

Peer Reviewed Publications (listed in chronological order, undergraduate co-authors)

1. Peretich, A. L.; Amenta, D. S.; Gilje, J.W.; Yap, G.P.A. "Crystal structure of $[\text{Me}_2\text{NCH}(\text{O})]_2\text{Mg}[(\mu\text{-OPr})_2\text{Al}(\text{OPr})_2]_2$ " *J. Chem. Crystallogr.* **2010**, *40*, 716-719. DOI: 10.1007/s10870-010-9783-x. [REU CHE-0754521](#), [REU CHE-0315345](#)
2. Deyerle, B. A.; Zhang, Y. J. "Effects of Hofmeister anions on the aggregation behavior of PEO-PPO-PEO triblock copolymers," *Langmuir*, **2011**, *27*, 9203-9210. [REU CHE-0754521](#)
3. Head, A. R.; Amenta, D. S.; Gilje, J. W.; Yap, G. P. A. "Crystal structure of bis(diphenylphosphino)ethane monoxide" *Global J. Inorg. Chem.* **2011**, *2*, 1-4. [REU CHE-0754521](#), [REU CHE-0315345](#)
4. Head, A. R.; Amenta, D. S.; Gilje, J. W.; Yap, G. P. A. "Crystal structure of *cis*-dichloro-*bis*-{[2-(diphenylphosphino- κ -*P*) methyl]diphenylphosphine oxide}palladium(II) ethanol solvate" *J. Chem. Crystallogr.* **2011**, *41*, 247-250, DOI: 10.1007/s10870-010-9922-4. [REU CHE-0754521](#), [REU CHE-0315345](#)
5. Jamieson, E. R. Eppley, H. J.; Geselbracht, M.; Johnson, A. J.; Reisner, B. A.; Smith, S.R.; Stewart, J. L.; Watson, L. A.; Williams, B. S. Inorganic Chemistry and IONiC: An online community bringing cutting-edge research into the classroom. *Inorg. Chem.* **2011**, *50*, 5849-5854. DOI: 10.1021/ic2006919. **NSF DUE-0737030**
6. LaDow, J. E.; Warnock, D. C.; Hamill, K. M.; Simmons, K. L.; Davis, R. W.; Schwantes, C. R.; Flaherty, D. C.; Willcox, J. A. L.; Wilson-Henjum, K.; Caran, K. L.; Minbiole, K. P. C.; Seifert, K. "Bicephalic amphiphile architecture affects antibacterial activity" *Eur. J. Med. Chem.* **2011**, *46*(9), 4219-4226. [REU CHE-0754521](#)
7. Mo, A.K.; DeVore, T.C.; Augustine, B.H.; Zungu, V.P.; Lee, L.L.; Hughes, W.C. "Improving the adhesion of Au thin films onto poly(methyl methacrylate) substrates using spun-cast organic solvents," *J. Vacuum Science and Tech. A: Vacuum Surfaces and Films*, **2011**, *29*, art. no. 030601. **DMR-1005641**, Department of Defense ASSURE/NSF-REU [DMR-0851367](#)
8. Campbell, H. M.; Boardman, B. M.; DeVore, T. C.; Havey, D. K., "Experimental determination of the Boltzmann constant: An undergraduate laboratory exercise for molecular physics or physical chemistry" *Am. J. Phys.*, **2012**, *80*, 1045. [REU CHE-1062629](#)
9. Cannon, W.R.; Talley, N.D.; Danzig, B.A.; Liu, W.; Martinez, J.S.; Shreve, A.P.; MacDonald, G. "Ion specific influences on the stability and unfolding transitions of a naturally aggregating protein; RecA," *Biophysical Chemistry*, **2012**, *163-164*, 56-63. **CHE-081476**, [REU CHE-0754521](#), **CHE-0420877**
10. Huffman, B.A., Poltash, M.L., Hughey, C.A. "Effect of polar protic and polar aprotic solvents on negative ion electrospray ionization and chromatographic separation of small acidic molecules." *Analytical Chemistry*, **2012**, *84*, 9942-9950. **CHE-0922935** and **CHE-1046630**
11. Hughey, C.A., Januszewicz, R., Minardi, C.S., Phung, J., Huffman, B.A., Reyes, L., Wilcox, B.E., Prakash, A. "Distribution of almond polyphenols in blanch water and skins as a function of blanching time and temperature." *Food Chemistry*, **2012**, *131*, 1165-1173. **CHE-0922935** and **CHE-1046630**, [REU CHE-0754521](#), [REU CHE-1062629](#)
12. Wagner, T.; Hrib, C. G.; Lorenz, V.; Edelman, F. T.; Amenta, D. S.; Burnside, C. J.; Gilje, J.W. "N-Pyrazolylpropanamide - a versatile ligand for the construction of supramolecular hydrogen-bonded

frameworks" *Zeit. Anorg. Allg. Chem.* **2012**, 638, 2129-2137. DOI: 10.1002/zaac.201200139. **CHE-0754521** Contribution to an edition honoring Prof. Rudolf Hoppe's 90th Birthday

13. Bagley, A.; White, C.C.; Mihay, M.D.; DeVore, T.C. "Physical chemistry laboratory projects using NMR and DFT-B₃LYP calculations," *NMR Spectroscopy in the Undergraduate Curriculum*, 11 ACS Symposium Series, Volume 28, **2013**, Chapter 15, 229-243. **Department of Defense ASSURE/NSF-REU DMR-0851367, REU CHE-1062629**
14. Barrett, A., Hughey, C.A., Straut, C., Howell, A., Ndou, T., Dai, Z., Kaletune, G. "Inhibition of α -amylase and glucoamylase by proanthocyanidins and condensed tannins isolated from grape, pomegranate, cranberry and cocoa." *J. of Ag. Food Chem.*, **2013**, 61, 1477-1486. **CHE-0922935 and CHE-1046630**
15. Brown, R.J.; Amenta, D.S.; Gilje, J.W.; Yap, G.P.A. "Chloridobis[2-(diphenylphosphanyl)-ethanamine- κ^2 P,N](triphenyl-phosphane- κ P)ruthenium(II) chloride toluene monosolvate" *Acta Cryst.* **2013**, C69, 1104-1103. doi:10.1107/S0108270113023263. **REU CHE-1062629**
16. Caran, K. L.; Lee, D. C.; Weiss, R. G. "Molecular Gels and their Fibrillar Networks" In: *Soft Fibrillar Materials: Fabrication and Applications*, Liu, X. Y. (Ed.); Li, J. L. (Ed.); Wiley-VCH Verlag GmbH & Co. KGaA, **2013**, 1-75. **CHE-1147353, CHE-0911089**
17. Hrib, C.G.; Edelmann, F.T.; Smith IV, C.W.; McQueen, K.C.; Cruz, S.S.; Amenta, D.S.; Gilje, J.W. RuCl₂(PPh₃)₂(N-ppa) - A hydrogen-bridged ruthenium(II) complex of N-pyrazolylpropanamide" *Zeit. Anorg. Allg. Chem.* **2013**, 639, 2561-2564. DOI: 10.1002/zaac.201300227. **REU CHE-1062629**
18. Lutter, J. C.; Wu, T.-Y.; Zhang, Y. J. Hydration of cations: A key to understanding of specific cation effects on aggregation behaviors of PEO-PPO-PEO triblock copolymers. *J. Phys. Chem. B*, **2013**, 117, 10132-10141. **REU CHE-1062629**
19. Mo, A.K.; Brown, V.L.; Rugg, B.K.; DeVore, T.C.; Meyer, H.M.; Hu, X.; Hughes, W.C.; Augustine, B.H. "Understanding the mechanism of solvent-mediated adhesion of vacuum deposited Au and Pt thin films onto PMMA substrates," *Advanced Functional Materials*, **2013**, 23, 1431-1439. **DMR-1005641, Department of Defense ASSURE/NSF-REU DMR-0851367**
20. Palmer, M. R.; Hagerman, J. M.; Matano, L. M.; DeWitt, K. M.; Zhang, Y. J. Thermodynamic analysis and fluorescence imaging of homochiral amino acid-amino acid interactions at the air/ water interface. *J. Colloid Interface Sci.* **2013**, 408, 235-241. **REU CHE-1062629**
21. Holland, S. K.; Dutter, M. R.; Lawrence, D. J.; Reisner, B. A.; DeVore, T. C. Photoelectrochemical performance of W-doped BiVO₄ thin films deposited by spray pyrolysis. *J. Photonics Energy.* **2014**, 4, 041598. DOI: 10.1117/1.JPE.4.041598. **DMR-0315345**
22. Reeves, B. J.; Boardman, B. M., "Synthesis and characterization of thienyl phosphines and thienyl phosphine chalcogenides" *Polyhedron*, **2014**, 73, 118. **REU CHE-1062629**
23. Umile, T.P.; McLaughlin, P.J.; Johnson, K.R.; Honarvar, S.; Blackman, A.L.; Teotonio, T.L.; Davis, R.W.; Burzynski, E.A.; Hearn, G.W.; Lagalante, A.F.; Hughey, C.A.; Minbiole, K.P.C. Nonlethal amphibian skin swabbing of cutaneous natural products for HPLC fingerprinting, *Analytical Methods*, **2014**, 6, 3277-3284. **CHE-0958973**

