

CHIP NATARO

PERSONAL INFORMATION

Birthplace and birth date - Staten Island, New York; September 15, 1969

Office Address - Department of Chemistry, Lafayette College, Easton, Pennsylvania
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Home Address - 2701 Bedford Rd., Easton, Pennsylvania 18045; (610)-252-9717

UNIVERSITY EDUCATION

Ph.D. - Inorganic Chemistry - Iowa State University, 1997; Dissertation title: "Ligand effects on the heats of protonation of metal-metal bonds in organometallic complexes"
Dissertation Advisor: Professor Robert J. Angelici.

B.S. - Chemistry - Messiah College, 1991, *cum laude*.

APPOINTMENTS

Head of Chemistry - Lafayette College, Easton, PA; 7/21 -

Marshall R. Metzgar Professor of Chemistry - Lafayette College, Easton, PA; 7/20 -

Acting Head of Chemistry - Lafayette College, Easton, PA; 4/20 - 6/21

Professor of Chemistry - Lafayette College, Easton, PA; 7/13 - 7/20

Associate Professor of Chemistry - Lafayette College, Easton, PA; 7/06 - 6/13

Assistant Professor of Chemistry - Lafayette College, Easton, PA; 7/01 - 6/06

Visiting Assistant Professor of Chemistry - Lafayette College, Easton, PA; 8/99 - 7/01.

Postdoctoral Fellow - University of Vermont, Burlington, VT; 8/97 - 8/99; with
Professors Christopher W. Allen and William E. Geiger.

Postdoctoral Fellow - Iowa State University, Ames, IA; 5/97 - 7/97; with Professor
Robert J. Angelici.

Temporary Instructor - Des Moines Area Community College, Boone, IA; 9/96 - 12/96.

Graduate Assistant - Department of Chemistry, Iowa State University, Ames, IA; 8/91 - 5/97.

PROFESSIONAL AFFILIATIONS

American Chemical Society (Inorganic Division, Organometallic and Coordination Chemistry
Sub-division)

IONiC - VIPeR (Interactive Online Network of Inorganic Chemists - Virtual Inorganic Pedagogical Electronic Resource)
Council of Undergraduate Research

GRANTS AWARDED

National Science Foundation

"Collaborative research: Improving inorganic chemistry education through a community-developed student-centered curriculum," Joanne L. Stewart (Hope College, PI), Anne K. Bentley (Lewis and Clark College, co-PI), Sheila R. Smith (University of Michigan, co-PI), Nancy S. Williams (The Claremont Colleges Keck Science Department, co-PI), Barbara A. Reisner (James Madison University, PI), Jeffrey R. Raker (University of South Florida, PI), Hilary E. Eppley (Depauw University), Elizabeth R. Jamieson (Smith College), Adam R. Johnson (Harvey Mudd College), Chip Nataro (Lafayette College), Lori A. Watson (Earlham College), 9/17-9/22, \$1,110,260.

"Reactivity of compounds containing 1,1'-bis(phosphino)metallocenediyl or 1,1'-bis(phosphino)metallocene ligands." 6/16-8/21, \$153,899.

"Redox reactions of phosphine sulfides, phosphine selenides and 1,1'-bis(phosphino)metallocenes." 5/11-1/15, \$127,189.

Petroleum Research Fund;

"Compounds of Bidentate Phosphines with Metallocene Backbones: Electrochemistry and Catalysis" 5/05 - 8/09, \$50,000.

"Electrochemical Investigation of 1,1'-bis(diphenylphosphino)metallocenes" 8/02 - 8/04, \$35,000.

Lafayette College Academic Research Committee

EXCEL Scholars - Support of student research assistants: Fall 1999 (1), Interim 2000 (1), Spring 2000 (2), Summer 2000 (1), Fall 2000 (2), Interim 2001 (2), Spring 2001 (2), Summer 2001 (2), Fall 2001 (3), Interim 2002 (2), Spring 2002 (3), Summer 2002 (2), Fall 2002 (1), Interim 2003 (1), Spring 2003 (1), Summer 2003 (4), Fall 2003 (2), Spring 2004 (2), Summer 2004 (2), Fall 2004 (1), Interim 2005 (1), Spring 2005 (1), Summer 2005 (4), Fall 2005 (1), Interim 2006 (1), Spring 2006 (2), Summer 2006 (3), Summer 2007 (2), Spring 2008 (1), Summer 2008 (3), Fall 2008 (1), Summer 2009 (2), Fall 2009 (2), Spring 2010 (1), Summer 2010 (2), Fall 2010 (1), Spring 2011 (1), Summer 2011 (3), Fall 2011 (1), Spring 2012 (1), Summer 2012 (4), Interim 2013 (2), Summer 2013 (3), Fall 2013 (1), Interim 2014 (1), Summer 2014 (4), Summer 2015 (2), Fall 2015 (1), Interim 2015 (1), Spring 2016 (1), Summer 2016 (3), Fall 2016 (2), Spring 2017 (2), Summer 2017 (3), Fall 2017 (2), Spring 2018 (2), Summer 2018 (3), Fall 2018 (1), Spring 2019 (1), Summer 2019 (5), Fall 2019 (1), Spring 2019 (1), Spring 2020 (1), Summer 2020 (1), Summer 2021 (4), Fall 2021 (1), Summer 2022 (3), Spring 2023 (1), and Summer 2023 (3).

Berg Scholar - Summer 2023.

Research Grants

Reactions of phosphines: Summer 2010.

Purchase of a flash chromatography system: Fall 2003.

Lafayette College Department of Chemistry

Sherma Scholar – Support of student research assistant: Summer 2008, Summer 2009, Summer 2015, Summer 2021, Summer 2022 and Summer 2023.

Lafayette College Information Technology Services

Teaching with Technology Grant

Rocketbooks in the Chemistry Laboratory with Melissa Galloway, Spring 2020
Student Response Systems in General Chemistry, Spring 2013

AWARDS

Fellow of the American Chemical Society; American Chemical Society, August 2023.

Marquis Distinguished Teaching Award; Lafayette College, May 2023.

ACS Award for Research at an Undergraduate Institution; American Chemical Society, March 2022.

E. Emmet Reid Award in Chemistry Teaching at Small Colleges; Mid-Atlantic Region of the American Chemical Society, June 2017.

James E. Lennertz Prize for Exceptional Teaching and Mentoring; Lafayette College, May 2016.

American Chemical Society Division of Inorganic Chemistry Award for Undergraduate Research (As preceptor, student Chelsea Mandell); ACS, September 2013.

Predominately Undergraduate Institution Travel Award; Gordon Research Conference, July 2008.

Thomas Roy and Lura Forrest Jones Lecture Award; Lafayette College, May 2007.

2004 Award for Excellence in Undergraduate Chemical Research; Indiana University, September 2004.

Delta Upsilon Distinguished Mentoring and Teaching Award; Lafayette College, May 2004.

Teaching Excellence Award; Iowa State University, May 1992.

TEACHING

Lafayette College, 1999 - present, approximately 9 contact hours per week each semester.

Courses Taught:

“A Chemical Perspective” (CHEM 102)
“General Chemistry I” (CHEM 107 formerly 121)
“Accelerated General Chemistry Lab” (CHEM 125L)
“Foundational Inorganic Chemistry” (CHEM 211)
“Inorganic Chemistry I” (212, 213, 213L)
“Organic Chemistry II Lab” (CHEM 222L)
“Environmental Chemistry” (CHEM 252)
“Course-based Research Experience in Chemistry” (CHEM 366)
“Independent Research Experience” (CHEM 380)
“Independent Research” (CHEM 391, 392)
“Independent Study” (CHEM 393, 394)
“Advanced Inorganic Chemistry” (CHEM 411)
“Inorganic Chemistry II” (CHEM 431)
“Structure Determination by Physical Methods” (CHEM 440)

“Organometallic Chemistry” (CHEM 476)
“Thesis” (CHEM 495, 496)
“Baseball: The One Constant through All the Years” (FYS 023)
“A Catalyst for Change” (LCE 003)

University of Vermont, Department of Chemistry; Fall 1997 and Fall 1998.

Courses Taught:

“Organometallic Chemistry” (CHEM 234)
“Homogeneous Catalysis” (CHEM 237)

Des Moines Area Community College, Department of Chemistry; Fall 1996.

Course Taught:

“Introduction to General Chemistry” (CHEM 131)

LAFAYETTE COLLEGE COMMITTEES, APPOINTMENTS, AND ACTIVITIES

Environmental Science Minor Committee: 2001-2005
Academic Research Committee: 2002-2005, 2015-2018 (Chair 2015-2017)
Chemistry Search Committee: 2003, 2006, 2010, 2012 (2 positions), 2014, 2016, 2019, 2021, 2022
Department Newsletter Editor: 2003-2005
Faculty Advisor/Head Coach Lafayette Club Baseball Team: 2003-
Faculty Advisor for Student Affiliates of the American Chemical Society: 2004-
Faculty Advisor for Phi Gamma Delta: 2008-2009
Search Committee for Assistant Director of Student Life: 2008
Chemistry Department Graduate School Liaison: 2008-
Chemistry Department Online Placement Exam Coordinator: 2008-2021
Faculty Committee on Athletics: 2009-2012
Search Committee for Instructional Technologist: 2010
Search Committee for Director of ATTIC: 2010
Search Committee for Research Grants Administrator: 2013
New Faculty Mentor: 2015-2020
Search Committee for Director of Sponsored Programs: 2015-2016
Faculty Advisor for Chemistry Living and Learning Community: 2015-2016
Faculty Advisor for Family Game Night Living and Learning Community: 2018-2020
Scholarships and Fellowships Advisory Committee: 2018-2019
Instructional Technology and Library Committee: 2020-2022
Faculty Advisor for American Chemical Society Living and Learning Community: 2021-2022
Faculty Advisor to the Lafayette College Baseball Team: 2021-
Hanson Center for Inclusive STEM Education Advisory Board: 2022-

ADDITIONAL ACTIVITIES

Editorial Board of *Transition Metal Chemistry*- 2023-
Leadership Council of IONiC - VIPeR (Interactive Online Network of Inorganic Chemists -
Virtual Inorganic Pedagogical Electronic Resource): 2011-
Advisory Board for the CBC (Covalent Bond Classification) website: 2012-
Inorganic Chemistry Committee for the ACS Exams Institute: 2013-2016, 2019-2021)

Guest co-editor for virtual issue of *Organometallics*: 2017, 2018

Alternate Councilor for the Division of Inorganic Chemistry of the American Chemical Society: 2018-2020

Guest co-editor for virtual issue of *Polyhedron*: 2021

PUBLISHED RESEARCH ARTICLES (undergraduate co-authors are underlined, high school student co-authors are italicized)

"Exploring opportunities for tuning phenyltris(pyrazol-1-yl)borate donation by varying the extent of phenyl substituent fluorination" P.J. Fischer, C.B. Roe, J.N. Stephenson, R.J. Dunscomb, C.L. Carthy, C. Nataro, V.G. Young, *Dalton Trans.* **2023**, 52, 5606.

