistry
T- 2	Synthetic Applications of Squaraine Dyes	Emily P. Bacher*, Brandon L. Ashfeld	University of Notre Dame
T- 3	Development of Ester and Ketone Syntheses via Hydroxyl-Directed C–C Bond Activation	Constance B. Anderson*, Siri A. Bruhn, Christopher J. Douglas	University of Minnesota
T- 4	Chemical Modification of Silk Protein via Palladium Mediated Suzuki-Miyaura Reactions	Racine Santen* and Dr. Amanda Murphy	Western Washington University
T- 5	Combinatorial Approach to Lead Generation: Discovery of a Novel Agent for Septoria tritici Control	Zoltan Benko*, George Davis, David Young, John Owen, Beth Lorsbach	Corteva AgriScience
T- 6	Synthesis of Small Molecules for Protein Control	Elena Bray*, Jacky Tran, Carmelo Alvarez, Michael W. White, James W. Leahy	University of South Florida
T- 7	Transfer Hydrogenation in the Solid Phase to Nitroalkenes by a Hantzsch Amide	Anthony C. O'Donnell*, Scott A. Van Arman	Franklin and Marshall College
T- 8	New quinoline- and isoquinoline-based multicomponent methods for the synthesis 1,1(3,3)-dicyanotetrahydrobenzoindolizines	I. A. Sanin-Sprague*, A.A. Zubarev, A. Yu. Rudenko, L. A. Rodinovskaya, A.M. Shestopalov	N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences
T- 9	Design of core-extended N,N-diaryl dihydrophenazines as strongly reducing organic photocatalysts	Mariel Price*, Justin Cole, Garret Miyake	Colorado State University - Fort Collins
T- 10	New Monodentate Directing Group for sp <sup>3</sup> C-H Bond Functionalization	Hanh Nguyen*, Ky Khac Anh Le, Olafs Daugulis	University of Houston

T- 11	Examination of the reaction mechanism of the rhodium-catalyzed decarbonylation of pyridyl ketones	Erik J. Schoonover*, Cole Wagner*, Julia Loula, Jacob VanderRoest, Jeffrey B. Johnson	Hope College
T- 12	First GMP Synthesis of JNJ-64300808, a GluN2B-Subunit Selective NMDA Antagonist	Daniel J. Pippel*, Xiufeng Sun, Christa Chrovian, Mike Letavic, Akinola Soyode-Johnson, Brice Stenne, Yanfeng Jin, Xiaopu Fu, Xiaoguang Song, Kai Wang, Haijin Yang	Janssen Discovery Process Research, Janssen CMC China, Janssen Discovery Chemistry, and Pharmaron Inc.
T- 13	Engineering Large Stokes shift dyes for transparent luminescent solar concentrators	Mehdi Moemeni*, Jun Zhang, Chenchen Yang, Richard R. Lunt, Babak Borhan.	Michigan State University
T- 14	Cesium base-promoted alkylations: Mild & efficient synthesis of carbon-heteroatom bonds and synthetic applications	Ralph N. Salvatore*	Southeastern University, Department of Natural Sciences and University of South Florida, Department of Chemistry
T- 15	The Total Synthesis of Yaku'amide A	Yu Cai, Zhiwei Ma, Jintao Jiang, Concordia C. L. Lo*, Shi Luo, Ankur Jalan, Joseph M. Cardon, and Steven L. Castle	Brigham Young University
T- 16	Oxidative approach to the synthesis of N-heterocycles from anilines	Tianning Deng*, Wrickban Mazumdar, Tom Driver	University of Illinois at Chicago
T- 17	Palladium-Catalyzed Decarboxylative Heck-Type Coupling of Aliphatic Carboxylic Acids Enabled by Visible Light	Maximilian Koy*, Frederik Sandfort, Adrian Tlahuext-Aca, Andreas Lerchen, Tobias Knecht, Johannes B. Ernst, Linda Quach, Constantin G. Daniliuc, Klaus Bergander, Frank Glorius	Westfälische Wilhelms-Universität Münster



T- 18	Novel Aryl Trehalose Derivatives as Vaccine Adjuvants for Mycobacterium tuberculosis	Omer K. Rasheed*, Kendal Ryter, George Ettenger, David J. Burkhart, Cassandra Buhl, Rob Child, Shannon Miller, Allyson Smith, Jay T. Evans	University of Montana
T- 19	Mannich-type Reactions of Cyclic Nitrones: Effective Methods for the Enantioselective Synthesis of Piperidine Alkaloids	Vladislav G. Lisnyak, Tessa Lynch-Colameta*, Scott A. Snyder	University of Chicago
T- 20	Halide Effects in Copper-Catalyzed 1,4-Conjugate Additions with Monoorganozinc Reagents	Christina N. Pierson*, Heather R. Rensch, Tyler J. Fulton, Michael R. Krout	Bucknell University
T- 21	Exploring the Morphologies of Substituted EDOT Films on ITO Electrodes	Madelyn R. Orndorff*, Macy J. Maraugh, Sydney M. Gross, Elizabeth M. Sanford, Kenneth L. Brown, Mary E. Anderson	Orndorff, Maraugh, Gross, Sanford and Brown: Hope College; Anderson: Furman University
T- 22	Enantioselective [4 + 2]-Annulation of Azlactones with Copper-Allenylidenes under Cooperative Catalysis: Synthesis of $\alpha$ -Quaternary $\alpha$ -Acylaminoamides	Amit Kumar Simlandy*, Biki Ghosh, Santanu Mukherjee	Indian Institute of Science
T- 23	Donor-acceptor azetines – new reactants for robust synthesis of chiral peptides	Kostiantyn O. Marichev*, Michael P. Doyle	The University of Texas at San Antonio
T- 24	Formic Acid Mediated Direct Z-Selective Reductive Coupling of Dienes and Aldehydes	Christopher Cooze*, Raphael Dada, Rylan J. Lundgren	University of Alberta
T- 25	Mechanistic Investigation into the Biological Glaser-Hay Reaction	Lauren E. Mazur*, Christopher R. Travis, Emily M. Peairs, Gillian H. Gaunt, Douglas D. Young, Robert J. Hinkle	College of William & Mary