Published Reports

Williams, N.C.; Downey, D.M. "St. Mary's Acid Mitigation Project: Is it time for another dose of 'medicine,'" Report on Research, US Forest Service, George Washington and Jefferson National Forests, Glenwood Pedlar Ranger Districts, National Bridge Station, Virginia, July, **2010**. 19pp.

Battaglia, A.C; Ellis, M.A.; Downey, D.M. "Water chemistry of lake shenandoah." Report on Research, Virginia Department of Game and Inland Fisheries, Richmond, Virginia, July, **2010**. 14pp.

Downey, D.M.; Burke, K. P.; Haraldstadt, J.P. Composition of mortar and concrete samples taken from Longdale Recreation Area: A preliminary archeological study. *Report* prepared for the United States Forest Service: George Washington & Jefferson National Forests. December, **2012**. 6 pages.

Downey, D.M. Little Stony Creek Liming Report. *Report* prepared for the United States Forest Service: George Washington & Jefferson National Forests. December, **2012**. 10 pages.

Downey, D.M. Mountain Run Liming Report. *Report* prepared for the United States Forest Service: George Washington & Jefferson National Forests. December, **2012**. 11 pages.

Downey, D.M.; Fisher, S.N. Little Tumbling Creek Liming Project. *Report* prepared for the Virginia Department of Game and Inland Fisheries. December, **2012**. 7 pages.

Downey, D.M.; Haraldstadt, J.P. Water Chemistry of North Branch Simpson Creek and the Rich Hole Wilderness Fire. *Report* prepared for the United States Forest Service: George Washington & Jefferson National Forests. February, **2013**. 19 pages.

Downey, D.M.; Fisher, S.N.; House, L. 2014. "Little tumbling creek liming project." Report prepared for the Virginia Department of Game and Inland Fisheries. December, **2013**. 10 pages. Published by VDGIF.

Non-JMU Conference Presentations (listed in chronological order by PI, undergraduate co-author)

Drs. Donna Amenta & John Gilje

Knight, S.E.; Walton, L.R.; Amenta, D.S.; Gilje, J.W.; Yap, G.P.A. "The preparation and properties of $\{RuCl_2(NO)[PPh_2(CH_2)_nP(O)Ph_2]_2\}^+$, n = 1 or 2" presented at the Boston ACS Meeting, August 24, 2010.

Knight, S.E.; Walton, L.R.; Amenta, D.S.; Gilje, J.W.; Yap, G.P.A. "The preparation and properties of $\{RuCl_2(NO)[PPh_2(CH_2)_nP(O)Ph_2]_2\}^+$, n = 1 or 2" presented at the UMBC Undergraduate Research Symposium, October, 2010.

Gilje, J.W.; Amenta, D.S.; Walton, L.R.; Knight, S.E.; Yap, G.P.A. "Preparation of ruthenium nitrosyl complexes containing $Ph_2P(CH_2)_nP(O)Ph_2$, n = 1 or 2, ligands" SERMACS, Richmond, VA, October 24, 2011.

Herold, S.; Olsonowski, K.; Amenta, D.S.; Gilje, J.W.; Yap, G.P.A. "Ruthenium nitrosyl complexes containing phosphine/phosphine oxide ligands" presented at the UMBC Undergraduate Research Symposium, October, 2012.

D'Amico, D.; Amenta, D.S.; Gilje, J.W. "Metal complexes with substituted N-pyrazolylpropanamide ligands" presented at the UMBC Undergraduate Research Symposium, October, 2012.

Cruz, S.; Amenta, D.S.; Gilje, J.W.; Yap, G.P.A. "Do donor ligands displace N-pyrazolylpropanamide (N-ppa) from $RuCl_2(PPh_3)_2(N-ppa)$? Solution behavior of $RuCl_2(PPh_3)_2(N-ppa)$ and $RuCl_2(PPh_3)_3$ with nitriles and dimethylformamide," presented at UMBC Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, Oct. 26, 2013.

Crossland, N. D.; Amenta, D.S.; Gilje, J.W. "The study of supporting ligands for ruthenium complexes," presented at UMBC Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, Oct. 26, 2013

Dr. Chris Berndsen

Putney, D.R.; Berndsen, C.E.; Wright, N.T. "Investigating Ubiquitin conjugating enzyme (E2) mechanism using NMR" Presented at the 42nd Southeastern Magnetic Resonance Conference in Tallahassee, Florida, October 11-13, 2013. Reid won a travel award to present at this meeting.

Putney, D.R.; Berndsen, C.E.; Wright, N.T. Investigating ubiquitin conjugating enzyme (E2) mechanism using NMR Presented at the UMBC Undergraduate Research Conference, October 23, 2013 Reid won First Place in his category

Du Pont, K.E.; Berndsen, C.E. "Purification and structural analysis of the anti-viral protein, BST-2," presented at the UMBC Undergraduate Research Symposium, October 23, 2013.

Du Pont, K.E.; Berndsen, C.E. "Purification and structural analysis of the anti-viral protein, BST-2," presented at the Biophysical Society Meeting in San Francisco, CA, February 15-19, 2014.

Welbourn, S.; Kao, S.; Du Pont, K.; Andrew, A.; Berndsen, C.; Strebler, K. Importance of cysteine positioning for functional dimerization of BST-2, Presented at the Ins and Outs of Viral Infection: Entry, Assembly, Exit and Spread Keystone Symposia C6 March 30-April 4th 2014 in Beaver Run Resort, Breckenridge, Colorado, USA.