"Synthesis of disubstituted furans catalysed by [(AuCl)₂(μ-bis(phosphino)metallocene)] and Na[BArF₂₄]." R.K. Gwinn, A.E. Boggess, E.P. Winter, C. Nataro, *Dalton Trans.* **2022**, 51, 17000.

"Cleavage of the dimeric heterometallic complexes {Pd(dppf)(μ-Cl)}₂[BArF₂₄]₂ (dppf = 1,1'-bis(diphenylphosphino)ferrocene, BArF₂₄ = tetrakis(bis-3,5-trifluoromethylphenyl)borate) via addition of monodentate phosphine ligands." S.A. Wolfarth, N.G. Colicchio, C.S. Nataro, E.W. Reinheimer, C. Nataro, *Polyhedron* **2022**, 222, 115915. *Invited special virtual issue in tribute to Arnie Rheingold.*

"The postsecondary inorganic chemistry instructional laboratory curriculum: Results from a national survey." J.R. Raker, J.M. Pratt, M.C. Connor, S.R. Smith, J.L. Stewart, B.A. Reisner, A.K. Bentley, S. Lin, C. Nataro, *J. Chem. Educ.* **2022**, 99, 1971.

"Hydroamination and carboxylative cyclization reactions catalyzed by gold(I) compounds with 1,1'-bis(phosphino)metallocene ligands." N.E. Miner, C. Nataro, *J. Organomet. Chem.* **2022**, 963, 122283.

"Synthesis and electronic properties of transition metal complexes containing sulfonamidoquinoline ligands." M. T. Gole, P. Pauls, S. F. Hartlaub, C. Nataro, L. M. Rossiter, A. R. O'Connor, B. C. Chan, *Polyhedron* **2021**, 204, 115269.

"Synthesis, characterization and electrochemistry of [Pd(PP)MeCl] compounds with 1,1'-bis(phosphino)ferrocene ligands." M. E. Hendricks, X. Xu, T. R. Boller, E. M. Samples, A. R. Johnson and C. Nataro, *Polyhedron* **2021**, 199, 115104.

"A community springs to action to enable virtual laboratory instruction." C. Nataro and A. R. Johnson, *J. Chem. Educ.* **2020**, 97, 3033.

"Hydroamination reactions catalyzed by [Au₂(μ-Cl)(μ-bis(phosphino)ferrocene)][BArF₂₄]." S. A. Wolfarth, N. E. Miner, N. E. Wamser, R. K. Gwinn, B. C. Chan and C. Nataro, *J. Organomet. Chem.* **2020**, 906, 121049.

"Catalytic ring-closing reactions of gold compounds containing bis(phosphino)ferrocene ligands." T. A. Michaels, O. F. Pritchard, J. S. Dell, M. W. Bezpalko, W. S. Kassel and C. Nataro, *J. Organomet. Chem.* **2019**, 889, 1.

"Teaching from the primary inorganic literature: lessons from Richard Andersen." J. L. Stewart, A. K. Bentley, A. R. Johnson, C. Nataro, B. A. Reisner and L. A. Watson, *Dalton Trans.* **2018**, 47, 13755.

"Undergraduate research: Contributions to organometallic chemistry." C.A. Bradley and C. Nataro, *Organometallics* **2018**, 37, 1813.

"Historical analysis of the inorganic chemistry curriculum using ACS examinations as artifacts." S. Srinivasan, B. A. Reisner, S. R. Smith, J. L. Stewart, A. R. Johnson, S. Lin, K. A. Marek, C. Nataro, K. L. Murphy and J. R. Raker, *J. Chem. Educ.* **2018**, 95, 726.

"Literature-based teaching strategies for organometallic courses." A. P. Duncan, A. R. Johnson and C. Nataro, *Organometallics* **2017**, 36, 2703.

"Monodentate phosphine substitution in $[\text{Pd}(\kappa^3\text{-dppf})(\text{PR}_3)][\text{BF}_4]_2$ (dppf = 1,1'-bis(diphenylphosphino)ferrocene) compounds." K. D. Cabrera, A. T. Rowland, J. M. Szarko, P. L. Diaconescu, M. W. Bezpalko, W. S. Kassel and C. Nataro, *Dalton Trans.* **2017**, 46, 5702. *Invited special issue on Multimetallic complexes: synthesis and applications.*

"Late transition metal compounds with 1,1'-bis(phosphino)ferrocene ligands." S. F. Hartlaub, N. K. Lauricella, C. N. Ryzcek, A. G. Furneaux, J. D. Melton, N. A. Piro, W. S. Kassel and C. Nataro, *Eur. J. Inorg. Chem.* **2017**, 424. *Invited special issue on The Multifaceted Chemistry of Ferrocene.*

"Spectroscopic, structural and computational analysis of $[\text{Re}(\text{CO})_3(\text{dippM})\text{Br}]^{n+}$ (dippM = 1,1'-bis(diiso-propylphosphino)metallocene, M = Fe, n = 0 or 1; M = Co, n = 1)." A. G. Furneaux, N. A. Piro, R. H. Sánchez, K. M. Gramigna, N. Fey, M. J. Robinson, W. S. Kassel and C. Nataro, *Dalton Trans.* **2016**, 45, 4819.

"Structural, computational and spectroscopic investigation of $[\text{Pd}(\kappa^3\text{-1,1'-bis(ditert-butylphosphino)ferrocenediyl)X}]^+$ (X = Cl, Br or I) compounds." B. L. Blass, R. H. Sánchez, V. L. Decker, M. J. Robinson, N. A. Piro, W. S. Kassel, P. L. Diaconescu and C. Nataro, *Organometallics* **2016**, 35, 462.

"Compounds containing weak, non-covalent interactions to the metal in the backbone of 1,1'-bis(phosphino)metallocene ligands." E. P. Warnick, R. J. Dupuis, N. A. Piro, W. S. Kassel and C. Nataro, *Polyhedron* **2016**, 114, 156. *Invited special issue on Undergraduate Research in Inorganic Chemistry.*

"X-ray structures and oxidative electrochemistry of phosphine sulfides and phosphine selenides." M. A. Tiedemann, C. L. Mandell, B. C. Chan, and C. Nataro, *Inorg. Chim. Acta* **2014**, 422, 193. *Invited special issue dedicated to T. Don Tilley.*

"Electrochemical parameterization of 1,1'-disubstituted cobaltocenium compounds." J. K. Pagano, E. C. Sylvester, E. P. Warnick, W. G. Dougherty, N. A. Piro, W. S. Kassel, and C. Nataro, *J. Organomet. Chem.* **2014**, 750, 107.

"Palladium(II) and Platinum(II) Compounds of 1,1'-Bis(phosphino)metallocene (M = Fe or Ru) Ligands with Metal→Metal Interactions." K. M. Gramigna, J. V. Oria, C. L. Mandell, M. A. Tiedemann, W. G. Dougherty, N. A. Piro, W. S. Kassel, B. C. Chan, P. L. Diaconescu, and C. Nataro, *Organometallics* **2013**, 32, 5966. *Invited special issue on Ferrocene – Beauty and Function.*

"Synthesis and spectroelectrochemistry of transition metal carbonyls with 1,1'-bis(phosphino)metallocene ligands." J. Berstler, A. Lopez, D. Ménard, W. G. Dougherty, W. S. Kassel, A. Hansen, A. Daryaei, P. Ashitey, M. J. Shaw, N. Fey, and C. Nataro, *J. Organomet. Chem.* **2012**, 712, 37.

"Synthesis and electrochemistry of 1,1'-bis(phosphino)cobaltocenium compounds." K. D. Reichl, C. L. Mandell, O. D. Henn, W. G. Dougherty, W. S. Kassel and **C. Nataro**, *J. Organomet. Chem.* **2011**, 696, 3882.

"Electrochemistry of P(CH₂Fc)₃ and derivatives." A. R. Seibert, M. F. Cain, D. S. Gleuck and **C. Nataro**, *J. Organomet. Chem.* **2011**, 696, 2259.

"Electrochemistry of 1,1'-bis(2,4-dialkylphosphetanyl)ferrocene and 1,1'-bis(2,5-dialkylphospholanyl)ferrocene ligands: Free phosphines, metal complexes and chalcogenides." C. L. Mandell, S. S. Kleinbach, W. G. Dougherty, W. S. Kassel and **C. Nataro**, *Inorg. Chem.* **2010**, 49, 9718.

"Bis(dialkylaminophosphino)ferrocenes: Reactivity and electrochemistry." A. R. Seibert, W. G. Dougherty, W. S. Kassel and **C. Nataro**, *Inorg. Chim. Acta* **2010**, 364, 30. *Invited special issue dedicated to Arnold Rheingold.*

"Synthesis and characterization of transition metal complexes containing 1,1'-bis(diphenylphosphino)ferrocene (dppf)." **C. Nataro** and S. M. Fosbenner, *J. Chem. Ed.* **2009**, 86, 1412.

"1-Methyl-1-vinyl-3,3,5,5-tetraphenylcyclotrisiloxane: An organofunctional cyclotrisiloxane." **C. Nataro**, W. M. Cleaver and C. W. Allen, *J. Inorg. Organomet. Polym.* **2009**, 19, 566.

"Synthesis, electrochemistry, and reactivity of half-sandwich ruthenium complexes bearing metallocene-based bisphosphines." A. P. Shaw, J. R. Norton, D. Buccella, L. A. Sites, S. S. Kleinbach, D. A. Jarem, K. M. Bocage and **C. Nataro**, *Organometallics* **2009**, 28, 3804.

"A new synthesis and electrochemistry of 1,1'-bis(β -hydroxyethyl)ferrocene." K. P. Barry and **C. Nataro**, *Inorg. Chim. Acta* **2009**, 362, 2068.

"Synthesis, characterization and electrochemistry of compounds containing 1-diphenylphosphino-1'-(di-tertbutylphosphino)ferrocene (dppdtbpf)." S. L. Kahn, M. K. Breheney, S. L. Martinak, S. M. Fosbenner, A. R. Seibert, W. S. Kassel, W. G. Dougherty and **C. Nataro**, *Organometallics* **2009**, 28, 2119.

"Taniaphos and Walphos ligands: Oxidative electrochemistry and complexation. Synthesis, characterization, oxidative electrochemistry and X-ray structures of [(Taniaphos/Walphos)MCl₂] (M = Pd or Pt)." A. F. Maddox, A. L. Rheingold, J. A. Golen, W. S. Kassel and **C. Nataro**, *Inorg. Chim. Acta* **2008**, 361, 3283.

"Synthesis and characterization of 1-methyl-silaindane and 1-methyl-germaindane." D. A. Ruddy, D. H. Berry and **C. Nataro**, *J. Organomet. Chem.* **2008**, 693, 169.

"Electrochemistry and complexation of Josiphos ligands." B. L. Ghent, S. L. Martinak, L. A. Sites, J. A. Golen, A. L. Rheingold and **C. Nataro**, *J. Organomet. Chem.* **2007**, 692, 2365.