T- 26	Studies toward the synthesis of rupestines B, C, L, and M	Evangeline S. Starchman*, Mari S. Marshall, James R. Vyvyan	Western Washington University
T- 27	Synthesis of Nitrogen heterocycles via Ligand-Promoted Ruthenium-Catalyzed Dehydrogenative and Deaminative Coupling Reaction of 2-Aminophenyl Ketones and 2-Aminobenzamides with Amines	Pandula T. Kirinde Arachchige* and Chae S. Yi	Marquette University
T- 28	Computational Studies of Ring-opening/Ring-closing Metathesis Polymerization Reactions	Christopher S. Elkhall, Michelle A. Rodriguez, Buck L. H. Taylor*	University of Portland
T- 29	Mechanistic Studies of Ni-Catalyzed Arylboration of Alkenes	Alison L. Lambright*, Stephen R. Sardini, Grace L. Trammel, Humair Omer, Peng Liu, M. Kevin Brown	Indiana University, University of Pittsburgh
T- 30	Catalytic Regioselective Synthesis of N, S-Containing Heterocycles from Chemical Feedstocks	Nur-E Alom,* Navdeep Kaur, Wei Li	The University of Toledo
T- 31	Deoxyamination of Activated Alcohols Using Phosphine Activated N-Haloimides	Charles Irving*, Makafui Gasonoo, Sébastien Laulhé	Indiana University Purdue University of Indianapolis
T- 32	Synthesis of Oxetanes via a Formal Formylation	Olivia N. Mautone, Dzenis Alagic, Sarah Z. Tasker*	Franklin & Marshall College
T- 33	Rapid Access to Benzimidazole Libraries via Oxidative Cyclization from Anilines	Prolay K. Mondal*, Eric P. Arnold, Daniel C. Schmitt	Pfizer, Inc.

T- 34	Teaching organic chemistry without structures!(not really, but hearing so makes organic chemists curious if not incredulous)	Fangyi Shen, Robert E. Maleczka, Jr.*	Michigan State Univeristy
T- 35	Design, Synthesis, and Effect of Diarylcyclopropane hydroxamic Acids as Histone Deacetylase (HDAC) Inhibitors: Improving Possible Therapy for Huntington's	Jeremy Thelven*, Liam Goldman, Shanna Stoddard, Roberto de la Salud Bea	Rhodes College
T- 36	Chemoselective BOC-Group Deprotection of Indoles and Other Carbamates Under Mild Conditions.	Zachary Gullledge*, Jesse D. Carrick	Tennessee Technological University
T- 37	Stereoselective Synthesis and Evaluation of Bile Acid Metabolites	Michael R. Krout*, Brandon N. Nelson, Samantha P. Kelly, Chris K. Rakowski, Brett J. Huckstep	Bucknell University; Harvard Medical School
T- 38	Studies Toward the Synthesis of Cyclic Phosphoramides via Intramolecular C-H Amidation	Allison R. Dick*, J. Joseph Caraway, Yoon Cho, Alisa K. Erck, Catie A. Reid, Amy T. Robison, Joshua T. Schnyders	Wheaton College (Illinois)
T- 39	Design and Synthesis of Peptide Analogs from Eumenes Wasp Venom	Lily North*, Sakura Horiuchi, Roberto de la Salud Bea	Rhodes College
T- 40	Enantioselective Synthesis of (+)-Lycoricidine, (+)-Narciclasine and Analogs from Benzene	Tanner W. Bingham*, Lucas W. Hernandez, Daniel G. Olson, Riley L. Svec, Paul J. Hergenrother and David Sarlah	University of Illinois at Urbana-Champaign
T- 41	Lessons on Strain and Stability: Synthesis of Ladderane Natural Products	Erin Hancock*, Erin Kuker, Nathan Line, Brittany Witherspoon, Kevin Brown	Indiana University
T- 42	Synthesis of Monocyclic, Bicyclic and Benzocyclobutene Amino Endoperoxides and their Derivatives.	Enoch Kudoahor*, Jiang Wang, Nan Zheng	University of Arkansas