Dr. Brycelyn Boardman

Carpenter, M. A.; Boardman, B. M. "Synthetic modification of PCPDTBT for improved film morphology in organic photovoltaics." Undergraduate Research Symposium, University of Maryland, Baltimore County, Baltimore, MD, October, 2011.

Reeves, B. J.; Boardman, B. M. "Investigation of N-sulfide bond formation in soluble precursors for metal chalcogenide thin films." SERMACS, Richmond, VA, October 26-28, 2011.

Park, E.; Reeves, B. J.; DeGraff, B. A.; Havey, D. K.; Boardman, B.M. "Emission spectroscopy of polymerizable phosphine ligands." ACS National Meeting, Physical chemistry division, New Orleans, LA, April 7-11, 2013. ** Poster selected to compete for "Best Student Poster" in the physical chemistry division.

Reeves, B. J. "Investigation of N-sulfide bond formation in soluble precursors for metal chalcogenide thin films.", Erker-UCSB Symposium, Santa Barbara, CA, February 21, 2012.

Reeves, B. J.; Boardman, B. M. "Synthesis of thienyl phosphine ligands for polymerizable cobalt clusters." ACS National Meeting, Inorganic division New Orleans, LA, April 7-11, 2013** Poster selected and presented in the Sci-Mix poster session as well.

Shott, J. L.; Reeves, B. J.; Boardman, B. M. "The synthesis and characterization of thienyl phosphine derivatives for polymerizable metal complexes." Undergraduate Research Symposium, University of Maryland, Baltimore County, Baltimore, MD, October 26, 2013. ** Poster won 2nd place in chemical sciences.

Reeves, B. J.; Boardman, B. M. "Synthesis of thienyl phosphine ligands for polymerizable metal complexes." Erker-UCSB Symposium, Santa Barbara, CA, March 3, 2014. Oral ** Only undergraduate research presented at the symposium.

Dr. Kevin Caran

Rogers, C. E.; Caran, K. L. "Lowering the activation energy to do chemical demonstrations" *2011 Virginia Association of Science Teachers (VAST) Professional Development Institute (PDI) - The New Face of Science Education*, Hotel Roanoke & Conference Center, Roanoke, VA, November 17-19, 2011.

Rogers, C. E.; Caran, K. L. "Chemical demonstrations at James Madison University" *242nd National Meeting of the American Chemical Society*, Denver, CO, August 28 - September 1, 2011.

Caran, K. L.; Minbiole, K. P. C.; Seifert, K. "Cationic amphiphiles: Novel double-headed antibacterial agents" *Techstorm Technology Transfer Conference*, George Mason University, Fairfax, VA, oral presentation, June 2, 2011.

LaDow, J. E.; Warnock, D. C.; Hamill, K. M.; Simmons, K. L.; Davis, R. W.; Schwantes, C. R.; Flaherty, D. C.; Willcox, J. A. L.; Wilson-Henjum, K.; Lainiotis, I.; Caran, K. L.; Minbiole, K. P. C.; Seifert, K. "Bicephalic amphiphile architecture affects antimicrobial activity" *University of Virginia Biotechnology Training Program Biosymposium*, The University of Virginia, Charlottesville, VA, poster presentation, May 5, 2011.

Byrne, R. M.; Salim, M. A.; Sabat, M.; Caran, K. L. "Dimeric propargylic alcohols and palladium(II)acetate: A novel metallogelator system" *Colonial Academic Alliance Undergraduate Research Conference*, Hofstra University, Hempstead, NY, poster presentation, April 8-10, 2011.

Rogers, C.; Caran, K. L. "Demonstrations at JMU" *American Chemical Society, Virginia Section Meeting, Undergraduate Research Poster Session*, The University of Virginia, Charlottesville, VA, poster presentation, April 8, 2011.

Caran, K. L., Salim, M. A.; Hamilton, P. L.; Byrne, R.; Boayue, Y. W.; Sabat, M.; Pu, L. "Propargylic alcohol and bis-propargylic alcohol organogels" *Indio-US Conference/workshop on Self-Assembled Fibrillar Gels, invited plenary lecture*, Trivandrum, Kerala, India, January 5-8, 2011.

Rogers, C. E.; Caran, K. L. "ChemDemo website and workshop: Catalysts for science educators" *2012 Virginia Association of Science Teachers (VAST) Professional Development Institute (PDI) – Designing Your Way Through Science*, Williamsburg Hotel & Conference Center, Williamsburg, VA, oral presentation, November 8-10, 2012.

Caran, K. L.; Rogers, C. E. "Using WordPress to develop the ChemDemo resource" *9th Annual Teaching and Learning with Technology Conference*, Center for Instructional Technology, James Madison University, Harrisonburg, VA, oral presentation, October 22, 2012.

Rogers, C. E.; Caran, K. L. "JMU ChemDemo: Lowering the activation energy to do chemistry demonstrations" *244th National Meeting of the American Chemical Society*, Philadelphia, PA, oral presentation, August 19-23, 2012.

Rogers, C. E.; Caran, K. L.; Downey, D. M.; MacDonald, G.; Havey, D. K.; Hughey, C. A. DeVore, T. C. "Week-long interactive science experience for deaf students" *244th National Meeting of the American Chemical Society*, Philadelphia, PA, oral presentation, August 19-23, 2012.

LaDow, J. E.; Barragan, J. A.; Moon, D. J.; Caran, K. L.; Minbiole, K. P. C.; Seifert, K. "Synthesis, antibacterial activity, and structure-function analysis of a novel series of multi-headed amphiphiles" *General Meeting of the American Society for Microbiology*, San Francisco, CA, poster presentation, June 16-19, 2012.

Salim, M.; Liapin, I.; Sabat, M.; Caran, K. L. "Gelation of ethanol-water mixtures by a novel propargylic alcohol" *American Chemical Society, Virginia Section Meeting, Undergraduate Research Poster Session*, The University of Virginia, Charlottesville, VA, poster presentation, April 20, 2012.

Minahan, N.; Bonifer, K.; LaDow, J.; Caran, K.; Minbiole, K.; Seifert, K. Antimicrobial analysis of the xylylene series of novel amphiphiles. *American Society for Microbiology Virginia Annual Meeting*, University of Virginia, November 8-9, 2013. Poster presentation.

Bonifer, K. S.; Volkens, B. L.; LaDow, J. E.; Seifert, K.; Caran, K. L.; Minbiole, K. P. C. Antimicrobial analysis of the meta-pyridine series of novel amphiphiles. *American Society for Microbiology Virginia Annual Meeting*, University of Virginia, November 8-9, 2013. Poster presentation.

Rogers, C.; Barker, J.; Lysher, R.; Caran, K. L. ChemDemo: Building Connections Between Science Educators. *Virginia Association of Science Teachers (VAST) Professional Development Institute (PDI) Sustaining Science*, Norfolk Waterside Marriot, Norfolk, VA, November 14-16, 2013. Oral presentation.

Dr. Tom DeVore

DeVore, T.C "TiF₂ Is Non-linear" *Virginia Academy of Science Annual Meeting*, JMU, May 2010.

White, Curtis C.; DeVore, T.C. "Proton chemical shifts for alcohols in the vapor phase and dilute solutions," *CAA Conference*, April 2010.