"Synthesis and electrochemistry of late transition metal complexes containing 1,1'-bis(dicyclohexylphosphino)ferrocene (dcpf). The X-ray structure of [PdCl₂(dcpf)] and Buckwald-Hartwig catalysis using [PdCl₂(bisphosphinometalocene)] precursors." L. E. Hagopian, A. N. Campbell, J. A. Golen, A. L. Rheingold and **C. Nataro**, *J. Organomet. Chem.* **2006**, 691, 4890.

"Anodic electrochemistry of 1,1'-bis(ditertbutylphosphino)ferrocene (dtbpf), $[MCl_2(dtbpf)]$ (M = Ni, Pd or Pt) and $dtbpfE_2$ (E = S or Se). Oxidative formation of a diselenide dication." F. N. Blanco, L. E. Hagopian, W. R. McNamara, J. A. Golen, A. L. Rheingold and C. Nataro, *Organometallics* **2006**, *25*, 4292.

"Derivatives of 1,1'-bis(diphenylphosphino)ferrocene (dppf): Electrochemistry, complexation and the X-ray structures of 1,1'-bis(diphenylphosphino)osmocene (dppo) and $[PdCl_2(dppo)]$." S. L. Martinak, L. A. Sites, S. J. Kolb, K. M. Bocage, W. R. McNamara, A. L. Rheingold, J. A. Golen and C. Nataro, *J. Organomet. Chem.* **2006**, *691*, 3627.

"Synthesis, structure, and electrochemistry of an electron-rich chiral diaminoferrocene, (S,S)-bis(2,5-dimethylpyrrolidinyl)ferrocene." N. F. Blank, D. S. Glueck, L. N. Zakharov, A. L. Rheingold, M. D. Saybolt, B. L. Ghent, and C. Nataro, *Organometallics* **2005**, *24*, 5184.

"BoPhoz ligands: Anodic electrochemistry and complexes." B. L. Ghent, L. A. Sites A. L. Rheingold and C. Nataro, *Organometallics* **2005**, *24*, 4788.

"Anodic electrochemistry of ferrocenylphosphine and ruthenocenylphosphine chalcogenide complexes and Lewis acid adducts." B. D. Swartz and C. Nataro, *Organometallics* **2005**, *24*, 2447.

"Electrochemistry of di-tert-butylphosphinopentaphenylferrocene (Q-phos) and derivatives." A. N. Campbell, S. J. Kolb, F. Barrios-Landeros and C. Nataro, *Electrochem. Acta* **2005**, *50*, 2661.

"Electrochemistry of group VI metal carbonyls containing 1,1'-bis(diphenylphosphino)ferrocene." A. C. Ohs, A. L. Rheingold, M. J. Shaw and C. Nataro, *Organometallics* **2004**, *23*, 4655.

"Synthesis and reactivity of $[N(C_6H_4Br)_3][B(C_6F_5)_4]$. The X-ray crystal structure of $[Fe(C_5H_5)_2][B(C_6F_5)_4]$." A. R. O'Connor, C. Nataro, J. A. Golen and A. L. Rheingold, *J. Organomet. Chem.* **2004**, *689*, 2411.

"Lewis acid-base, molecular modeling and isotopic labeling in a sophomore inorganic chemistry laboratory." C. Nataro, M. A. Ferguson, K. M. Bocage, B. J. Hess, V. J. Ross and D. T. Swarr, *J. Chem. Ed.* **2004**, *81*, 722.

"Determination of the basicity of 1,1'-bis(diphenylphosphino)metallocenes." A. R. O'Connor and C. Nataro, *Organometallics* **2004**, *23*, 615.

"Electrochemistry of late transition metal complexes containing the ligand 1,1'-bis(diisopropylphosphino)ferrocene (dippf)." J. H. L. Ong, C. Nataro, J. A. Golen and A. L. Rheingold, *Organometallics* **2003**, *22*, 5027.

"Ruthenium cluster compounds containing 1,1'-bis(diphenylphosphino)ferrocene (dppf): an electrochemical analysis and the crystal structure of $[Ru_3(CO)_{11}]_2(\mu-dppf)$." A. R. O'Connor, C. Nataro and A. L. Rheingold, *J. Organomet. Chem.* **2003**, *679*, 72.

"Group 10 metal compounds of 1,1'-bis(diphenylphosphino)ferrocene (dppf) and 1,1'-bis(diphenylphosphino)ruthenocene: a structural and electrochemical investigation. X-ray structures of $[MCl_2(dppr)]$ (M = Ni, Pd)." C. Nataro, A. N. Campbell, M. A. Ferguson, C. D. Incarvito and A. L. Rheingold, *J. Organomet. Chem.* **2003**, *673*, 47.

"Electrochemistry of $Ru_2Cp'_{1/2}(CO)_4$ and $Ru_2Cp_2(CO)_3(PMe_3)$ and the Estimation of $Ru_2(\mu-H)$ Bond Dissociation Enthalpies." K. M. Rourke and C. Nataro, *J. Organomet. Chem.* **2002**, *656*, 181.

"Synthesis and characterization of ferrocenylalcohol derivatives of hexachlorocyclotriphosphazene. X-ray crystal structure of $N_3P_3Cl_5OCH_2CH_2C_5H_4FeCp$." **C. Nataro**, C. N. Myer, W. M. Cleaver, and C. W. Allen, *J. Organomet. Chem.* **2001**, 637-639, 284. *Invited special issue on The 50th Anniversary of the Discovery of Ferrocene.*

"Analysis of phosphines functionalized with crown ether groups by NMR and cyclic voltammetry." **C. Nataro**, H. M. Baseski, C. M. Thomas, B. J. Wiza and K. M Rourke, *Polyhedron* **2001**, 20, 1023.

"Analysis of 2-ferrocenylethanol by NMR, cyclic voltammetry and X-ray crystallography." **C. Nataro**, W. M. Cleaver, C. C. Landry and C. W. Allen, *Polyhedron* **1999**, 18, 1471.

"Protonation of metal-metal bonds in $Cp_2Ru_2(CO)_3(PR_3)$ and $Cp_2Mo_2(CO)_4(PR_3)_2$." **C. Nataro** and R. J. Angelici, *Inorganic Chemistry* **1998**, 37, 2975.

"Cyanide ligand basicities in $Cp^*M(L)_2CN$ complexes (M = Ru, Fe). Correlation between heats of protonation and ν_{CN} ." **C. Nataro**, J. Chen and R. J. Angelici, *Inorganic Chemistry* **1998**, 37, 1868.

"Cyclopentadienyl ligand effects on enthalpies of protonation of the Ru-Ru bond in $Cp^*_2Ru_2(CO)_4$ complexes." **C. Nataro**, L. Thomas and R. J. Angelici, *Inorganic Chemistry* **1997**, 36, 6000.

PUBLISHED BOOK

"You're gonna need a bigger book: My COVID-19 odyssey through sharksploitation films." **C. Nataro**, **2020**, 179 pages.

PUBLISHED BOOK CHAPTER (undergraduate co-authors are underlined)

"Ferrocene: To infinity and back again." **C. Nataro**, *Comprehensive Coordination Chemistry III, Vol. 5*, Eds. E. Constable, G. Parkin and L. Que, **2021**, Ch. 5, p. 572.

"Teaching molecular orbital theory better." A. R. Johnson and **C. Nataro**, *Advances in Teaching Inorganic Chemistry, Vol. 1* an ACS Symposium Series, Ed. R. M. Jones, **2020**, Ch. 5, p. 47.

"³¹P NMR spectroscopy in an undergraduate curriculum." **C. Nataro**, C.L. Mandell and M.A. Tiedemann, *NMR Spectroscopy in the Undergraduate Curriculum* an ACS Symposium Series, Eds. D. Soulsby, L.J. Anna and A.S. Wallner, **2013**, Ch. 9, p. 131.

"When nuclei cannot give 100%." **C. Nataro**, W. R. McNamara and A. F. Maddox, *Modern NMR in Undergraduate Education* an ACS Symposium Series, Eds. D. Rovnyak and R. Stockland, **2007**, Ch. 18, p. 246.

The above articles and book chapter have been cited a total of 964 times (Analysis on SciFinder Scholar and Web of Science on February 15, 2024).

ADDITIONAL PUBLICATIONS

"IONiC VIPer: A community of inorganic chemists who create, share, adapt, comment on, and give back in order to improve student learning." **C. Nataro**, A.K. Bentley, H.J. Eppley, E.R. Jamieson, A.R. Johnson, B.A. Reisner, S.R. Smith, J.L. Stewart, L.A. Watson and N.B.S. Williams **2017** *CCCE Newsletter*, Paper 1.

(<https://confchem.ccce.divched.org/2017SpringCCCEenlp1>)

"VIPer: An online academic resource enhancing undergraduate research." S. R. Smith, S. Collins, H. Eppley, M. Geselbracht, E. Jamieson, A. Johnson, **C. Nataro**, B. Reisner, J. Stewart, B. S. Williams, and L. Watson *CUR Quarterly* **2013**, *34*, 14.

(https://www.cur.org/assets/1/7/Winter2013_TOC.pdf)

ELECTRONIC PUBLICATIONS

"The short game." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/short-game>) **2023**.

"SLiThEr #53: Beyond Lecture - Helping Students Get and Stay on the Alternative Pedagogy Bus." **C. Nataro**, J.L. Stewart, and R.M. Jones (<https://www.ionicviper.org/web-resources-and-apps/slither-53-beyond-lecture-helping-students-get-and-stay-alternative-pedagogy>) **2023**.

"SLiThEr #51: Chemistry applications of Desmos." **C. Nataro** and S.L. Nataro (<https://www.ionicviper.org/web-resources-and-apps/slither-51-chemistry-applications-desmos>) **2023**.

"SLiThEr #48: Teaching organometallic chemistry to undergraduates." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-48-teaching-organometallic-chemistry-undergraduates>) **2023**.

"SLiThEr #46: Results from a departmental climate survey." **C. Nataro**, W. Hill, A. Mensch, R. Miller, D. Griffith (<https://www.ionicviper.org/web-resources-and-apps/slither-46-results-departmental-climate-survey>) **2023**.

"Germanes to Cyclic and Linear Germoxanes – A Final Exam that is Sort of a Literature Discussion." **C. Nataro** (<https://www.ionicviper.org/problem-set/germanes-cyclic-and-linear-germoxanes-final-exam-sort-literature-discussion>) **2023**.

"Dichloro-(1,1'-bis(diphenylphosphino)ferrocenyl-P,P')-nickel(ii)" **C. Nataro**, K.C. Wong CSD Communication (CCDC 2196024) **2022**.

"SLiThEr #42: Our Favorite Labs." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-42-our-favorite-labs>) **2022**.

"Nickel-catalyzed Hydrodefluorination." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/nickel-catalyzed-hydrodefluorination>) **2022**.

"Hydrogenative Depolymerization of Nylons." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/hydrogenative-depolymerization-nylons>) **2022**.

"SLiThEr #36: CUREs in Chemistry." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-36-cures-chemistry>) **2022**.

"SLiThEr #35: Teaching Inorganic Chemistry - A Live Discussion from MARM 2022." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-35-teaching-inorganic-chemistry-live-discussion-marm-2022>) **2022**.

"SLiThEr #34: Libretext as a Platform." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-34-libretext-platform>) **2022**.