T- 43	Diastereoselective Debenzylative Glycosylation	Sara N. Alektiar*, Girish C. Sati, John Montgomery	University of Michigan
T- 44	Trapping of Thermally Generated Benzyne with N-Heterocycles	Sahil Arora*, Juntian Zhang, Vedamayee Pogula, and Thomas R. Hoye	University of Minnesota, Twin Cities
T- 45	Phenylethynyl Oxacalixarenes	KC Russell*, Bailey Hardy, Kimberly Richards, Jacolby Gardner, Owen Sharp, Anna Vernier, Doug Johnson, Jeff Katz	Northern Kentucky University, Colby College
T- 46	Thiourea-Catalyzed Asymmetric Michael Addition of Carbazolones to 2-Chloroacrylonitrile: Total Syntheses of Kopsia Alkaloids	Dongshun Ni*, Yi Wei, Dawei Ma	Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences
T- 47	Semisynthesis of a potent neuroprotector, serofendic acid, and analogs.	Dimitri Perusse*, Szu-Yi (Suzie) Hsu, Christopher S. Stach, Michael J. Smanski	University of Minnesota
T- 48	De Novo Construction of Multi-substituted Arene Derivatives Utilizing the Hexadehydro-Diels–Alder Reaction	Juntian Zhang*, Annika Page, Dawen Niu, Thomas R. Hoye	University of Minnesota, Twin Cities
T- 49	Chiral, Non-Racemic Homoallylic Amines for the Synthesis of Quinolizidine and Isoindolone Alkaloids	Hayley T. Allen*, Matthew G. Donahue	University of Southern Mississippi
T- 50	Ullman-Type Coupling of Functionalized 1,2,4-Bistriazinyl-Bipyridines toward Strategic Complexants for Minor Actinide Separations	Gabrielle D. Waters*, Jesse D. Carrick	Tennessee Technological University
T- 51	Synthesis of Trisubstituted Indolizines from 2-Propargyloxypyridines	Colin T. Hartgerink*, Jaimie E. Van De Burg*, Matthew M. Rossler, Emily E. Zerull, Carolyn E. Anderson	Calvin College

T- 52	Synthesis of Modified Benzo[1,2-b:4,5-b']difuran Donor-Acceptor Polymers for use in Organic Photovoltaics	Carmen Gott-Betts*, Malika Jeffries-EL	Boston University
T- 53	Synthesis of the Hexasaccharide Fragment of Landomycin A Using a Mild, Reagent Controlled Approach	Subbarao Yalamanchili*, Dina Lloyd, Clay S. Bennett	Tufts University
T- 54	Chemoselective, Stereocontrolled Cu-Catalyzed C-N Couplings Towards a Highly Potent mPI3Ka Inhibitor	Chong Han,* Sean Kelly, Theresa Cravillion, Scott Savage, Francis Gosselin.	Genentech, Inc.
T- 55	An Efficient and Stereocontrolled Synthesis of an Arylomycin Derived Complex Macrocyclic Antibiotic on Kilogram Scale	Filip Petronijevic*, Allen Hong, Nicholas Wong, Theresa Cravillion, Sean Kelly, Haiyun Hou, Chong Han, Xin Linghu, Francis Gosselin	Genentech
T- 56	The Synthesis of Vinylogous Aldol-type Products via Electrochemical Reductions of $\gamma,\delta$ -epoxy $\alpha,\beta$ -unsaturated Carbonyl Compounds	Mingxiang Zhou*, Rakesh Thorat, Andrew M. Harned	Texas Tech University
T- 57	Binding and Synthesis of Oxaquinonacyclophanes	Kayleigh Rohr*, Jay Wackerly	Central College
T- 58	Exploration of the Ambident Reactivity of Heterocyclic Enaminones	Maddie Filkorn*, Roslyn Patel*, Kaitlynn Sockett*, Jonathan Thrall, Mike Bruno, Brooke Boyer, Alden Ferrier, Marissa McFadden, Erin T. Pelkey	Hobart and William Smith Colleges
T- 59	Diastereoselective Synthesis of Unnatural Amino Acids	Kayla Steinke*, Hailey Lister, Tre'Shunda James, Sophia Yang, Jeffrey Cannon	Occidental College
T- 60	Synthesis of bis-Triazolylthiophenes	Ronald Brisbois*, Elizabeth Croll*, Claire Schmit, Erik Anderson, Abdullgadir Hayir	Macalester College

T- 61	Enantioselective Phenolic $\alpha$ -Oxidation Using Hydrogen Peroxide via an Unusual Double Dearomatization Mechanism	Michael F. McLaughlin*, Elisabetta Massolo, Thomas Cope, Shubin Liu, Jeffrey S. Johnson	University of North Carolina at Chapel Hill
T- 62	Synthesis and Biological Evaluation of Novel Nitrogen Containing Marine Natural Products	Christina Martinez-Brokaw*, Joshua G. Pierce	NC State University
T- 63	Stereocontrolled Synthesis of Piperidines via Rh-catalyzed Ring Expansion of Aziridines	Josephine Eshon*, Kate Nicastrì, Steve Schmid, Jennifer Schomaker	University of Wisconsin-Madison
T- 64	Ti-Mediated Synthesis of Cyclobutanones and 1,4-Diketones	Sydney F. Seavey, Nathan N. Le, Aimee M. Rodriguez, James R. Alleyn, Michael R. Gesinski*	Southwestern University
T- 65	Modular Chemical Probes for Detection of Amino Acid Citrulline	Dmitry V Kadnikov*, Michael Thomas, Brandon Laufenberg, Ashley Bronder, Mikayla Moore, Nicholas Dacon, Christopher Threvarthen	University of Wisconsin-Stout
T- 66	Photoredox Radical/Polar Crossover Reactions for Cyclopropane and Heterocycle Synthesis	John A. Milligan*, Loïc R.E. Pantaine, Viktor C. Polites, James P. Phelan, Zheng-Jun Wang, Christopher B. Kelly, Jennifer K. Matsui, Gary A. Molander	University of Pennsylvania
T- 67	Vibrational Coupling: An IR analogue to FRET	Edward E. Fenlon,* <sup>^</sup> Scott H. Brewer, <sup>^</sup> Matthew J. Tucker, <sup>~</sup> Xin Sonia Gai, <sup>^</sup> Jessie Tianjiao Shi, <sup>^</sup> Julia M. Weiner, <sup>^</sup> Judith N. Monzy, <sup>^</sup> Jeremy S. Kramer, <sup>^</sup> Maria C. Meriwether, <sup>^</sup> Andrew J. Schmitz, <sup>~</sup> David G. Hogle <sup>~</sup>	<sup>^</sup> Franklin & Marshall College; <sup>~</sup> University of Nevada Reno
T- 68	Synthesis of Ether-linked Glucose Uptake Inhibitor	Liyi Wang*, Emma Kessler, Pratik Shriwas, Jennifer V. Hines, Xiaozhuo Chen, Stephen C. Bergmeier	Ohio University