DeVore, T.C. "What's a Geezer to DO? When twenty-first century technology collides with ninth century pedagogy," *SERMACS Richmond*, VA, Oct 2011.

Bagley, A.; Hill, J.; DeVore, T.C. "The effect of sample mass on the thermal decomposition of NaCO₃-H₂O," *SERMACS Richmond*, VA, Oct 2011

Havey, D.; DeVore, T.C. "Does CO₂ Warm the Environment?" *Va Academy of Science Annual Meeting*, U Richmond, May 2011.

Woods, Megan A.; Schnell, Brandy. DeVore, T.C. "The thermal decomposition of 2-propanol using a zinc sulfide catalyst," *National ACS Meeting*, Anaheim, CA, March 2011.

DeVore, T. C.; Havey, D.; Layman, K. A. "Spectroscopic analysis of CO and CO₂: An alternative to the Ro-vibrational analysis of HCl / DCl," *National ACS Meeting*, Anaheim, CA, March 2011.

DeVore, T. C.; Layman, K. A. "Thermal decomposition of Na₂SiF₆ revisited: A laboratory project for the physical chemistry or senior capstone laboratory," *National ACS Meeting*, Anaheim, CA, March 2011.

DeVore, T. C.; White, Curtis C.; Gallaher, T.N.; Mihay, M. "NMR in the Physical Chemistry Laboratory," *National ACS Meeting*, Anaheim, CA, March 2011.

Woods, Megan A. ; DeVore, T.C. "Thermal decomposition of 2-propanol over zinc sulfide," *CAA Conference*, April 2011.

Hill, Jacob A.; DeVore, T.C. "Thermal decomposition of metal oxalate compounds," *National ACS Meeting*, Anaheim, CA, March 2011.

Baglie, A.; White, C.; DeVore, T.C. "NMR in the physical chemistry lab: H-bonding in dilute solutions of methanol-acetone" *SERMACS*, Raleigh, NC Oct. 2012.

Bagley, A.; Hill, J.; DeVore, T.C. "The effect of sample mass on the thermal decomposition of CaC₂O₄-H₂O," *SERMACS*, Raleigh, NC Oct. 2012.

Bagley, A.; Berman, G.; DeVore, T.C. "Thermal decomposition of metal hydroxides," Va Academy of Science Annual Meeting, Norfolk State University, May 2012.

Bagley, A.; DeVore, T.C. "Coupling DFT calculations with experimental measurements in the physical chemistry laboratory," SERMACS, Atlanta, GA, Nov 2013.

Cooper, N.; Bagley, A.; Hill, J.; DeVore, T.C. "Thermal decomposition of metal oxalates," Va Academy of Science Annual Meeting, Virginia Tech, May 2013

Cooper, N.; DeVore, T.C. "Thermal decomposition of metal oxalates," SERMACS, Atlanta, GA, Nov 2013.

Holland, S. K.; Dutter, M. R.; Lawrence, D. J.; Reisner, B. A.; DeVore, T. C. "Photoelectrochemical performance of W-doped BiVO₄ thin films deposited by spray pyrolysis." Presented at SPIE Optics+ Photonics: Solar Energy + Technology, San Diego, CA, August 28, 2013; 8822-14. (oral presentation)

Holland, S. K.; Dutter, M. R.; Lawrence, D. J.; Reisner, B. A.; DeVore, T. C. "Photoelectrochemical performance of W-doped BiVO₄ thin films deposited by spray pyrolysis." In Solar Hydrogen and Nanotechnology VIII, Proceedings of the SPIE 8822, San Diego, CA, August 25-29; Kanai, Y., Prendergas, D., Eds.; Bellingham, WA, 2013.

Snell-Feikema, R.; Mehta, N.; DeVore, T.C. "Thermal decomposition of nesquehonite and hydromagnesite," SERMACS, Atlanta, GA, Nov 2013.

Baglie, Arlie; DeVore, T.C. "NMR in the Physical Chemistry Laboratory," National ACS meeting, Dallas Texas, March 16- 20 2014.

DeVore, T.C.; Snell-Feikema, R.; Mehta, N. "Adventures in the investigation of the thermal decomposition of metal carbonates." Virginia Academy of Sciences Meeting, VCU, Richmond May 2014.

Snell-Feikema, Rafael; Mehta, Neil; Bagley, A.; Cooper, N. Howard, S.; DeVore, T.C. "Thermal decomposition of metal oxide precursors." 2014 Hi Temp Conference, Santa Fe NM Sept 2014.

Dr. Dan Downey

Rugg, B. K.; Downey, D.M.; "Survey of US forest streams in Virginia," 15th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 30, 2011.

Ellis, M. A.; Battaglia, A. C.; Downey, D.M. "Lake Shenandoah," 15th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 30, 2011.

Williams, N. C.; Downey, D.M. "St. Mary's wilderness water chemistry study," 15th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 30, 2011.

Ellis, M. A.; Battaglia, A. C.; Downey, D.M. "Estimation of nutrient loading in Lake Shenandoah," Joint Meeting of the Virginia and West Virginia Chapters of the American Fisheries Society, CaCapon State Park, Berkeley Springs, WV, February 8, 2011.

Rugg, B. K.; Downey, D.M. "Headwater stream survey of the George Washington and Jefferson National Forests in Virginia," Joint Meeting of the Virginia and West Virginia Chapters of the American Fisheries Society, CaCapon State Park, Berkeley Springs, WV, February 8, 2011.

Williams, N. C.; Downey, D.M. "Determination of the need to relime St. Mary's River," Joint Meeting of the Virginia and West Virginia Chapters of the American Fisheries Society, CaCapon State Park, Berkeley

Springs, WV, February 8, 2011.

Williams, N. C.; Downey, D.M. "St. Mary's River acid mitigation project: Is it time for another dose of medicine?" 25th National Conference on Undergraduate Research, Ithaca College, Cornell, NY, March 30, 2011.

Williams, N.C.; Downey, D.M. "St. Mary's Acid Mitigation Project: Is it time for another dose of medicine?" Proceedings of the 25th National Conference on Undergraduate Research, UNCA, Asheville, NC, August, 2011, CD-ROM.

Ellis, M. A.; Battaglia, A. C.; Downey, D.M. "Lake Shenandoah, Rockingham Co., Virginia: Estimation of nutrient loading" 25th National Conference on Undergraduate Research, Ithaca College, Cornell, NY, March 30, 2011.

Rugg, B. K.; Downey, D.M. "Forest Service trout stream survey in Virginia," 9th Annual Colonial Academic Alliance Undergraduate Research Conference, Hofstra University, Hempstead, NY, April 9, 2011.

Morris, M.P.; Siemens, C.; Downey, D.M. "A snapshot study of water chemistry for three streams in the Shenandoah Valley," 16th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 22, 2012.

Chambers, P.C.; Ahmad, W.; McNece, J.; Downey, D.M. "Elemental analysis of *Didymosphenia geminata* by inductively coupled plasma – mass spectrometry," 16th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 22, 2012.

Ahmad, W.; Chambers, P.C.; McNece, J.; Downey, D.M. "Microwave assisted digestion of *Didymosphenia geminata*," 16th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 22, 2012.

Wickham, A.E.; Downey, D.M. "Determination of nitrate-nitrogen in soils by instrumental ion chromatography," 16th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 22, 2012.