"Substitution Chemistry in Odd-electron Iron Group Carbonyl Complexes (D'Acchioli)" N. Williams and **C. Nataro** (<https://www.ionicviper.org/literature-discussion/substitution-chemistry-odd-electron-iron-group-carbonyl-complexes-dacchioli>) **2022**.

"SLiThEr #33: Development, Implementation, and Successes of a Blind and Scaffolded Faculty Search." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-33-development-implementation-and-successes-blind-and-scaffolded>) **2022**.

"SLiThEr #32: Detangling Chemistry Ed Research, Scholarship of Teaching & Learning, and Science Education." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-32-detangling-chemistry-ed-research-scholarship-teaching-learning>) **2022**.

"SLiThEr #31: Using "Process Oriented Guided Inquiry Learning" (POGIL) in your classroom!" **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-31-using-process-oriented-guided-inquiry-learning-pogil-your>) **2022**.

"SLiThEr #30: Covalent Bond Classification (CBC) Counting of Electrons in TM Complexes." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-30-covalent-bond-classification-cbc-counting-electrons-tm-complexes>) **2022**.

"SLiThEr #30: Covalent Bond Classification (CBC) Counting of Electrons in TM Complexes Problem Set." M. Radlauer, **C. Nataro** (<https://www.ionicviper.org/problem-set/slither-30-covalent-bond-classification-cbc-counting-electrons-tm-complexes-problem-set>) **2022**.

"SLiThEr #26: Foray into Alternative Grading Methods." **C. Nataro**, K. Stone, M. Anstey (<https://www.ionicviper.org/web-resources-and-apps/slither-26-foray-alternative-grading-methods>) **2021**.

"SLiThEr #27: A mental conversation – Warning signs, normalization, and responses." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-27-mental-health-conversation-warning-signs-normalization-and>) **2021**.

"SLiThEr #21: Teaching During COVID-19: A Catalyst for Positive Instructional Change." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-21-teaching-during-covid-19-catalyst-positive-instructional-change>) **2021**.

"SLiThEr #20: African American Chemists: Academia, Industry, and Social Entrepreneurship." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-20-african-american-chemists-academia-industry-and-social>) **2021**.

"SLiThEr #19: Landing that Job at a PUI." **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-19-landing-job-pui>) **2021**.

"SLiThEr #18: Dr. Strangebook or: How I Learned to Stop Worrying and Love Libretext." C. **Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-18-dr-strangebook-or-how-i-learned-stop-worrying-and-love-libretext>) **2021**.

"SLiThEr #17: Demonstration of a Transition to a Remote General Chemistry Course." C. **Nataro**, K. Stone and D. Kissel (<https://www.ionicviper.org/web-resources-and-apps/slither-17-demonstration-transition-remote-general-chemistry-course>) **2021**.

"SLiThEr #14: The Student Experience in the Midst of the COVID-19 Pandemic." C. **Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-14-student-experience-midst-covid-19-pandemic>) **2021**.

"SLiThErs - Supporting Learning with Interactive Teaching: a Hosted, Engaging Roundtable." C. **Nataro**, K. Stone, K. Grice, T. Hayes, M. Cranswick, M. Porter and S. Shaner (<https://www.ionicviper.org/collection/slithers-supporting-learning-interactive-teaching-hosted-engaging-roundtable>) **2020**.

"SLiThEr #2: A 'Traditional' Course in an Online Environment." C. **Nataro** (<https://www.ionicviper.org/web-resources-and-apps/slither-2-traditional-course-online-environment>) **2020**.

"A cobalt hydroformylation catalyst tribute to Malcolm Green." C. **Nataro** (<https://www.ionicviper.org/literature-discussion/cobalt-hydroformylation-catalyst-tribute-malcolm-green>) **2020**.

"A copper "Click" catalyst for the synthesis of 1,2,3-triazoles." C. **Nataro** (<https://www.ionicviper.org/literature-discussion/copper-click-catalyst-synthesis-123-triazoles>) **2020**.

"Ferrocene acylation - The Covid-19 version." C. **Nataro** and L. Bell-Loncella (<https://www.ionicviper.org/lab-experiment/ferrocene-acylation-covid-19-version>) **2020**.

"Job's Method - The Covid-19 version." A. Johnson, A. Bentley, N. Williams and C. **Nataro** (<https://www.ionicviper.org/lab-experiment/jobs-method-covid-19-version>) **2020**.

"1FLO: One figure learning objects." C. **Nataro** (<https://www.ionicviper.org/collection/1flo-one-figure-learning-objects>) **2019**.

"Zinc-zinc bonds (expanded and updated)." W. S. Farrell, A. Strom, A. L. Fernandez, B. Jamieson, B. Anderson, C. **Nataro**, D. Durr, C. Partigianoni, D. Wicht, J. Andreatta, J. Smieja, J. Miecznikowski, L. Tilley, M. Carroll and M. J. Hartmann (<https://www.ionicviper.org/literature-discussion/zinc-zinc-bonds-expanded-and-updated>) **2019**.

"Redox-switch polymerization catalysis." C. **Nataro** (<https://www.ionicviper.org/literature-discussion/redox-switch-polymerization-catalysis>) **2019**.

"1FLO: Redox-switch polymerization catalysis." C. **Nataro** (<https://www.ionicviper.org/literature-discussion/1flo-redox-switch-polymerization-catalysis>) **2019**.

"Foundations Inorganic Chemistry for New Faculty." C. Nataro, A. Bentley, A. L. Fernandez, E. Sylvester, K. Stone, K. N. Crowder, K. Grace, S. E. Schmidt and S. Lin (<https://www.ionicviper.org/collection/foundations-inorganic-chemistry-new-faculty>) 2019.

"Inorganic Chemistry I." C. Nataro (<https://www.ionicviper.org/syllabus/inorganic-chemistry-i>) 2019.

"Inorganic Chemistry II." C. Nataro (<https://www.ionicviper.org/syllabus/inorganic-chemistry-ii>) 2019.

"Inorganic Chemistry I with Laboratory." C. Nataro (<https://www.ionicviper.org/syllabus/inorganic-chemistry-i-laboratory>) 2019.

"Undergraduate research contributions to organometallic chemistry." Eds. C. Bradley and C. Nataro, *Virtual issue of Organometallics* (<https://pubs.acs.org/page/orgnd7/vi/organometallic-undergradresearch.html>) 2018.

"Papers for pedagogy." Eds. A. P. Duncan, A. R. Johnson and C. Nataro, *Virtual issue of Organometallics* (<http://pubs.acs.org/page/vi/papers-for-pedagogy?ref=highlight>) 2017.

"George Stanley organometallics." A. Johnson, C. Nataro and G. Stanley (<https://www.ionicviper.org/collection/george-stanley-organometallics>) 2017.

"A stable monomeric SiO₂ complex with donor-acceptor ligands: foundational implications of Lewis-acid base interactions in stabilizing SiO₂." G. Guillet, B. Quillian, C. Nataro, M. Carroll and C. Stieber (<https://www.ionicviper.org/literature-discussion/stable-monomeric-sio2-complex-donor-acceptor-ligands-foundational-implications>) 2017.

"A stable monomeric SiO₂ complex with donor-acceptor ligands: foundational examination of Lewis dot structures and bond enthalpies." M. Carroll, B. Quillian, C. Nataro, G. Guillet and C. Stieber (<https://www.ionicviper.org/literature-discussion/stable-monomeric-sio2-complex-donor-acceptor-ligands-foundational-examination>) 2017.

"A stable monomeric SiO₂ complex with donor-acceptor ligands: foundational application of VSEPR for understanding crystallographic data." C. Stieber, B. Quillian, C. Nataro, G. Guillet and M. Carroll (<https://www.ionicviper.org/literature-discussion/stable-monomeric-sio2-complex-donor-acceptor-ligands-foundational-application>) 2017.

"Ligand based reductive elimination from a thorium compound." C. Nataro and A. Johnson (<https://www.ionicviper.org/literature-discussion/ligand-based-reductive-elimination-thorium-compound>) 2017.

"Fivefold bonding in a Cr(I) dimer updated and expanded." T. Brown, B. Reisner, B. Quillian, B. Smith, C. McCusker, C. Nguyen, C. Nataro, E. Downs, E. Villa, G. Guillet, H. Eppley, J. Schrenk, K. Plass, K. Crowder, M. Carroll, M. Zhou, N. Piro, R. Scarrow, R. Swails, C. Stieber, S. Lin, T. Gupta and W. Dougherty (<https://www.ionicviper.org/literature-discussion/fivefold-bonding-cri-dimer-updated-and-expanded>) 2017.

"Ruthenium catalyzed transfer hydrogenation." C. Nataro (<https://www.ionicviper.org/literature-discussion/ruthenium-catalyzed-transfer-hydrogenation>) 2017.

"Reactivity of a platinum benzyne compound." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/reactivity-platinum-benzyne-compound>) **2017**.

"Group VI metal carbonyl compounds with pincer ligands." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/group-vi-metal-carbonyl-compounds-pincer-ligands>) **2017**.

"Nucleophilic attack at an iridium arene." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/nucleophilic-attack-iridium-arene>) **2017**.

"Reactions of Cp*₂Zr(2,3-dimethylbutadiene)." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/reactions-cp2zr23-dimethylbutadiene>) **2017**.

"Synthesis and reactivity of palladium and platinum carbenes." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/synthesis-and-reactivity-palladium-and-platinum-carbenes>) **2017**.

"The Monsanto acetic acid process." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/monsanto-acetic-acid-process>) **2016**.

"Binding dinitrogen to titanium sandwich compounds." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/binding-dinitrogen-titanium-sandwich-compounds>) **2016**.

"Methane activation by a tungsten allyl." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/methane-activation-tungsten-allyl>) **2016**.

"Ethylene compounds of the coinage metals." **C. Nataro** (<https://www.ionicviper.org/literature-discussion/ethylene-compounds-coinage-metals>) **2016**.

"Ligand effects in titration calorimetry from the Angelici lab." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/ligand-effects-titration-calorimetry-angelici-lab>) **2016**.

"CBC electron counting in an Ir catalyst." **C. Nataro** (<https://www.ionicviper.org/problem-set/cbc-electron-counting-ir-catalyst>) **2016**.

"Adaptable Poster for Promoting VIPeR." **C. Nataro** (<https://www.ionicviper.org/problem-set/adaptable-poster-promoting-viper>) **2015**.

"Kinesthetic Learning: Cyclic Voltammetry Mechanisms." **C. Nataro**
(<https://www.ionicviper.org/class-activity/kinesthetic-learning-cyclic-voltammetry-mechanisms>) **2015**.

"I Do Not Think It Means What You Think It Means." **C. Nataro**
(<https://www.ionicviper.org/literature-discussion/i-do-not-think-it-means-what-you-think-it-means>) **2015**.

"Community Challenge #3: Solid State Structures." **C. Nataro**
(<https://www.ionicviper.org/collection/community-challenge-3-solid-state-structures>) **2015**.