T- 69	Mechanistic investigation of oxypyridyl- and oxylepidyl-salt electrophilic transfer reactions towards new reagent development	Christopher S. LeMasters and Philip A. Albiniak*	Ball State University
T- 70	Design, syntheses and cytotoxic bioevaluations of some novel dichloroacetyl amides	Mohammad Hossain*, Swagatika Das, Umashankar Das, Jonathan R. Dimmock	Indiana University Kokomo and University of Saskatchewan
T- 71	Synthesis of bioactive quinazolines by auto-tandem Pd(II) catalysis: A platform for Diversity Oriented Synthesis	Arshad J. Ansari*, Devesh M. Sawant	Department of Pharmacy, Central University of Rajasthan
T- 72	Dienamine Catalyzed [4+2] Cycloaddition of Pyrones with alpha,beta-Unsaturated Aldehydes	Charles J. F. Cole*, Lilia Fuentes, Scott A. Snyder	University of Chicago
T- 73	Differential Syntheses of alpha-Carbolines by Rh(I) and Pd(0) Catalysis	Kyle Medas,* Robert Lesch, Friendship Idioma, and Seann P. Mulcahy	Providence College
T- 74	Stereospecific Synthesis of Highly Substituted Piperazines via a One-Pot Three Component Ring-Opening Cyclization from N-activated Aziridines, Anilines and Propargyl Carbonates	Navya Chauhan*, Manas Ghorai	Indian Institute of Technology Kanpur
T- 75	Chiral Bifunctional Phosphine Ligand Enabling Gold-Catalyzed Asymmetric Isomerization of Alkyne to Allene	Xinpeng Cheng*, Zhixun Wang, Carlos D. Quintanilla, Liming Zhang	University of California, Santa Barbara
T- 76	Peptide Stapling by Lewis Base-Bronsted Acid Catalyzed Sulfenylation of Tryptophan	Zachary E. Brown*, Mirza A. Saputra, Hanne C. Henriksen, Isaac W. Bell, Joseph J. Provost, Jeffrey L. Gustafson	San Diego State University

T- 77	Expanding the Electrophile and Nucleophile Scope in $\pi$ -allyl(Pd)/Lewis Base Cooperative Catalysis	W. Rush Scaggs*, Thomas N. Snaddon	Indiana University–Bloomington
T- 78	Synthesis and Characterization of Bacterial Isonitrile Chalkophores	Yao Xu*, Derek Tan	Memorial Sloan Kettering Cancer Center
T- 79	Efforts Toward the Synthesis of Fischer Carbenes for Intramolecular Decarboxylative Allylation	Phong Thai* Michael C. Slade	University of Evansville
T- 80	Photoredox Catalyzed Radical Additions to Aliphatic and Aromatic N-acylhydrazones	Stephen T. J. Cullen*, Gregory K. Friestad	University of Iowa
T- 81	Chameleon Catalyst	Aliakbar Mohammadlou*, Xiaopeng Yin, Emily Matthews, Babak Borhan, William D. Wulff	Michigan State University
T- 82	Transition- Metal Complexes for C-H Activation Reactions to Construct Valuable C–N Bonds through Nitrene-Transfer Chemistry	Meenakshi Mehta*, Anshika Kalra, Suraj Kumar Sahoo, Himanshu Bhatia, Lillian Adams, Pericles Stavropoulos	Missouri University of Science and Technology
T- 83	Photoinduced Iron-Catalyzed Cycloisomerizations: Discovery and Reaction Mechanism	Dan Lehnerr, Yining Ji, Tamas Benkovics, John McIntosh, Carolyn Suh, Ryan D. Cohen, Andrew P. J. Brunskill, Junyu Yang, Mikhail Reibarkh, Andrew J. Neel*	Merck and Co., Inc.



T- 84	Arene Amination using Hydroxylamine	Yi Yang See*, Melanie S. Sanford	University of Michigan
T- 85	Snatching Chloride Using C-H Hydrogen Bonds	Nabarupa Bhattacharjee*, Yun Liu, Wei Zhao, Chun-Hsing Chen, Fred C. Parks, Yi Yi, Takashi Ito, Amar H. Flood	Indiana University Bloomington, University of Illinois at Urbana-Champaign, University of North Carolina At Chapel Hill, Kansas State University
T 86	Synthesis of Quinoline-5,8-Dione Derivatives	Austin Jones*, Gunnar Taylor, Robert E. Sammelson	Ball State University