Morris, M.P.; Siemens, C.; Downey, D.M. "A snapshot study of water chemistry for three streams in the Shenandoah Valley," Joint Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Blacksburg, Va, February 1, 2012.

Wickham, A.E.; Downey, D.M. "Improved method for nitrate-nitrogen in soils and sediment by ion chromatography," Joint Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Blacksburg, Va, February 1, 2012.

Chambers, P.C.; Ahmad, W.; McNece, J.; Downey, D.M. "Elemental composition of *Didymosphenia geminata* "Didymo" in the Jackson River, Virginia," Joint Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Blacksburg, Va, February 1, 2012.

Wickham, A.E.; Downey, D.M. "Determination of nitrate-nitrogen in soils by instrumental ion chromatography," 26th National Conference on Undergraduate Research, Weber State University, Ogden, UT, March 30, 2012.

Chambers, P.C.; Ahmad, W.; McNece, J.; Downey, D.M. "Using inductively coupled plasma-mass spectrometry to analyze the elemental composition of *Didymosphenia geminate*," 26th National Conference on Undergraduate Research, Weber State University, Ogden, UT, March 30, 2012.

Downey, D.M. "Strasburg's Mountain," Annual Meeting of the Strasburg Museum, Strasburg VA. April 13, 2012. Keynote Speaker.

Ahmad, W.; Chambers, P.C.; McNece, J.; Downey, D.M. "Microwave assisted digestion of *Didymosphenia geminata*," 10th Annual Colonial Academic Alliance Undergraduate Research Conference, Old Dominion University, Norfolk, VA, April 14, 2012.

Pettit, M.E.; Downey, D.M. "Water chemistry analysis of Lake Keokee," 17th Annual Undergraduate Research Symposium, University of Maryland Baltimore County, October 20, 2013.

Pettit, M.E.; Downey, D.M. "Lake Keokee: Physical and chemical attributes and management issues" Virginia Chapter American Fisheries Society Annual Research Conference, Lexington, VA, February 27, 2013.

Downey, D. M. "Water chemistry of North Branch Simpson Creek and the Rich Hole Wilderness Fire," Wildland Fire in the Appalachians Conference, Consortium of Appalachian Fire Managers and Scientists & Association of Fire Ecology, Roanoke, Virginia, October 8, 2013, paper 132 (invited).

House, L.A.; Roodman, J. A.; Downey, D.M. "A tale of two trout streams: Planning and results of liming projects," Shenandoah Valley Pure Water Forum Annual Meeting, Bioscience Building, James Madison University, Harrisonburg, VA, October 10, 2013.

House, L.A.; Roodman, J. A.; Downey, D.M. "A tale of two Appalachian Highland streams: Acid mitigation planning and results," Annual Meeting of the Virginia Chapter of the American Fisheries Society, Fredericksburg, Virginia, February 12, 2014. (LAH winner of best student presentation award)

Fisher, S.N.; Haraldstadt, J. P.; Downey, D.M. "Water chemistry of North Branch Simpson Creek as related to the Rich Hole wilderness fire," Annual Meeting of the Virginia Chapter of the American Fisheries Society, Fredericksburg, Virginia, February 12, 2014.

House, L.A.; Downey, D.M., "The acid mitigation planning and results for two Appalachian Highland streams," NCUR 2014: National Conference on Undergraduate Research, University of Kentucky, Lexington, KY, April 4, 2014.

Roodman, J.A.; Downey, D.M. "Archeological limestone analysis," NCUR 2014: National Conference on Undergraduate Research, University of Kentucky, Lexington, KY, April 4, 2014.

Downey, D.M.; Haradstedt, J.P.; Fisher, S.N. "Water chemistry of North Branch Simpson Creek and the Rich Hole Wilderness Fire," Accepted for Proceedings of Wildland Fire Conference (in press), 2014.

Dr. Richard Foust

Foust, Jr., R. D. Hughey, C. A., Clouston, J. and Pierre, A., Trace Metals in Beer, 247th American Chemical Society National Meeting and Exposition, Dallas, TX, March 16-20, 2014.

Dr. Christine Hughey

Huffman, B.A.; Hughey, C.A. "Effect of protic and aprotic solvents on negative ion ESI response for a physiochemically diverse group of acidic compounds." In Analytical Chemistry III, Proceedings of the 63rd Southeastern Regional Meeting of the American Chemical Society, Richmond, VA, October 26-29, 2011.

Hughey, C.A. "Negative ion electrospray: Flavonoids and fundamentals." Analytical Division Seminar, Florida State University, Tallahassee, FL, September 22, 2011. Invited Talk.

Hughey, C.A. "Fingerprinting of craft beers by high resolution mass spectrometry." 3rd Annual Agilent Academic Symposium, Santa Clara, CA, August 23-24, 2011. Invited Talk.

Hughey, C.A.; Wilcox, B.E.; Rafferty, D.; Huffman, B.A.; Brunson, E., Phung, J. "Effect of protic and aprotic solvents on negative ion ESI response for a physiochemically diverse group of acidic compounds." In Ionization Mechanisms, Proceedings of the 59th Conference on Mass Spectrometry and Allied Topics, Denver, CO, June 5-9, 2011.

Hughey, C.A.; Phung, J.; McMinn, C.M.; Goodman, C.M. "Beer-omics: Molecular fingerprinting of craft beers by high resolution mass spectrometry." In Food Chemistry session, Conference on Small Molecule Science, Providence, RI, September 10-12, 2012. Invited Talk.

Huffman, B.A.; Hughey, C.A. "The LC/MS Waltz: Optimization of negative ion ESI ionization efficiency and chromatographic separation for physiochemically diverse small molecules." In LC-MS Chromatography I, Proc. 59th Amer. Soc. for Mass Spectrom. Annual Conf. on Mass Spectrometry & Allied Topics, Vancouver, Canada, May 20-24th, 2012. Poster was also presented in the Undergraduate Poster Competition.

Hughey, C.A.; Phung, J.; McMinn, C.M. "Beer-omics: Molecular fingerprinting of craft beers by high resolution mass spectrometry." In Component Source Determination for Drugs, Pharmaceuticals, and Homeland Security Applications, Proc. 59th Amer. Soc. for Mass Spectrom. Annual Conf. on Mass Spectrometry & Allied Topics, Vancouver, Canada, May 20-24th, 2012.

Hughey, C.A. "Effect of protic and aprotic solvents on negative ion ESI response for a physiochemically diverse group of acidic compounds." Analytical Division Seminar, University of North Carolina, Chapel Hill, NC, April 7, 2012. Invited Talk.

Hughey, C.A., Januszewicz, R.; Phung, J.; Diehl, R.; Huffman, B.A. "Thermal degradation of almond skin proanthocyanidins as a function of blanching time and temperature." In Division of Agriculture and Food Chemistry, Proceedings of the 243rd American Chemical Society National Meeting, San Diego, CA, March 25-29, 2012.

Hughey, C.A.; McMinn, C.M.; Moon, D.J.; Wright, N. "Beer-omics: Differential analysis of single-hop India pale ales by q-TOF MS and NMR." In "Chemistry of the Bar" sponsored by Division of Agriculture and Food Chemistry, Proceedings of the 245th American Chemical Society National Meeting, New Orleans, LA, April 7-11, 2013.