- "Dilithium VI: The Undiscovered Defect." M. Geselbracht and C. **Nataro** (<https://www.ionicviper.org/problem-set/dilithium-vi-undiscovered-defect>) **2015**.
- "Dilithium V: The Density Frontier." M. Geselbracht and C. **Nataro** (<https://www.ionicviper.org/problem-set/dilithium-v-density-frontier>) **2015**.
- "Dilithium IV: The X-ray Pattern." M. Geselbracht and C. **Nataro** (<https://www.ionicviper.org/problem-set/dilithium-iv-x-ray-pattern>) **2015**.
- "Dilithium III: The Drawing for Dilithium." M. Geselbracht and C. **Nataro** (<https://www.ionicviper.org/problem-set/dilithium-iii-drawing-dilithium>) **2015**.
- "Dilithium II: The Lattice of Dilithium." M. Geselbracht and C. **Nataro** (<https://www.ionicviper.org/problem-set/dilithium-ii-lattice-dilithium>) **2015**.
- "Dilithium: The Exam Question." M. Geselbracht and C. Nataro (<https://www.ionicviper.org/problem-set/dilithium-exam-question>) **2015**.
- "Doh! NO⁺ MO." C. Nataro (<https://www.ionicviper.org/problem-set/doh-no-mo>) **2015**.
- "Community Challenge #1 - Orbitals and Trends." C. Nataro (<https://www.ionicviper.org/collection/community-challenge-1-orbitals-and-trends>) **2015**.
- "Slater's Rules Applied to Gadolinium." C. Nataro (<https://www.ionicviper.org/problem-set/slaters-rules-applied-gadolinium>) **2015**.
- "Ferrocenium(iii) tetrakis(pentafluorophenyl)borate" A.L. Rheingold, C. **Nataro**, CSD Communication (CCDC 1441545) **2015**.
- "Decacarbonyl-(m-1,1'-bis(diphenylphosphino)ruthenocene)-tri-ruthenium" A.L. Rheingold, C. **Nataro**, CSD Communication (CCDC 1441544) **2015**.
- "Tetracarbonyl-(1,1'-bis(diphenylphosphino)ruthenocene)-molybdenum" A.L. Rheingold, C. **Nataro**, CSD Communication (CCDC 1441543) **2015**.
- "The structure of an iron carbonyl compound by analysis of the IR spectrum." C. Nataro (<https://www.ionicviper.org/problem-set/structure-iron-carbonyl-compound-analysis-ir-spectrum>) **2014**.
- "Maggie's LOs" C. Nataro (<https://www.ionicviper.org/collection/maggies-los>) **2014**.
- "A tale of two structures" C. Nataro (<https://www.ionicviper.org/class-activity/tale-two-structures>) **2014**.
- "Electron counting and reaction type ID for a hydroformylation catalytic cycle" H. Eppley, C. Nataro and S. Smith (<https://www.ionicviper.org/problem-set/electron-counting-and-reaction-type-id-hydroformylation-catalytic-cycle>) **2014**.

"Sophomore' symmetry: Exam questions" **C. Nataro** (<https://www.ionicviper.org/problem-set/sophomore-symmetry-exam-questions>) **2014**.

"Sophomore' symmetry: Computational analysis" **C. Nataro** (<https://www.ionicviper.org/lab-experiment/sophomore-symmetry-computational-analysis>) **2014**.

"Sophomore' symmetry: Lecture materials" **C. Nataro** (<https://www.ionicviper.org/five-slides-about/sophomore-symmetry-lecture-materials>) **2014**.

"Sheffield Chemputer" **C. Nataro** (<https://www.ionicviper.org/web-resources-and-apps/sheffield-chemputer>) **2014**.

"Where's the Proton" **C. Nataro** (<https://www.ionicviper.org/problem-set/wheres-proton>) **2014**.

"Structure Elucidation from a Single Peak in a ^{31}P NMR Spectrum" **C. Nataro** (<https://www.ionicviper.org/problem-set/structure-elucidation-single-peak-31p-nmr-spectrum>) **2014**.

"[RuH(NO₃)(CO)₂(PPh₃)₂]: An analysis of the literature" **C. Nataro**, K. L. Mardis and R. J. LeSuer (<https://www.ionicviper.org/classactivity/ruhno3co2pph32-analysis-literature>) **2013**.

"A Molybdenum Carbonyl Group Theory Question" **C. Nataro** (<https://www.ionicviper.org/problemset/molybdenum-carbonyl-group-theory-question>) **2012**.

"The Solid State Structure of H₄N₄" **C. Nataro** (<https://www.ionicviper.org/problemset/solid-state-structure-h4n4>) **2012**.

"The Covalent Bond Classification (CBC) Website" **C. Nataro** (<https://www.ionicviper.org/webresources/covalent-bond-classification-cbc-website>) **2012**.

"VIPeR Screencast" **C. Nataro** (<https://www.ionicviper.org/webresources/viper-screencast>) **2012**.

"Five Slides About Percent Buried Volume (%V_{bur})" **C. Nataro** (<https://www.ionicviper.org/fiveslidesabout/five-slides-about-percent-buried-volume-vbur>) **2012**.

"Five Slides About CBC (Covalent Bond Classification) Method of Electron Counting" **C. Nataro** (<https://www.ionicviper.org/fiveslidesabout/cbc-covalent-bond-classification-method-electron-counting>) **2012**.

"Five Slides About Cyclic Voltammetry" **C. Nataro** (<https://www.ionicviper.org/five-slides-about/cyclic-voltammetry-0>) **2011**.

"Diphenyl(indenyl)phosphine selenide" **C. Nataro**, E.A. Dethoff, P. Gantzel, A.L. Rheingold, CSD Communication (CCDC 270929) **2005**.

SYMPOSIA ORGANIZATION

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) American Chemical Society National Meeting, oral sessions and posters, March 2023.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) American Chemical Society National Meeting, March 28, 2023.

Discussion leader - *Ligand Design to Enhance Reactivity and Selectivity in C-H Activation Chemistry* Organometallic Chemistry Gordon Research Seminar, Newport, RI, July 9-10, 2022.

Session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry* Mid-Atlantic Regional American Chemical Society Meeting, oral sessions, June 2022.

Organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* Mid-Atlantic Regional American Chemical Society Meeting, oral sessions, June 2022.

Organizer - *Teaching Inorganic Chemistry: A Live Discussion* Mid-Atlantic Regional American Chemical Society Meeting, workshop, June 2022.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) American Chemical Society National Meeting, oral sessions and posters, March 2022.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) American Chemical Society National Meeting, virtual event oral sessions and posters, August 2021.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) American Chemical Society National Meeting, virtual event oral sessions and posters, April 2021.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry: Applications of Metal Complexes Part 2* (INOR) American Chemical Society National Meeting, virtual event, April 8, 2021.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry: Applications of Metal Complexes Part 1* (INOR) American Chemical Society National Meeting, virtual event, April 7, 2021.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry: Materials and Solid State* (INOR) American Chemical Society National Meeting, virtual event, April 8, 2021.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) 260th American Chemical Society National Meeting, San Francisco, CA, August 2020.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* (INOR) 259th American Chemical Society National Meeting, Philadelphia, PA, March 2020.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 258th American Chemical Society National Meeting, San Diego, CA, August 25-29, 2019.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 257th American Chemical Society National Meeting, Orlando, FL, March 31, 2019.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 257th American Chemical Society National Meeting, Orlando, FL, March 31-April 4, 2019.

Discussion leader - *Organometallic Synthesis and Structure* Organometallic Chemistry Gordon Research Seminar, Newport, RI, July 7-8, 2018.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 255th American Chemical Society National Meeting, New Orleans, LA, March 18-22, 2018.

Discussion leader - *New Reactivity and Transformations* Organometallic Chemistry Gordon Research Conference, Newport, RI, July 9-14, 2017.

Discussion leader - *Frontiers in Organometallic Synthesis and Structure* Organometallic Chemistry Gordon Research Seminar, Newport, RI, July 8-9, 2017.

Division chair - *Inorganic, Catalysis and Energy* 45th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, June 4-6, 2017.

Co-session Chair - *Teaching Inorganic Chemistry* 45th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, June 5, 2017.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 253rd American Chemical Society National Meeting, San Francisco, CA, April 2-6, 2017.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 251st American Chemical Society National Meeting, San Diego, CA, March 13-17, 2016.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 249th American Chemical Society National Meeting, Denver, CO, March 22-26, 2015.

Co-session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry – IONiC VIPeR on Mg* 249th American Chemical Society National Meeting, Denver, CO, March 23, 2015.

Co-organizer - *Introduction to IONiC/VIPeR: Using and Sharing Inorganic Chemistry Education Resources* Biennial Conference on Chemical Education 2014, August 3, 2014.

Co-organizer - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 247th American Chemical Society National Meeting, Dallas, TX, March 16-20, 2014.

Session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry – Organometallic Chemistry* 247th American Chemical Society National Meeting, Dallas, TX, March 18, 2014.

Session Chair - *Heterobimetallic Compounds and their Chemistry* 245th American Chemical Society National Meeting, New Orleans, LA, April 10, 2013.

Session Chair - *Undergraduate Research at the Frontiers of Inorganic Chemistry* 243rd American Chemical Society National Meeting, San Diego, CA, March 27, 2012.

Session Chair - *Applications of Organometallic Chemistry* 40th Mid-Atlantic Regional Meeting of the American Chemical Society, Brooklyn, NY, May 20, 2008.

Session Chair – *Organometallics* 231st National Meeting of the American Chemical Society, Atlanta, GA, March 28, 2006.

INVITED SEMINARS, SYMPOSIA AND WORKSHOPS

Stevens Institute of Technology, February 8, 2024. “A historical (and current!) perspective on ferrocene.” **C. Nataro**

Duquesne University, January 12, 2024. “A historical (and current!) perspective on ferrocene.” **C. Nataro**

Messiah University, October 27, 2023. “Ferrocene: From a town that no longer exists to Stockholm.” **C. Nataro**

VIPeR Workshop on VIPeR Content Building, June 30, 2023. “What do we teach in our classes?” **C. Nataro.**

VIPeR Workshop on VIPeR Content Building, June 29, 2023. “How do we bring the literature into our classroom?” **C. Nataro.**

Co-organizer of VIPeR Workshop on VIPeR content development, Morgan State University, June 28-July 1, 2023.

Internet, *IONiC VIPeR SLiThEr #48*, April 20, 2023, “Teaching special topics in inorganic chemistry: Organometallic chemistry.” **C. Nataro.**

Internet, *IONiC VIPeR SLiThEr #46*, March 8, 2023, “A departmental climate survey.” W. Hill and **C. Nataro.**

University of Missouri – St. Louis, March 2, 2023. “Reactions and catalytic activity of gold compounds with bis(phosphino)metallocene ligands.” **C. Nataro**

Internet, *IONiC VIPeR SLiThEr #39*, October 6, 2022, “Learning object (LO) development and course structuring.” **C. Nataro.**

Internet, *IONiC VIPeR SLiThEr #35*, June 1, 2022, “Live from MARM.” **C. Nataro.**

Lehigh Valley Section of the American Chemical Society, November 18, 2021. “A VIPeR SLiThErs.”