**Wednesday, June 26, 2019 8:15-11PM**

W- 1	N-Morpholinomethyl-5-lithiotetrazole: A Reagent for the One-Pot Synthesis of 5-(1-Hydroxyalkyl)tetrazoles	Panagiotis D. Alexakos*, Duncan J. Wardrop	University of Illinois at Chicago
W- 2	Cyanoborylation and Traceless Nitrile- Directed C-H Activation as a Versatile Approach to Late-Stage Functionalization	Annabel Q. Ansel* and John Montgomery	University of Michigan
W- 3	Biocatalytic derivatization of $\alpha$ -amino acids	Stephanie W. Chun*, LeeAnne Wang, Robert T. Kennedy, Alison R. H. Narayan	Department of Chemistry and Life Sciences Institute, University of Michigan, Ann Arbor
W- 4	A General Diversity Oriented Synthesis of Asymmetric Double-Decker Shaped Silsesquioxanes	Badru-Deen Barry,* Jonathan E. Dannatt, Austin K. King, Andre Lee, Robert E. Maleczka, Jr.	Michigan State University
W- 5	Applying chirality transfer [2+2] reaction into bicyclo[4.2.0] natural product syntheses	Renyu Guo*, Brittany P. Witherspoon, Nathan J. Line, M. Kevin Brown	Indiana University, Bloomington
W- 6	Expedient Synthesis of Chiral Tryptamines via a Regioselective Indole Alkylation	Jie Xu*, Jens Wolfard, Cheol K. Chung, Haiming Zhang	Genentech Inc.
W- 7	The Multi-Directional Hexadehydro- Diels—Alder (HDDA) Reaction towards Synthesis of Polyaromatic Compounds	Daniel Lee*, Thomas R. Hoye	University of Minnesota - Twin Cities
W- 8	Triflate-Catalysis Enables Selective Access to $\alpha,\alpha$ - Difluoroalkylthioethers	Jacob P. Sorrentino*, Douglas L. Orsi, Ryan A. Altman	Dept. of Medicinal Chemistry, The University of Kansas

W- 9	Novel Aromatization Domino Sequence to Fused Heterocycles	Brendon B. Carnell,* Robert J. Hinkle, Youzhou Chen, Colleen P. Nofi, Shane E. Lewis, Daniel J. Speer, Bethany L. Kanter	College of William & Mary
W- 10	Novel Reactivity of Coumarins with the Hexadehydro-Diels—Alder (HDDA) Generated Benzyne	Bhavani Shankar Chinta*, Daniel Lee, Thomas R. Hoye	University of Minnesota - Twin Cities
W- 11	Fe-catalyzed radical cyclization via reductive addition of olefins to N-acylhydrazones	Reid L. Hein*, Gregory K. Friestad	University of Iowa
W- 12	Cobalt-Catalyzed Aerobic Oxidative Cyclization of 2-Aminophenols and 2-Aminoanilines with Isonitriles	Jiaqi Liu*, Jessica Hoover	West Virginia University
W- 13	Cyanoborylation and Traceless Nitrile-Directed C-H Activation as a Versatile Approach to Late-Stage Functionalization	Annabel Q. Ansel* and John Montgomery	University of Michigan
W- 14	Synthesis and Characterization of Heteroacenes Derived from Mellophanic Diimide	Stella M. Luo*, Kellie A. Stellmach, Stella M. Ikuzwe, Dennis D. Cao	Macalester College
W- 15	Solution-phase Automated Synthesis of a Di- and Trisaccharide Rhamnan Library	Victoria R. Kohout*, Alyssa Pirinelli, Nicola L.B. Pohl	Indiana University
W- 16	Efforts Towards a One-pot Synthesis of an O-linked Fucose Trisaccharide Target	Ashley E. DeYong*, Nicola L. B. Pohl	Indiana University

W- 17	Synthesis of ABBV-168, a 2'-Bromouridine for the Treatment of Hepatitis C	Geoff T. Halvorsen*, Brian S. Brown, Stephen N. Greszler, Eric A. Voight, Gang, Zhao, Albert W. Kruger, John Hartung, Kirill, A. Lukin, Steven R. Martinez, Eric G. Moschetta, Michael T. Tudesco, Nathan D. Ide	Drug Discovery Science and Technology and Process Research and Development, AbbVie Inc.
W- 18	Development Of Greener Synthesis Of N-Heterocycles Via Reductive Cyclization Of Nitroarenes	Xinyu Guan*, Haoran Zhu, Michael Shevlin and Tom G. Driver	1) Department of Chemistry, University of Illinois at Chicago; 2) Department of Process Research & Development, Merck & Co., Inc.
W- 19	Vapor diffusion for crystallization: A quantitative study of volume and solvent strength changes.	Michael J. Wen, Matthew T. Jackson, Charles M. Garner*	University of Memphis, Baylor University
W- 20	Medicinal Chemistry and Chemical Biology- Inspired Synthesis of Troponoids	Daniel Schiavone*, Ryan Murelli	Brooklyn College and The Graduate Center, The City University of New York
W- 21	Synthesis and Development of a Safe and Green Testing Method for Manganese Concentration in Drinking Water	Anna Holmes*, Anusree Mukherjee, Bernhard Vogler, Emanuel Waddell	The University of Alabama in Huntsville
W- 22	Toward Identifying Inhibitors of a Glycosyltransferase that is Important for Bacterial Cell Wall Biosynthesis	Regan N. Szalay*, Ian D. Mundy, Rada Zunich, Sara E.S. Martin	The College of Wooster