Hughey, C.A.; Phung, J.; McMinn, C.M. "Development of a QC platform for untargeted metabolomics profiling of food (the most important food... beer)," Agilent Annual ASMS Event, 62nd American Society for Mass Spectrometry Conference on Mass Spectrometry and Applied Topics, Baltimore, MD, June 15-19, 2014. Invited talk.

Dr. Gina MacDonald

Corbett, K.M.; LiCata, V.; MacDonald, G. "Monitoring the effect of salts on the aggregation and unfolding of the escherichia coli dna repair protein, RecA, utilizing fourier-transformed infrared spectroscopy." ACS Southeastern Regional Meeting, Richmond, VA, 2011.

Mitchum, J.; Hughey, C.A.; MacDonald, G. "Quantitating neurotransmitters and their metabolites in urine." ACS Southeastern Regional Meeting, Richmond, VA, 2011.

Metrick, M.A.; MacDonald, G. "Spectroscopic studies of the effects of buffers on the thermal stability of the DNA repair protein, RecA." University of Maryland, Baltimore County's 15th Annual Undergraduate Research Symposium, MD, 2012.

Rogers, C.; Caran, K.L.; Downey, D.M.; MacDonald, G.M.; Havey, D.K.; Hughey, C.S.; DeVore, T.C. "Week-long interactive science experience for deaf students." ACS Meeting, Philadelphia, PA, 2012.

Corbett, K.M.; LiCata, V.; Esquillo, R.; MacDonald, G. "Monitoring the effect of salts on the structure,

aggregation, and unfolding of the escherichia coli dna repair protein, RecA, utilizing attenuated total reflectance infrared spectroscopy." American Chemical Society Meeting, Philadelphia, PA, 2012.

Light, T.P.; Corbett, K. M.; MacDonald, G. "Influence of Hofmeister salts on the structure, aggregation and unfolding of RecA." University of Maryland, Baltimore County's 16th Annual Undergraduate Research Symposium, MD, 2013.

Temple, J.E.; MacDonald, G. "Difference FT-IR Studies on the effects of buffers on nucleotide binding to RecA." University of Maryland, Baltimore County's 16th Annual Undergraduate Research Symposium, 2013.

MacDonald, G. "Deaf students and interpreters in the research laboratory." Presented at The American Chemical Society, Meeting, Dallas, TX. March, 2014.

Metrick, M.A.; and MacDonald, G. Spectroscopic studies of the effects of buffers on the thermal stability and specific activity of the DNA repair protein, RecA. Biophysical Society Meeting, Philadelphia, PA, 2013.

Temple, J.E.; MacDonald, G. "Difference FT-IR studies on the effects of buffers on nucleotide binding to RecA." Biophysical Society Meeting, San Francisco, CA, 2014.

Light, T.P.; Corbett, K. M. Metrick, M.A.; MacDonald, G. Influence of Hofmeister salts on the structure, aggregation and unfolding of RecA. Biophysical Society Meeting, San Francisco, CA., 2014.

Dr. Barbara Reisner

Reisner, B. A.; Raker, J. R. "What is taught in inorganic chemistry: a survey of the field." Biennial Conference on Chemical Education, Allendale, MI, August 3-7, 2014. (Oral: P510)

Reisner, B., Smith, S., Watson, L. "Advanced IONIC/VIPEr: Using and sharing inorganic chemistry education resources" Biennial Conference on Chemical Education, Grand Valley State University (MI), Aug 3-7, 2014. (Half-day workshop)

Reisner, B. A. Coordination compounds and hybrid frameworks containing the hydrotris(triazolyl)borate ligand. Presented at the Department of Chemistry, Wayne State University, Detroit, MI, October 10, 2014 (invited).

Reisner, B. A. Coordination compounds and hybrid frameworks containing the hydrotris(triazolyl)borate ligand. Presented at the Department of Natural Sciences, University of Michigan-Dearborn, Dearborn, MI, October 11, 2014 (invited).

Reisner, B. A. Coordination compounds and hybrid frameworks containing the hydrotris(triazolyl)borate ligand. Presented at the Department of Chemistry and Biochemistry, University of Maryland, College Park, MD, March 27, 2014 (invited).

Mandernach, M. A.; Shorish, Y.; Reisner, B. A. Evolving instruction delivery for chemistry information literacy course. Presented at American Library Association Annual Conference, Chicago, IL, June 27-July 2, 2013. (poster)

Holland, S. K.; Dutter, M. R.; Lawrence, D. J.; Reisner, B. A.; DeVore, T. C. Photoelectrochemical performance of W-doped BiVO₄ thin films deposited by spray pyrolysis. Presented at SPIE Optics+ Photonics: Solar Energy + Technology, San Diego, CA, August 28, 2013; 8822-14. (oral presentation)

Reisner, B. A.; Campbell, C. J.; Dent, M. R.; Muetterties, A. T.; Boltersdorf, J. A.; Chan, B. C.; Forster, P. M. Coordination compounds and hybrid frameworks containing the hydrotris(triazolyl)borate ligand, 245th

National Meeting of the American Chemical Society, New Orleans, LA, April 8, 2013 (INOR 513, oral presentation).

Dent, M. R.; Boltersdorf, J. A.; Chan, B. C.; Forster, P. M.; Reisner, B. A. Metal organic frameworks derived from the hydrotris(1,2,4-triazolyl)borate ligand: $M[BH(C_2H_2N_3)_3]$ ($M = Li, Na, K$), 245th National Meeting of the American Chemical Society, New Orleans, LA, April 7-8, 2013 (INOR 374, poster presentation, selected for Sci-Mix).

Geselbracht, M. J.; Reisner, B. A. VIPER: Highlighting solid state chemistry research in the undergraduate chemistry classroom, 245th National Meeting of the American Chemical Society, New Orleans, LA, April 9, 2013 (CHEM 1648, oral presentation).

Nataro, C.; Smith, S. R.; Collins, S. N.; Eppley, H. J.; Geselbrach, M. J.; Jamieson, E. R.; Johnson, A. R.; Reisner, B. A.; Stewart, J. L.; Williams, B. S.; Watson, L. A. IONiC/VIPER at five: Developing a model network for sharing pedagogical resources, 245th National Meeting of the American Chemical Society, New Orleans, LA, April 7-8, 2013 (INOR 237, poster presentation, selected for Sci-Mix).

Reisner, B.; Geselbracht, M. G.; Eppley, H. J.; Jamieson, E.; Stewart, J.; Smith, S. Solid state materials for alternative energy needs. VIPER Workshop, Penn State, June 23-28, 2013. (Five-day workshop)

Dent, M. R.; Campbell, C. J.; Sabat, M. Reisner, B.A. Alkali metal frameworks derived from the hydrotris(1,2,4-triazolyl)borate ligand, 15th Chemistry and Biochemistry Undergraduate Research Symposium, UMBC, Baltimore, Maryland, October 2012.

Reisner, B. A.; Campbell, C. J.; Boltersdorf, J. A.; Forster, P. M. Hybrid frameworks derived from the hydrotris(triazolyl)borate ligand. Southeast Regional Meeting of the American Chemical Society, Richmond, VA, October 28, 2011 (567).