Internet, *IONiC VIPeR SLiThEr #24*, August 4, 2021, “What I learned at my summer IONiC Workshop.” **C. Nataro.**

VIPeR Workshop on VIPeR Content Building, August 4, 2021. “VIPeR and issues of DEIJ” **C. Nataro.**

VIPeR Workshop on VIPeR Content Building, August 4, 2021. “Developing a rubric” **C. Nataro.**

VIPeR Workshop on VIPeR Content Building, August 3, 2021. “Teaching with a literature discussion.” **C. Nataro.**

VIPeR Workshop on VIPeR Content Building, August 3, 2021. "How do we bring the literature into our classroom?" **C. Nataro**.

Co-organizer of VIPeR Workshop on VIPeR content development, Morgan State University, August 2-5, 2021.

Lafayette College Reunion 2021, June 8, 2021, "Sharksploitation Movies: A JAWsome Experience." **C. Nataro**

ACS National Meeting, Moderator, April 6, 2021, "Panel discussion on applying for academic jobs in a predominately undergraduate institution" **C. Nataro**.

Internet, *IONiC VIPeR SLiThEr #18*, March 25, 2021, "Dr. Strangebook or: How I Learned to Stop Worrying and Love Libretext." **C. Nataro**.

Internet, *IONiC VIPeR SLiThEr #2*, July 16, 2020, "A 'traditional' course in an online environment." **C. Nataro**.

Princeton University, *Student Invited Lecture*, April 15, 2020, "Teaching at a PUI: Everything I needed to know I learned in graduate school." **C. Nataro**.

Lafayette Teaching Connections, February 5, 2020. "External community of Practice: IONiC VIPeR." **C. Nataro**.

VIPeR Workshop on VIPeR Content Building, June 5, 2019. "How do we bring the literature into our classroom?" **C. Nataro**.

VIPeR Workshop on VIPeR Content Building, June 5, 2019. "What do we teach in inorganic chemistry?" **C. Nataro**.

Organizational assistant of VIPeR Workshop on VIPeR Content Building, June 4-7, 2019.

Lehigh Valley Section of the American Chemical Society, *886th Meeting*, March 27, 2019. "Ferrocene: A long, strange trip."

Organometallic Chemistry Gordon Research Seminar, *Career Panel Discussion*, July 8, 2018.

Organometallic Chemistry Gordon Research Seminar, *Career Panel Discussion*, July 9, 2017.

Co-organizer of VIPeR Workshop on An IONiC Workshop on VIPeR and Literature Discussions, June 1-3, 2017.

VIPeR Workshop on An IONiC Workshop on VIPeR and Literature Discussions, June 3, 2017. "Challenges at your institution (removing roadblocks and learning from each other)."

VIPeR Workshop on An IONiC Workshop on VIPeR and Literature Discussions, June 2, 2017. "Synthesis of a stable compound with fivefold bonding between chromium(I) centers." H. Eppley and **C. Nataro**.

VIPeR Workshop on An IONiC Workshop on VIPeR and Literature Discussions, June 2, 2017. "Choosing papers & developing literature discussion LOs."

Lehigh Valley Section of the American Chemical Society, *870th Meeting*, January 19, 2017. "From isolation to a vibrant community of practice for teaching."

Lehigh Valley Section of the American Chemical Society, *870th Meeting*, January 19, 2017. "The Octagon – the early years."

VIPeR Workshop on Organometallica, June 27, 2016. "Teaching a literature discussion LO."

VIPeR Workshop on Organometallica, June 27, 2016. "Back to Grad School Session 1 – Electron counting via CBC."

VIPeR Workshop on Organometallica, June 27, 2016. "Mechanics of posting an LO."

Misericordia University, *Departmental Seminar*, February 26, 2016, "The Ferrocene Awakens."

UCLA, *Departmental Seminar*, January 7, 2016, "Research at a PUI: The bis(phosphino)ferrocene awakens."

VIPeR Workshop on Hetero-'genius' Catalysis, June 30, 2015. "Picking Favorites."

VIPeR Workshop on Hetero-'genius' Catalysis, June 29, 2015. "Electrochemistry Primer."

Lafayette College, *Departmental Seminar*, February 11, 2015. "Fun with Ferrocene."

245th American Chemical Society National Meeting, New Orleans, LA, *Heterobimetallic Compounds and their Chemistry*, April 9, 2013. "Bis(phosphino)ferrocene compounds with Fe-M (M = Pd or Pt) interactions."

Villanova University, *Departmental Seminar*, February 26, 2013, "Ferrocene: Days of future past."

Organometallic Chemistry Gordon Research Seminar, *Career Panel Discussion*, July 10, 2011.

Temple University, *Departmental Seminar*, October 15, 2009. "Reactivity and electrochemistry of bis(phosphino)ferrocenes."

Brown University, *Departmental Seminar*, January 23, 2009. "Synthesis and electrochemistry of bidentate phosphinechalcogenides with metallocene backbones."

Brandeis University, *Departmental Seminar*, January 22, 2009. "Synthesis and electrochemistry of bidentate phosphinechalcogenides with metallocene backbones."

40th Mid-Atlantic Regional Meeting of the American Chemical Society, *Applications of Organometallic Chemistry*, May 20, 2008. "Synthesis and electrochemistry of bidentate phosphinechalcogenides with metallocene backbones."

University of Vermont, *Departmental Seminar*, April 7, 2008. "Synthesis and electrochemistry of bidentate phosphinometallocenes."

Lafayette College, *Thomas Roy and Lura Forrest Jones Lecture*, October 29, 2007. "Mirror mirror"

Chicago State University, *Departmental Seminar*, March 27, 2007. "Chemistry wars: revenge of the selenium."

233rd American Chemical Society National Meeting, Chicago, IL, *ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Symposium in Honor of Robert J. Angelici*, March 26, 2007. "Binding of bis(phosphino)metallocenes: Amazing, novel, grand, electrochemically lively inorganic complexes investigated."

Messiah College, *Departmental Seminar*, October 10, 2006. "The past and future of ferrocene."

Lafayette College, *Departmental Seminar*, September 15, 2006. "Chemistry wars: revenge of the selenium."

Gettysburg College, *Departmental Seminar*, December 1, 2005. "Why diphosphinoferrocenes are freakin' sweet!"

University of Vermont, *2005 Vermont NSF EPSCoR Annual Conference*, August 15, 2005. "Anodic electrochemistry of bidentate phosphines with metallocene backbones."

Bucknell University, *Departmental Seminar*, February 23, 2005. "Fire good! How a mistake opened the door to examining bidentate phosphines with metallocene backbones."

Indiana University, *4th Annual Excellence in Undergraduate Chemical Research Symposium*, September 11, 2004. "Fire good! How a mistake turned into a research project."

University of Rochester, *Frontiers in Undergraduate Research*, October 26, 2002. "Training and developing undergraduate students as researchers."

Lafayette College, *Departmental Seminar*, September 13, 2002. "Investigating bis(diphenylphosphino)metallocenes."

University of Delaware, *PuDDuP Meeting*, April 17, 2002. "Investigating bis(diphenylphosphino)metallocenes."

PUBLISHED ABSTRACTS FROM TALKS AND POSTERS PRESENTED AT CONFERENCES

*(undergraduate co-authors are underlined, high school co-authors are italicized, * oral presenter, ‡ poster presenter)*

"Reactivity of late metal compounds of bis(phosphino)metallocene ligands." **C. Nataro[‡]**, A.E. Boggess, K.C. Wong, I.S. Leiby, J. Soika, T.J. Roberts, M. Familetti, V. Parparcén, N. Ding, K. Kunz, Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2023.

"The reactivity of [M(PP)Cl₂] (M = Ni or Pt; PP = 1,1'-bis(phosphino)metallocene) with Na[BArF₂₄] (BArF₂₄ = tetrakis(3,5-bis(trifluoromethyl)phenyl)borate) and reactions of the subsequent products." K. Wong^{*}, I. Lowdermilk and **C. Nataro**, National Meeting of the American Chemical Society, Indianapolis, IN, March 2023.

"Preparation of [Pd(PP)(PR₃)Cl][BArF₂₄] (PP = 1,1'-bis(phosphino)metallocene; BArF₂₄ = tetrakis(3,5-bis(trifluoromethyl)phenyl)borate) compounds by the reaction of monodentate phosphines and [Pd(PP)(μ-Cl)]₂[BArF₂₄]₂." I. Leiby^{*}, V. Parparcén, N. Ding, K. Kunz and **C. Nataro**, National Meeting of the American Chemical Society, Indianapolis, IN, March 2023.

"IONiC VIPER: A community racing to improve teaching and learning." **C. Nataro**[‡], A.K. Bentley, K.N. Crowder, H.J. Eppley, A.L. Fernandez, K.A. Grice, E.R. Jamieson, S. Lin, J.M. Pratt, J.R. Raker, B.A. Reisner, S.R. Smith, J.L. Stewart, K.L. Stone, L.A. Watson and N.S.B. Williams, National Meeting of the American Chemical Society, Indianapolis, IN, March 2023.

"Reactivity of compounds with bis(phosphino)ferrocene ligands." **C. Nataro**[‡], S.A. Wolfarth, K.C. Wong, I.S. Leiby, V. Parparcén, N. Ding, K. Kunz, E.P. Winter, A.E. Boggess and R.K. Gwinn Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2022.

"Cleavage of the dimeric heterometallic complexes [Pd(dppf)(μ^2 -Cl)]₂[BArF₂₄]₂ (dppf = 1,1'-bis(diphenylphosphino)ferrocene) using monodentate phosphines." S. Wolfarth and **C. Nataro**^{*}, Mid-Atlantic Regional American Chemical Society Meeting, Ewing, NJ, June 2022.

"MO: Is it me you're looking for?" A. Johnson^{*} and **C. Nataro**^{*}, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"Cleavage of the dimeric heterometallic complexes [Pd(PP)(μ^2 -Cl)]₂[BArF₂₄]₂ (PP = bis(phosphino)ferrocene) using monodentate phosphines." S. Wolfarth^{*} and **C. Nataro**, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"What if...dppf was not the iron horse of an undergraduate research program? In my experience there is no such thing as luck." **C. Nataro**^{*}, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"Catalytic activity of gold compounds with 1,1'-bis(phosphino)metallocene ligands." N. Miner^{*} and **C. Nataro**, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"Interactive online network of inorganic chemists: A community of transformation that's staying classy." A. Bentley, N. Crowder, H. Eppley, A. Fernandez, K. Grice, E. Jamieson, S. Lin **C. Nataro**[‡], J. Pratt, J. Raker, B. Reisner, S. Smith, J. Stewart, K. Stone, L. Watson and N. Williams, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"IONiC VIPER workshops: Building community one learning object at a time." W.-Y. Chu[‡], M. Orr[‡], J. Pham[‡], N. Crowder, H. Eppley and **C. Nataro**, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"Synthesis, characterization, X-ray crystal structures and electrochemistry of [(AuCl)₂(μ -dppM)] (M = Ru or Os) compounds." A. Boggess[‡], L. Winter and **C. Nataro**, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"Analysis and efficiency of various metal catalysts in the formation of disubstituted furans." L. Winter[‡], A. Boggess, R. Gwinn and **C. Nataro**, National Meeting of the American Chemical Society, San Diego, CA, March 2022.