W- 23	Copper-Mediated 1,2-(Bis)trifluoromethylation of Alkynes: A Combined Experimental and Computational Study	Deyaa I. AbuSalim*, Shuo Guo*, and Silas P. Cook	Indiana University - Bloomington
W- 24	Atropisomerism as a strategy towards increased potency and selectivity of Ibrutinib analogs	Sean Toenjes, Ramsey Hazin*, Samuel Albright*, Sagar Vaidya, Jeffrey Gustafson	San Diego State University
W- 25	Molybdenum Catalyzed Deoxydehydration Of Vicinal Diols to Olefins	Alex John, Stephenie Martinez*, Jamie Lam, Christine Navarro, Tim Siu\, Andranik Mihranyan, Celine Parker, Consuelo Martinez, Maiko Lunn, Paula Magat, Skyler Stovall, Tristhan-Trieu Tran	California Polytechnic University, Pomona
W- 26	Synthesis of indole-fused S-containing heterocycles	Mukund Jha*	Department of Biology and Chemistry, Nipissing University
W- 27	Protein Proximity Assay in FFPE Tissue Using Caged Haptens	Nate Polaske*, Yuri Belosludtsev, Brian Kelly, Adrian Murillo	Roche Tissue Diagnostics
W- 28	Mimicking Extracellular Matrix with Visible-Light Controlled, Biopolymer-Derived Hydrogels	Boyeong Kang*, Joseph V. Accardo, Julia A. Kalow	Northwestern University
W- 29	Ammonium Heptamolybdate Catalyzed Deoxydehydration of Vicinal Diols to Olefins	Christine A. Navarro*, Alex John	California State Polytechnic University, Pomona
W- 30	Direct Amide Synthesis from Carboxylic Acids Using N-Haloimide Reagents	Jack T. Floreancig*, Charles D. Irving, Sebastien Lulhe	Indiana University Purdue University of Indianapolis

W- 31	Tri-Catalytic Cross-Electrophilic Coupling of Epoxides with Aryl Iodides under Visible Light	Marvin Parasram*, Benjamin J. Shields, Abigail G. Doyle	Princeton University
W- 32	Enantioselective Functionalization of Enamides at the beta-position with Indoles	Mirza A. Saputra, Binod Nepal*, Nitin S. Dange, Pu Du, Frank R. Fronczek, Revati Kumar, Rendy Kartika	Louisiana State University
W- 33	Palladium-Catalyzed Dearomative syn-1,4-Diamination	William C. Wertjes*, Mikiko Okumura, David Sarlah	University of Illinois at Urbana-Champaign
W- 34	Application of Acetylene-Activated SNAr Reactions To the Synthesis of Heterohelicenes	Samuel M. Hoenig, Emily A. Dougherty, Lucas S. Gomez, Yusheng Hu, Christopher K. Lee, Sava Petovic, Jeffrey L. Katz*	Colby College
W- 35	A Versatile Bis-Allylboron Reagent for the Stereoselective Synthesis of Chiral Diols	Belinda E. Hetzler*, Giulio Volpin, Dirk Trauner	New York University
W- 36	Maltol Derived Oxidopyrylium Ylides Display Unique Kinetics in Formation of Oxabicyclic Intermediates Towards the Synthesis of 4- or 2-Hydroxytropolones	Lauren P. Bejcek*, Ryan P. Murelli	Brooklyn College and the Graduate Center at CUNY
W- 37	Synthesis and Redox Transmetalation Reactivity of a Catalytically Relevant Nickel Metallacycle	Aaron P. Honeycutt, Kerry-Ann Green, Jessica M. Hoover*	West Virginia University
W- 38	total synthesis of Napyradiomycin A1	Saeedeh Torabi Kohlbouni*, Arvind Jaganathan, Gonzalo Javier Villegas Rodriguez, Natasha Rose Perry, Babak Borhan	Michigan State University

W- 39	Mild and Efficient Synthesis of Amides from Acid Chlorides and Amines using Cs <sub>2</sub> CO <sub>3</sub> -TBAI. Application Toward the Preparation of Sulfanilamide Derivatives and Penicillin Analogs	Abe Rosenthal *, Joseph Shamp, Ethan Carey, David Orlando Ralph N. Salvatore	Southeastern University, Department of Natural Sciences
W- 40	Synthetic Studies Towards the Total Synthesis of Laingolide A	Alexandra Golliher*, William Maio	New Mexico State University
W- 41	Selective Intermolecular Reductive-Heck Reaction via Pd Nanoparticles	Daisy Rosas Vargas*, Silas P.Cook	Indiana University
W- 42	Synthesis and Methodology Enabled by $\gamma$ -Functionalization of Enones	Gennadii Grabovyi*, Scott Virgil, Brian Stoltz, Justin Mohr	University of Illinois at Chicago, California Institute of Technology
W- 43	Pd-Catalyzed Reductive Amination of Enolizable sp <sup>3</sup> -C-H Bonds.	Russell Ford*, Isabel Alt, Navendu Jana, Tom Driver	University of Illinois at Chicago
W- 44	Towards Molecular Complexity: Alkene Carboboration via Cu/Pd Synergistic Catalysis	Stanna K. Dorn*, Allison M. Bergmann, Annika E. Tharp, M. Kevin Brown	Indiana University-Bloomington
W- 45	Strategies and Catalysis for the Synthesis of Epidithiodiketopiperazines	Toya D. Scaggs*, Colin M. Pearson, James W. B. Fyfe, Thomas N. Snaddon	Indiana University Bloomington
W- 46	Total Synthesis of Pactalactam and Its Structure Confirmation by Reisolation from Pactamycin-producing Actinomycetes	Taejung Kim*†,‡, Shohei Matsushita†, So Matsudaira†, Tsuyoshi Doi†, Shinji Hirota†, Young-Tae Park‡, Masayuki Igarashi#, Masaki Hatano#, Noriko Ikeda#, Jungyeob Ham‡, Masaya Nakata†, Yoko Saikawa†	†Keio University, ‡Korea Institute of Science and Technology (KIST), #Institute of Microbial Chemistry (BIKAKEN)