Eppley, H. J.; Nataro, C.; Geselbracht, M. J.; Jamieson, E. R.; Johnson, A. R.; Reisner, B. A.; Smith, S. R.; Stewart, J. L.; Watson, L. A.; Williams, B. S. VIPER: Adapt and adopt classroom content from the frontiers of inorganic chemistry. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 25-29, 2012 (INOR 210, poster presentation, SciMix).

Campbell, C. J.; Dent, M. R.; Steehler, S. A.; Reisner, B. A. Hybrid frameworks derived from the hydrotris(triazolyl)borate ligand. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 25-29, 2012 (INOR 198, poster presentation).

Reisner, B. A.; Smith, S. R.; Williams, B. S.; Eppley, H.; Stewart, J. inorganic chemistry at the frontiers of catalysis. cCWCS/VIPER Workshop, University of North Carolina, July 15-20, 2012. (Five-day workshop)

Mandernach, M. A.; Reisner, B. A. Embedding chemistry information literacy skills into the curriculum at James Madison University. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 25-29, 2012 (CINF 8).

Reisner, B. A.; Stewart, J. L. The Virtual Inorganic Pedagogical Electronic Resource: Collaboration, community building, and faculty development. Gordon Research Conference on Chemistry Education Research and Practice, Davidson College, Davidson, NC, June 26-July 1, 2011 (invited).

Reisner, B. A. The virtual inorganic pedagogical electronic resource: Collaboration and community building using Web 2.0. Southeast Regional Meeting of the American Chemical Society, Richmond, VA, October 26, 2011 (47).

Smith, E. J.; Geselbracht, M. G.; Heppley, H.; Johnson, A. R.; Reisner, B. A.; Smith, S. R.; Stewart, J.; Watson, L. AALAC workshop for inorganic chemistry, Smith College, Northampton, MA, June 24-26, 2011.

B. A. Reisner, J. A. Boltersdorf, A. Thirumurugan, L. Dupuy, A. K. Cheetham, P. M. Forster. Hybrid framework derived from poly(triazolyl)borate and poly(imidazolyl)borate ligands. Undergraduate Research at the Frontiers of Inorganic Chemistry, 241st National Meeting of the American Chemical Society, Anaheim, CA, March 27-31, 2011 (INOR 65, oral presentation, invited).

Boltersdorf, J. A.; Reisner, B. A. "Synthesis and characterization of hybrid frameworks derived from poly(triazolyl)borate ligands." National Conference on Undergraduate Research, Ithaca, NY, March 31-April 2, 2011 (poster presentation, chemistry).

Boltersdorf, J. A.; Forster, P. M.; Reisner, B. A. "Synthesis and characterization of hybrid frameworks derived from poly(triazolyl)borate ligands." 241st National Meeting of the American Chemical Society, Anaheim, CA, March 27-31, 2011 (INOR 356, poster presentation, SciMix).

B. A. Reisner, J. L. Stewart, and B. S. Williams "We're all in this sandbox together: Learning to share in our teaching of inorganic chemistry through Visible Teaching." 241st National Meeting of the American Chemical Society, Anaheim, CA, March 27-31, 2011 (oral presentation, CHED 1222).

M. J. Geselbracht, H. J. Eppley, E. R. Jamieson, A. R. Johnson, B. A. Reisner, S. R. Smith, J. L. Stewart, L. A. Watson, B. S. Williams, "Highlighting the frontiers of research in the undergraduate chemistry classroom" 241st National Meeting of the American Chemical Society, Anaheim, CA, March 27-31, 2011 (INOR 294, poster presentation, SciMix).

B. A. Reisner, J. A. Boltersdorf, A. Thirumurugan, L. Dupuy, A. K. Cheetham, P. M. Forster. "Hybrid Frameworks derived from poly(azolyl)borate frameworks." Gordon Research Conference on Solid State Chemistry: Functional Materials by Design, Colby Sawyer College, New London, NH, August 1-6, 2010. (Invited poster talk)

E. Benatan, H. J. Eppley, M. J. Geselbracht, E. R. Jamieson, A. R. Johnson, B. A. Reisner, S. R. Smith, J. L. Stewart, L. A. Watson, B. S. Williams "IONiC: A cyber-enabled community of practice for inorganic chemistry," CCLI/TUES PI Conference, Washington, D.C., January 27, 2011 (poster presentation).

D. J. Lawrence, S. K. Holland, T. C. DeVore, and B. A. Reisner, "Materials for photoelectrochemical water splitting" solar fuels: Catalysis and photoconversion, University of North Carolina at Chapel Hill, Chapel Hill, NC, January 13-14, 2011.

Boltersdorf, J. A.; Forster, P. M.; Reisner, B. A. "Synthesis and characterization of hybrid frameworks derived from poly(triazolyl)borate ligands." UMBC 13th Annual Undergraduate Research Symposium, Baltimore, MD, October 31, 2010 (poster presentation, chemical sciences, 2nd place).

M. J. Geselbracht and B. A. Reisner, "VIPeR: Highlighting solid state chemistry research in the undergraduate chemistry classroom." Gordon Research Conference on Solid State Chemistry: Functional Materials by Design, Colby-Sawyer College, New London, NH, August 1-6, 2010 (poster presentation).

Williams, B. S.; Benatan, E.; Dene, J.; Eppley, H. J.; Geselbracht, M. G.; Jamieson, E. R.; Johnson, A. R.; Reisner, B. A.; Smith, S. R.; Stewart, J. L.; Watson, L. A. "The Virtual Inorganic Pedagogical Electronic Resource: A community for teachers and students of inorganic chemistry" MADCP2010 (Middle Atlantic Discovery Chemistry Project meeting), June 4-5, 2010 (poster presentation).

Dr. Isaiah Sumner

Iuga, A.; McKaig, D.; Sumner, I. "Correcting force field bias in pin1WW folding." 12th MERCURY Conference on Computational Chemistry, Bucknell University, Lewisburg, PA. July 25 - July 27, 2013. (poster)

Zamfir, S.; Sumner, I. "Molecular dynamics studies of the ubiquitin conjugation mechanism." 12th MERCURY Conference on Computational Chemistry, Bucknell University, Lewisburg, PA. July 25 - July

27, 2013. (poster)

Iuga, A.; McKaig, D.; Sumner, I. "Correcting force field bias in pin1WW folding." 16th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, University of Maryland, Baltimore County, October 26th, 2013. (poster, 2nd place finish)

Anthony, H.; Sumner, I. "Hydrogen atom trajectories for exact and approximate wavefunctions." 13th MERCURY Conference on Computational Chemistry, Bucknell University, Lewisburg, PA. July 24 - July 26, 2014. (poster)

Davis, A.; Sumner, I. "Nucleotide effects in the GroEL subunit." 13th MERCURY Conference on Computational Chemistry, Bucknell University, Lewisburg, PA. July 24 - July 26, 2014. (poster)

Dr. Nathan Wright

Wright, N.T. "cis-autoproteolysis of ThnT", presented at the Virginia Light Source Symposium, James Madison University VA, May 2012 (invited 30 min. lecture)

Wright, N.T. "Undergraduate NMR structural studies on obscurin" presented at the ACS Meeting, Philadelphia PA August 2012 (invited 20 min. lecture)

Monroe, J. D.; Mursaliyev, N.; Platt, S.; Howser, S.; Cresawn, S.; Wright, N.; Waligora, T.; Hupp, T. "Identifying ligands for a catalytically inactive beta-amylase (BAM9) from Arabidopsis thaliana." Presented at the American Society of Plant Biologist meeting in College Station, Texas, 2012