"IONiC VIPER: A community of practice for the advancement of inorganic chemistry teaching." **C. Nataro**^{*}, A. Bentley, N. Crowder, H. Eppley, A. Fernandez, K. Grice, E. Jamieson, A. Johnson, S. Lin, J. Pratt, J. Raker, B. Reisner, S. Smith, J. Stewart, K. Stone, L. Watson, N. Williams, Pacificchem 2021, virtual event, December 2021.

"Gold catalysts with redox-active bis(phosphino)ferrocene ligands." **C. Nataro**[‡] Pacificchem 2021, virtual event, December 2021.

"Synthesis of furans using gold catalysts with 1,1'-bis(phosphino)ferrocene ligands." R. Gwinn† and **C. Nataro**, National Meeting of the American Chemical Society, virtual event, April 2021.

"Synthesis, characterization and electrochemistry of [Pd(PP)MeCl] (PP = bis(phosphino)ferrocene) compounds." M. Hendricks† and **C. Nataro**, National Meeting of the American Chemical Society, virtual event, April 2021.

"1,1'-bis(diarylphosphino)ferrocene compounds: Metal complexes and chalcogenides." N. Colicchio† and **C. Nataro**, National Meeting of the American Chemical Society, virtual event, April 2021.

"Remember the IONiC: A community of transformation for teaching and learning inorganic chemistry." **C. Nataro**†, A. K. Bentley, K. N. Crowder; H. J. Eppley, A. L. Fernandez; K. A. Grice, E. R. Jamieson, S. Lin, J. M. Pratt, J. R. Raker, B. A. Reisner, S. R. Smith, J. L. Stewart, K. L. Stone, L. A. Watson, N. B. S. Williams, National Meeting of the American Chemical Society, virtual event, April 2021.

"When computational chemistry fails: Modeling geometries of nickel(II) diphosphine complexes." S. Towell*, A. R. Johnson and **C. Nataro**, National Meeting of the American Chemical Society, virtual event, April 2021.

"Catalytic applications of gold compounds containing bis(phosphino)ferrocene ligands." **C. Nataro***, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Derivatives of 1,1'-bis(diphenylphosphino)ferrocene." N. Colicchio†, E. Lubas, A. Connor and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Hip to be square (planar): VIPER content building workshop on molecular orbital theory and bonding." W.S. Farrell†, A.L. Fernandez, E.R. Jamieson, J.R. Miecznikowski† and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Hydroamination reactions catalyzed by gold compounds with bis(phosphino)ferrocene ligands." N. Miner†, S. Wolfarth†, R. Gwinn, N. Wamser, B.C. Chan and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Interactive inorganic: 'I's' of the VIPER." S. Poland, **C. Nataro**, A.K. Bentley, H.J. Eppley, E.R. Jamieson, S. Lin, A.R. Johnson†, J.M. Pratt, J.R. Raker, B.A. Reisner, S.R. Smith, J.L. Stewart, L.A. Watson, N.B.S. Williams, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Synthesis of furans using gold catalysts with 1,1'-bis(phosphino)ferrocene ligands." R. Gwinn† and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Synthesis, electrochemistry and catalytic activity of [Pd(PP)MeCl] (PP = 1,1'-bis(phosphino)ferrocene ligands) compounds." M. Hendricks†, X. Xu, M. Koorie and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"IONiC: Advancing inorganic chemistry through collaborative curriculum and material development." L. Watson* and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"Reactivity of [Pd(PP)MeCl] (PP = 1,1'-bis(phosphino)ferrocene ligands) compounds." X. Xu[‡], and **C. Nataro**, 259th National Meeting of the American Chemical Society, Philadelphia, PA, March 2020.

"VIPeR: Community and content for the inorganic classroom." N.B.S. Williams[‡], **C. Nataro**, A.K. Bentley, H.J. Eppley, E.R. Jamieson, S. Lin, A.R. Johnson, J.R. Raker, B.A. Reisner, S.R. Smith, J.L. Stewart, L.A. Watson, N.B.S. Williams, 258th National Meeting of the American Chemical Society, San Diego, CA, August 2019.

"Compounds with 1,1'-bis(phosphino)ferrocene ligands as hydroamination and polymerization catalysts." N. Wamser, R. Gwinn, N. Miner, S. Wolfarth, X. Xu, M. Hendricks, M. Koorie and **C. Nataro**[‡], Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2019.

"Ask not what VIPeR can do for you – ask what you can do for VIPeR." E.C. Sylvester, **C. Nataro**, A.K. Bentley, H.J. Eppley, E.R. Jamieson, S. Lin, A.R. Johnson, J.R. Raker, B.A. Reisner, S.R. Smith, J.L. Stewart, L.A. Watson, N.B.S. Williams, 257th National Meeting of the American Chemical Society, Orlando, FL, April 2019.

"Hydroamination reactions catalyzed by [Au₂(μ-Cl)(μ-bis(phosphino)ferrocene)][BARF₂₄]." N.E. Wamser^{*}, 257th National Meeting of the American Chemical Society, Orlando, FL, April 2019.

"Suzuki-Miyaura coupling employing palladium catalysts with 1,1'-bis(ditert-butylphosphino)ferrocene in different coordination modes." R. Bal[‡] and **C. Nataro**, 257th National Meeting of the American Chemical Society, Orlando, FL, March and April 2019.

"I find your lack of bis(phosphino)metallocene ligands disturbing: The varying coordination modes exhibited by these ligands to encoil transition metals." **C. Nataro**^{*}, Organometallic Chemistry Gordon Research Seminar, Providence, RI, July 2018.

"Synthesis and reactivity of palladium compounds with κ³-bis(phosphino)ferrocene ligands." N.E. Wamser^{*}, R. Bal^{*} and **C. Nataro**, 255th National Meeting of the American Chemical Society, New Orleans, LA, March 2018.

"Catalytic ring closing reactions of gold compounds containing bis(phosphino)ferrocene ligands." T.A. Michaels[‡] and **C. Nataro**, 255th National Meeting of the American Chemical Society, New Orleans, LA, March 2018.

"IONiC VIPeR: Slithering to the next stage of improving the teaching and learning of inorganic chemistry." L.A. Watson[‡], **C. Nataro**[‡], A.K. Bentley, H.J. Eppley, E.R. Jamieson, A.R. Johnson, J.R. Raker, B.A. Reisner, S.R. Smith, J.L. Stewart and N.S.B. Williams[‡], 255th National Meeting of the American Chemical Society, New Orleans, LA, March 2018.

"Reactivity of late transition metal compounds with redox active ligands." N. Wamser, R. Bal, J. Dell, K. Cabrera, N. Lauricella and **C. Nataro**[‡], Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2017.

"Reactivity of late transition metal compounds with redox active ligands." N. Wamser, R. Bal, J. Dell, K. Cabrera, N. Lauricella and **C. Nataro**[‡], Organometallic Chemistry Gordon Research Seminar, Providence, RI, July 2017.

"Reactions of palladium compounds containing 1,1'-di(phenylphosphino)ferrocene." N. Wamser^{*} and **C. Nataro**, 45th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, June 2017.

"IONiC VIPER: A community of practice for improving the teaching of inorganic chemistry." **C. Nataro**, 45th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, June 2017.

"Developing literature discussions for an advanced inorganic chemistry course." **C. Nataro**, 45th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, June 2017.

"Synthesis and reactivity of compounds containing a κ^3 -1,1'-bis(diphenylphosphino)ferrocene ligand." K. Cabrera^{*} and **C. Nataro**, 253rd National Meeting of the American Chemical Society, San Francisco, CA, April 2017.

"Late transition metal compounds with 1,1'-bis(phosphino)ferrocene ligands." N. Lauricella[‡], S. Hartlaub, C. Ryczek, A. Furneaux, J. Melton, N. Piro, W. Kassel and **C. Nataro**, 253rd National Meeting of the American Chemical Society, San Francisco, CA, April 2017.

"Substitution reactions of compounds containing 1,1'-bis(phosphino)ferrocene ligands." N. Wamser[‡], K. Cabrera[‡] and **C. Nataro**, 253rd National Meeting of the American Chemical Society, San Francisco, CA, April 2017.

"IONiC bonding: Building a lattice using attractive forces." A. Johnson[‡], J. Stewart[‡], A. Bentley, H. Eppley, E. Jamieson, **C. Nataro**, B. Reisner, S. Smith, L. Watson and N. Williams[‡], 253rd National Meeting of the American Chemical Society, San Francisco, CA, April 2017.

"Building community in (inorganic) chemistry: Ideas from IONiC." B. Reisner^{*} and **C. Nataro**^{*}, 253rd National Meeting of the American Chemical Society, San Francisco, CA, April 2017.

"Leveraging resources on VIPER to teach inorganic chemistry." E. Jamieson^{*} and **C. Nataro**^{*}, 252st National Meeting of the American Chemical Society, Philadelphia, PA, August 2016.

"Synthesis and reactivity of compounds containing 1,1'-bis(phosphino)ferrocene ligands." B. L. Blass, K. Cabrera, A. G. Furneaux, K. M. Gramigna, S. F. Hartlaub, N. Lauricella, A. Rowland, C. Ryczek, N. Wamser and **C. Nataro**[‡], Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2016.

"Synthesis and reactivity of compounds with 1,1'-bis(phosphino)ferrocenediyl ligands." V. A. Decker[‡], B. L. Blass, N. K. Lauricella and **C. Nataro**, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Tetrahedral compounds with bis(phosphino)ferrocene ligands." S. F. Hartlaub[‡], A. G. Furneaux and **C. Nataro**, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Synthesis and reactivity of compounds containing 1,1'-bis(phosphino)metallocene ligands." R. J. Dupuis‡, E. P. Warnick and **C. Nataro**, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Oxidation of a coordinated bis(phosphino)ferrocene ligand." **C. Nataro***, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Incorporation of research in the undergraduate inorganic chemistry curriculum: IONiC VIPER workshops." S. Goforth‡, P. Fischer‡ and **C. Nataro**‡, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Expanding the frontiers of inorganic chemistry." H. Eppley, **C. Nataro**‡, A. Bentley, E. Jamieson, A. Johnson‡, B. Reisner, J. Stewart‡, S. Smith, L. Watson and N. Williams‡, 251st National Meeting of the American Chemical Society, San Diego, CA, March 2016.

"Interesting reactivity and structures of compounds with 1,1'-bis(phosphino)metallocene ligands." B. L. Blass, V. A. Decker, A. G. Furneaux, E. P. Warnick and **C. Nataro**‡, Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2015.

"Reactivity of bis(phosphino)ferrocenediyl containing compounds." **C. Nataro***, 249th National Meeting of the American Chemical Society, Denver, CO, March 2015.

"VIPER faculty development workshops: Cutting edge content development and sharing pedagogical best practices." H. Eppley*, A. Johnson*, A. Bentley, E. Jamieson, **C. Nataro**, J. Raker, B. Reisner, S. Smith, J. Stewart, L. Watson and N. Williams*, 249th National Meeting of the American Chemical Society, Denver, CO, March 2015.