W- 47	Design, synthesis, and structure-activity relationships of novel phenolic series of indenopyridinone as topoisomerase inhibitors	Eung-Seok Lee*, Aarajana Shrestha, Youngjoo Kwon	Yeungnam University
W- 48	Leveraging atropisomerism to obtain a selective inhibitor of RET kinase with secondary activities towards EGFR mutants	Sean Toenjes*, Valeria Garcia, Sean Maddox, Greg Dawson, Maria Ortiz, Javier Piedrafita, Jeff Gustafson	San Diego State University
W- 49	Development of Atroposelective Syntheses of Pharmaceutically Relevant N-Heterocycles	Mariel M. Cardenas*, Mirza A. Saputra, Andrea N. Sanchez, Crystal J. Robinson, Edward Valle, Jeffrey L. Gustafson	San Diego State University
W- 50	Copper Mediated Photochemical Methods for the Synthesis of Small Heterocycles	Daniel M. Flores*, Valerie A. Schmidt	University of California - San Diego
W- 51	Introduction of the Ether Bridge into Loline Alkaloids	Minakshi Bhardwaj, Robert B. Grossman*, Padmaja Nagabhyru, Christopher L. Schardl, Juan Pan, Wei-Chen Chang, Bo Zhang, J. Martin Bollinger, Carsten Krebs	University of Kentucky and Pennsylvania State University
W- 52	Identification and optimization of novel small molecule inhibitors of mPGES-1	Bryce Dye*, Angela Warning*, Taylor Gerrein, Sarah Kirchhoff, Leah Kovalic, William L. Seibel, Sarah R. Anthony, Michael Tranter, Amber J. Onorato	Northern Kentucky University, University of Cincinnati, Cincinnati Children's Hospital
W- 53	Pd-catalyzed preparation of vinyl sulfonyl fluorides from enol triflates	Terry Lou <sup>1</sup> , Edward Conn <sup>2</sup> , Scott W. Bagley <sup>2*</sup> , Michael C. Willis <sup>1</sup>	1 - University of Oxford; 2 - Pfizer Medicine Design



W- 54	Toward an AMPK-12 Selective Activator: A Metabolic Amplification Treatment for Type 2 Diabetes	Michael A. Plotkin*, Hyunjin Kim, James M. Apgar, Robert Wilkening, Hong-Ping Guan, Ku Lu, Xiaodong Yang, Judy Gorski, George Eiermann, Anantha Gollapudi, Marc Kurtz, Maria Trujillo, Robert Myers, Daniel Kemp, Mengwei Hu, Rosemary Mayer-Ezell, Shiyao Xu, James R. Tata, Iyassu Sebhat, Jason Cox	Merck & Co., Inc., MRL
W- 55	Pd-Catalyzed Enantioselective Hydrofunctionalizations of 1,3-Dienes and 1,3-Enynes	Nathan J. Adamson*, Haleh Jeddi, Steven J. Malcolmson	Duke University Department of Chemistry
W- 56	Design and Synthesis of Phosphoglycerate Derivatives Incorporating Azacycle as Bacterial Transglycosylase Inhibitors	Tsung-Han Chao*, Jim-Min Fang	Academia Sinica
W- 57	Designing Functional and Degradable Polyphthalaldehyde Derivatives	J. Patrick Lutz*, Anne J. McNeil	Department of Chemistry, University of Michigan

W- 58	Fabrication of N-free trichlorovinyl silane-modified-chitosan film with enhanced solubility and antibacterial activity	Anthony Udukhomo Awode 1*, Akeem Adeyemi Oladipo 2, Mumtaz Guran 3, Osman Yilmaz 1, Mustafa Gazi 1.	1.Polymeric Materials Research Laboratory, Chemistry Department, Faculty of Arts and Science, Eastern Mediterranean University, 2.Cyprus Science University, Faculty of Engineering, 3.Department of Medical Microbiology, Dr. Fazıl Küçük Faculty of Medicine, Eastern Mediterranean University
W- 59	Difunctionalization of N-cyclobutylanilines with Isocyanide and TMSCN under Photoredox Catalysis	Elvis Boateng*, Nan Zheng	University of Arkansas
W- 60	Supramolecular Catalyst Assembly Based on Aromatic Donor-acceptor Interaction for Asymmetric Ring Opening of Epoxides	Jian Liang, Daniel Blechschmidt, Matthew Woodhouse, Luke N. Soucie, Yu Liu*	Northern Michigan University
W- 61	Photoredox/ Transition Metal Dual Catalysis in Decarboxylative Elimination and Cross Coupling Reactions	Kaitie C. Cartwright*, Simon B. Lang, Jon A. Tunge	The University of Kansas
W- 62	Electrochromic and Non-Volatile Memristive Study of Mn(III)-polymer of Schiff's Base Organic Ligand	Ddeepa Oberoi*, Ansauya Bandyopadhyay	Indian Institute of Technology Roorkee