Woosley, A.N.; Wright, N.T. "Characterization and Structural Analysis of Obscurin, A Giant Muscle Protein Involved in Muscle Integrity and Maintenance" (poster) presented at the UMBC Undergraduate Research Symposium, Baltimore MD, Oct 2012

Meyer, L.C.; Woosely, A.N.; Wright, N.T. "Low resolution structure of obscurin Ig58/59" (poster) presented at the UMBC Undergraduate Research Symposium, UMBC, Baltimore MD, Oct 2012

Wright, N.T. "Structure and Function of S100A1" presented at Eastern Mennonite U., Harrisonburg VA Jan 2013 (invited 1 hr lecture)

Woosley, A.N.; Wright, N.T. "Characterization and Structural Analysis of Obscurin, A Giant Muscle Protein Involved in Muscle Integrity and Maintenance" (poster) presented at the Biophysical Society Annual Meeting, Philadelphia PA, Feb 2013

Meyer, L.C.; Woosely, A.N.; Wright, N.T. "Low resolution structure of obscurin Ig58/59" (15 min talk) presented at the 57th Annual Meeting of the Biophysical Society, Philadelphia PA, Feb 2013 (travel award recipient)

Rudloff, M.W.; Wright, N.T. "Structural and functional analysis of disease causing mutations in the M10 domain of Titin" (Poster), UMBC undergraduate research symposium, presented at University of Maryland Baltimore-County, Oct 2013 (1st place).

Caldwell, T.A.; Wright, N.T. "Structural analysis of the Ig59 domain of Obscurin" (poster), presented at UMBC Undergraduate Research Symposium, Baltimore MD, Oct 2013, (1st place).

Putney, D.R.; Berndsen, C.E.; Wright, N.T. "Investigating Ubiquitin conjugating enzyme (E2) mechanism using NMR" Presented at the 42nd Southeastern Magnetic Resonance Conference in Tallahassee, Florida, October 11-13, 2013. Reid won a travel award to present at this meeting.

Meyer, L.C.; Caldwell, T.A.; Wright, N.T. "High and low resolution structure of obscurin Ig59/59" (poster) presentat at the CCP-SAS kickoff meeting, NIST, Gaithersburg MD Feb 2014

Caldwell, T.A.; Wright, N.T. "Structural analysis of the Ig59 domain of Obscurin," presented at NCUR, Lexington KY, Apr 2014.

Rudloff, M.W.; Wright, N.T. "Structural and functional analysis of disease causing mutations in the M10 domain of Titin" (15 minute talk), presented at NCUR symposium, Lexington KY, Apr 2014.

Wright N.T. "Structure of obscurin Ig58 and 59" (15 min. talk) presented at VAS, Richmond VA May 2014

Dr. Yanjie Zhang

DeLuca, A.; DiDomenico, A.; Hagerman, J.; Matano, L.; Zhang, Y. "Organogel formation by amino acid surfactants", Poster, *SERMACS*, Richmond, VA, October 26-29, 2011.

Turner, E.E.; Deyerle, B.A.; Zhang, Y. "Effects of osmolytes on the phase behaviors of triblock copolymer", Poster, *SERMACS*, Richmond, VA, October 26-29, 2011.

DiDomenico, A.; DeLuca, A.; Hagerman, J.; Matano, L.; Zhang, Y. "Two-component gel formation based on amino acid surfactants", Poster, *UMBC Undergraduate Research Symposium*, Baltimore, MD, October 22, 2011 (won the first place poster award in chemical science).

Deyerle, B.A.; Zhang, Y. "Specific ion effects on the phase behaviors of PEO-PPO-PEO Triblock Copolymers", Poster, *UMBC Undergraduate Research Symposium*, Baltimore, MD, October 22, 2011.

Hagerman, J.; Palmer, M.; Matano, L.; Zhang, Y. "Chiral interactions at the air/water interface", Poster, *UMBC Undergraduate Research Symposium*, Baltimore, MD, October 22, 2011.

Zhang, Y. Deyerle, B.A. "Effect of Hofmeister ions on the phase behavior of PEO-PPO-PEO", Invited Oral Presentation, *Telluride Science Research Workshop on the Physics, Chemistry, and Biology of Ions and Osmolytes in Solution*, Telluride, CO, July 11-15, 2011.

Deyerle, B.A.; Zhang, Y. "Specific ion effects on the phase behaviors of thermoresponsive triblock copolymers", Poster, *ACS Regional Meeting*, University of Virginia, Charlottesville, April 8, 2011.

Hagerman, J.; Matano, L.; Zhang, Y. "Synthesis and characterization of amino acid surfactants", Poster, *ACS Regional Meeting*, University of Virginia, Charlottesville, April 8, 2011.

Palmer, M.; Hagerman, J.; Matano, L.; Zhang, Y. "Chiral interactions at the air-water interface", Poster, *ACS Regional Meeting*, University of Virginia, Charlottesville, April 8, 2011.

Natalie Trinh, Branden A. Deyerle, Yanjie Zhang, "Effects of Anions on the Interfacial Tension at Hydrophobic/Aqueous Interface", Poster, *UMBC Undergraduate Research Symposium*, Baltimore, MD, October 20, 2012

Deyerle, B.A.; Turner, E.E.; Zhang, Y. "Hofmeister anion effects on the phase behaviors of PEO-PPO-PEO triblock copolymers", Oral Presentation, *The 26th Annual National Conference on Undergraduate Research*, Weber State University, Ogden, Utah, March 29-31, 2012

Zhang, Y. J.; Deyerle, B. A.; Lutter, J. L.; Wu, T.-Y. Specific ion effects on the aggregation of PEO-PPO-PEO triblock copolymers. The 246th ACS National Meeting, Indianapolis, Indiana, September 8-12, 2013 (oral).

Rogers, B. A.; Zhang, Y. J. Effects of Hofmeister anions on the partition of caffeine between organic-aqueous phases. The 246th ACS National Meeting, Indianapolis, Indiana, September 8-12, 2013 (poster, was selected to participate in the 2013 Physical Chemistry Symposium Workshop for Undergraduate Chemistry Majors).

Wu, T.-Y.; Lutter, J. L.; Zhang, Y. J. Specific cation effects on aggregation behaviors of PEO-PPO-PEO triblock copolymers. UMBC Undergraduate Research Symposium, Baltimore, MD, October 26, 2013 (poster, won the first place poster award in chemical science).

Al Hussein, D.; Trinh, N.; Zhang, Y. J. Effects of anions on the interfacial tension at hydrophobic/aqueous interface. UMBC Undergraduate Research Symposium, Baltimore, MD, October 26, 2013 (poster, won the second place poster award in chemical science).

Rogers, B. A.; Zhang, Y. J. Specific ion effects on caffeine partition coefficient between aqueous-cyclohexane phases. UMBC Undergraduate Research Symposium, Baltimore, MD, October 26, 2013 (poster).

Wu, T.-Y.; Lutter, J. L.; Zhang, Y. J. Understanding specific cation effects on aggregation behaviors of PEO-PPO-PEO triblock copolymers. The 28th Annual National Conference on Undergraduate Research (NCUR), University of Kentucky, Lexington, Kentucky, April 3-5, 2014 (oral).