W- 63	Toward a Modular Synthesis of Substituted Naphthothiophenes via the Garratt-Braverman Cyclization	Stefan L. Debbert*, Anthony M. Ortiz, Erin L. Hill, Thang X. Nguyen, Franklie A. Dilone	Lawrence University
W- 64	Synthesis of benzo[c][1,2,5]selenadiazol Based Sulphonamides	Syeda Shaista Gillani 1,2*, Hafiz Adnan Ahmad, Munawar Ali Munawar, Salman Gul, Rabia Babar	Lahore Garrison University
W- 65	Frustrated Complexant Scaffolds of 2-(6-[1,2,4]triazin-3-yl-pyridin-2-yl)-1H-indoles Toward Minor-Actinide Separations	Mariah L. Tedder*, Zachary Z. Gullede, Jesse D. Carrick	Tennessee Technological University
W- 66	DBU-Assisted Intermolecular [3 + 2] Dipolar Cycloaddition of Terminal Alkynes with Tosylhydrazones Towards the Synthesis of Frustrated Pyrazolyl-Pyridine-1,2,4-Triazine Complexant Scaffolds for Minor Actinide Separations	Giri Babu Veerakanellore*, Jesse Carrick	Tennessee Technological University
W- 67	Intramolecular Alkene Hydroalkylation with 1,3-Dicarbonyls via Photoredox Catalysis	Marc Kawada*, Anne-Marie Crooke, Yuri Lee, Joseph Costello, Jeffrey Scott Cannon	Occidental College
W- 68	Atroposelective halogenation of biaryl anilines	Sagar D. Vaidya*, Sean Toenjes, Jeffrey L. Gustafson	San Diego State University
W- 69	Stereoselective applications of proline-catalysed $\alpha$ -amination of Aldehydes	Anas Ansari*, Ramesh Ramapanicker	Indian Institute of Technology, Kanpur

W- 70	Fluorinated Phthalonitriles and Phthalocyanines: Synthesis, X-Ray Structures and Exocyclic Conjugation Effects on Oxygen Activation Reactivity	Marius Pelmus*, Christopher Colomier, Hemant H. Patel, Olivia C. Xiao, Ralph III Foglia, Marta G. Suazo, Sergiu M. Gorun	Department of Chemistry and Biochemistry, Seton Hall University
W- 71	SUBSTITUTION OF AROMATIC METHYL GROUP WITH AMINO: NOVEL FLAVOENZYME CONVERTS VITAMIN INTO ANTIBIOTIC	Isita Jhulki*, Tadhg P. Begley	Texas A & M University
W- 72	Toward a General Route to Nanographenes via a [2+2+2] / Cyclodehydrogenation Sequence	Hannah Nguyen, Gavin Kiel, T. Don Tilley	University of California, San Diego and University of California, Berkeley
W- 73	Synthesis of cyclic amidines via activation of N-heterocycles	Seewon Joung*	Mokpo National University
W- 74	Copper(II)-Dipicolylamine-Coumarin Sensor for Maltosyltransferase Assay	Wei-Li Lee, Tse-Wei Hsu*, Wei-Cheng Hung, Jim-Min Fang	National Taiwan University
W- 75	Structural Complexity from Simple Starting Materials: Novel Alkenylboration Reaction via Synergistic Cu/Pd Catalysis	Annika Tharp*, Stanna Dorn, M. Kevin Brown	Indiana University
W- 76	Enantioselective Copper Catalyzed Alkyne-Azide Cycloaddition by Kinetic and Dynamic Kinetic Resolution	En-Chih Liu*, Amy Ott, Juliana Alexander, Joseph Topczewski	University of Minnesota
W- 77	Chemoenzymatic synthesis of natural products and complex scaffolds	Tyler J. Doyon*, Jonathan C. Perkins, Summer A. Baker Dockrey, Evan O. Romero, Alison R. H. Narayan	Life Sciences Institute, Program in Chemical Biology, University of Michigan, Ann Arbor

W- 78	A Unified Approach to the Akuammiline Alkaloids via Nitrenium Ion-Mediated Alkene Oxamidation	Mihir K. Chavda*, Duncan J. Wardrop	University of Illinois at Chicago
W- 79	Ipso-Borylation of Silyloxyarenes and Unexpected C-H Activation of Non-Acidic, Undirected C-H Bonds	Wesley Pein*, Eric Wiensch, and John Montgomery	University of Michigan
W- 80	Halogenase Genome Mining for Selective Catalysis	Brian F. Fisher*, Harrison M. Snodgrass, Jared C. Lewis	Indiana University
W- 81	Designing Polyurethane Dendrimers by Click Chemistry	Dhruba P. Poudel*, Dr. Richard T. Taylor	Miami University
W- 82	Gamma Activation of Enones Enabled by Nitrogen Centered Radicals	Sebastian Marquez*, Justin Mohr	University of Illinois at Chicago
W- 83	Towards Photoswitchable Double Helical Foldamers	Alketa Lutolli*, Fred C. Parks, Yun Liu, Yuran Hua, Semin Lee, Amar H. Flood	Indiana University
W- 84	Pyridine as a Photocatalyst and Nucleophile for the Synthesis of Aryl-Pyridiniums	Tolani K. Salvador*, Matthew S. Remy, Melanie S. Sanford	University of Michigan and Dow
W- 85	Nickel-Catalyzed Arylboration of Alkenylarenes: Synthesis of Boron-Substituted Quaternary Carbons and Regiodivergent Reactions	Alan R. Lear*, Liang-An Chen, Pin Gao, M. Kevin Brown	Indiana University