"Mg deficient IONiC/VIPER: An online community for inorganic chemists." M. Geselbracht, A. Bentley‡, H. Eppley‡, E. Jamieson, A. Johnson‡, **C. Nataro**‡, B. Reisner‡, J. Stewart‡, S. Smith‡, N. Williams‡ and L. Watson‡, 249th National Meeting of the American Chemical Society, Denver, CO, March 2015.

International Society for the Scholarship of Teaching and Learning Conference 2014, October 25, 2014, "From Isolation to a Vibrant Community of Practice for Teaching." (G02) H. Eppley, **C. Nataro** and J. Stewart.

Biennial Conference on Chemical Education 2014, August 5, 2014. "MO's in sophomore inorganic inspired by a VIPER learning object."

International Conference on Chemistry Education 2014, July 17, 2014. "VIPER: Building a community to improve teaching and learning in inorganic chemistry." (Oral: 281) **C. Nataro** and J. L. Stewart.

"M-M interactions in compounds containing 1,1'-bis(phosphino)ferrocene ligands." B. L. Blass, V. A. Decker, K. M. Gramigna, C. L. Mandell, C. N. McCarthy, M. A. Tiedemann, E. P. Warnick and **C. Nataro**‡, Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2014.

"The Synthesis and Electrochemistry of 1,1'-Disubstituted Cobaltocenium Compounds" E. P. Warnick*, 28th National Conference on Undergraduate Research, Lexington, KY, April 2014.

"Halide abstraction from $[M'X_2(1,1'$ -bis(phosphino)metallocene complexes." M. A. Tiedemann*, 247th National Meeting of the American Chemical Society, Dallas, TX, March 2014.

"Ride the snake: The online, inorganic community of IONiC/VIPeR." **C. Nataro**‡, S. R. Smith‡, S. N. Collins, H. J. Eppley, M. J. Geselbracht, E. R. Jamieson, A. R. Johnson, B. A. Reisner, J. L. Stewart, B. S. Williams and L. A. Watson, 247th National Meeting of the American Chemical Society, Dallas, TX, March 2014.

"Metal-metal interactions in compounds with 1,1'-bis(phosphino)metallocene ligands." E. G. Lubas‡, E. P. Warnick, M. A. Tiedemann and **C. Nataro**, 247th National Meeting of the American Chemical Society, Dallas, TX, March 2014.

"Effect of Au(III) redox stabilization on anticancer activity." P. Kamalakannan, **C. Nataro**, T. House and A. Ontko, 48th Midwest Regional Meeting of the American Chemical Society, Springfield, MO, October 2013.

"Characterization and electrochemical studies of ferrocenyl phosphines." C. L. Mandell*, 246th National Meeting of the American Chemical Society (Oral presentation for the American Chemical Society Division of Inorganic Chemistry Award for Undergraduate Research), Indianapolis, IN, September 2013.

"VIPeR workshops: Building a "Back to Grad School" model for creating cutting-edge inorganic teaching materials." L. A. Watson‡, H. J. Eppley‡, **C. Nataro**‡, S. N. Collins, M. J. Geselbracht, E. R. Jamieson, A. R. Johnson, B. A. Reisner, R. E. Schaak, S. R. Smith, J. L. Stewart and B. S. Williams, 246th National Meeting of the American Chemical Society, Indianapolis, IN, September 2013.

"Heterobimetallic Fe/Ru/Os-Pd/Pt species with M-M' interactions." K. M. Gramigna, C. L. Mandell, J. V. Oria, M. A. Tiedemann, E. G. Lubas, E. P. Warnick, W. G. Dougherty, W. S. Kassel, P. L. Diaconescu and **C. Nataro**‡, Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2013.

"Pd/Pt compounds of 1,1'-bis(disubstitutedphosphino)ferrocenes: Dative bond formation between the Fe and Pd/Pt atoms." K. M. Gramigna‡, M. A. Tiedemann‡, C. L. Mandell, W. G. Dougherty, W. S. Kassel and **C. Nataro**, 245rd National Meeting of the American Chemical Society, New Orleans, LA, April 2013.

"Electrochemical and structural characterization of mono- and bis-phosphine chalcogenides." M. A. Tiedemann‡, C. L. Mandell, B. C. Chan, A. R. O'Connor and **C. Nataro**. 245rd National Meeting of the American Chemical Society, New Orleans, LA, April 2013.

"IONiC/VIPeR at five: Developing a model network for sharing pedagogical resources." **C. Nataro**‡, S. R. Smith‡, S. N. Collins, H. J. Eppley, M. J. Geselbracht, E. R. Jamieson, A. R. Johnson, B. A. Reisner, J. L. Stewart, B. S. Williams and L. A. Watson. 245rd National Meeting of the American Chemical Society, New Orleans, LA, April 2013.

"Pd/Pt compounds of 1,1'-bis(disubstitutedphosphino)ferrocenes: Dative bond formation between the Fe and Pd/Pt atoms." C. L. Mandell, M. A. Tiedemann, K. M. Gramigna, W. G. Dougherty, W. S. Kassel and **C. Nataro**‡, Organometallic Chemistry Gordon Research Conference, Providence, RI, July 2012.

"VIPeR: Developing and sharing classroom content from the frontiers of inorganic chemistry." J. Stewart‡, H. Eppley, S. Collins, M. Geselbracht, E. Jamieson, A. Johnson, **C. Nataro**, B. Reisner, S.

Smith, B. S. Williams and L. Watson. 2012 Biennial Conference on Chemical Education, University Park, PA, July 2012.

"Electrochemistry and structural parameters of phosphine chalcogenides." C. L. Mandell*, M. A. Tiedemann, **C. Nataro**, B. C. Chan and A. R. O'Connor. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 2012.

"Electrochemistry of metal carbonyls with 1,1'-bis(phosphino)metallocene ligands." A. Lopez, K. M. Gramigna†, J. Berstler, D. Menard, **C. Nataro**, W. G. Dougherty, W. S. Kassel and M. J. Shaw. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 2012.

"Phosphine chalcogenides: Synthesis, electrochemistry and structural characterization." M. A. Tiedemann†, C. L. Mandell, **C. Nataro**, A. R. O'Connor and B. C. Chan. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 2012.

"Electrochemistry of 1,1'-disubstituted cobaltocenium compounds." J. K. Pagano†, K. D. Reichl, C. L. Mandell, O. J. Henn, E. C. Sylvester, **C. Nataro**, W. G. Dougherty and W. S. Kassel. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 2012.

"VIPer: Adapt and adopt classroom content from the frontiers of inorganic chemistry." H. J. Eppley, **C. Nataro**†, M. J. Geselbracht, E. R. Jamieson, A. R. Johnson, B. A. Reisner, S. Smith, J. L. Stewart, L. A. Watson and B. S. Williams. 243rd National Meeting of the American Chemical Society, San Diego, CA, March 2012.

"Electrochemistry and structural parameter of 1,1'-bis(phosphino)cobaltocenium ligands." **C. Nataro***, 243rd American Chemical Society National Meeting, San Diego, CA, March, 2012.

"Long and winding road: From the research lab to the teaching lab." **C. Nataro***, 243rd American Chemical Society National Meeting, San Diego, CA, March, 2012.

"Electrochemical and structural comparisons of bis(phosphino)cobaltocenium and bis(phosphino)ferrocene compounds." K. D. Reichl, C. L. Mandell, O. G. Henn, E. C. Sylvester, W. G. Dougherty, W. S. Kassel and **C. Nataro**†. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2011.

"Synthesis, reactivity and electrochemistry of bis(phosphino)metallocenes." C. L. Mandell, A. R. Seibert, K. D. Reichl, O. D. Henn, S. S. Kleinbach, W. S. Kassel, W. G. Dougherty and **C. Nataro**†. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2010.

"FerroLANE and FerroTANE ligands: Reactivity and electrochemistry of chiral 1,1'-bis(phosphino)ferrocene ligands." C. L. Mandell†, S. S. Kleinbach, W. S. Kassel, W. G. Dougherty and **C. Nataro**. 239th National Meeting of the American Chemical Society, San Francisco, CA, March, 2010.

"Electrochemistry and reactivity of ferrocenylphosphines." A. R. Seibert†, W. S. Kassel, W. G. Dougherty, D. S. Gleuck, M. F. Cain and **C. Nataro**. 239th National Meeting of the American Chemical Society, San Francisco, CA, March, 2010.

"Electrochemistry and reactivity of bis(phosphino)cobaltocenium compounds." K. D. Reichl†, W. S. Kassel, W. G. Dougherty and **C. Nataro**. 239th National Meeting of the American Chemical Society, San Francisco, CA, March, 2010.

"A tale of two undergrads: What an early start can do for you." A. R. Seibert*, C. L. Mandell* and **C. Nataro***, 239th American Chemical Society National Meeting, San Francisco, CA, March, 2010.

"Electrochemistry of compounds with FerroTANE and FerroLANE ligands." S. S. Kleinbach, C. L. Mandell and **C. Nataro**†. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2009.

"Reactions of bisphosphine sulfides and bisphosphine selenides with ferrocene backbones." **C. Nataro**, S. S. Kleinbach† and A. R. Seibert, 237th National Meeting of the American Chemical Society, Salt Lake City, UT, March, 2009.

"Synthesis and electrochemistry of bis(phosphine chalcogenide)ferrocenes." **C. Nataro**†, S. L. Kahn, S. L. Martinak, S. M. Fosbenner, M. K. Breheny and A. R. Seibert. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2008.

"Ruthenium hydride hydrogenation catalysts with bisphosphinometallocene ligands." L. A. Sites† and **C. Nataro**, 235th National Meeting of the American Chemical Society, New Orleans, LA, April, 2008.

"Examining the redox properties of bisphosphines with metallocene backbones." J. Berstler† and **C. Nataro**, 235th National Meeting of the American Chemical Society, New Orleans, LA, April, 2008.

"How bisphosphinoferrocenes changed my life." **C. Nataro***, 235th American Chemical Society National Meeting, New Orleans, LA, April, 2008.

"Electrochemistry and reactivity of bisphosphinometallocenes." A. F. Maddox, D. A. Jarem, L. A. Sites, H. A. Carroll, S. M. Fosbenner and **C. Nataro**†. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2007.

"Oxidative electrochemistry of chiral bis(phosphino)ferrocenes." A. F. Maddox†, J. A. Golen, A. L. Rheingold, W. S. Kassel and **C. Nataro**, 233rd National Meeting of the American Chemical Society, Chicago, IL, March, 2007.

"Preparation of ruthenium hydride hydrogenation catalysts." D. A. Jarem† and **C. Nataro**, 233rd National Meeting of the American Chemical Society, Chicago, IL, March, 2007.

"Examining the redox properties of metal carbonyl complexes containing bidentate phosphines with metallocene backbones." J. Berstler†, D. Ménard, M. J. Shaw and **C. Nataro**, 233rd National Meeting of the American Chemical Society, Chicago, IL, March, 2007.

"Electrochemistry and reactivity of metallocene containing phosphine selenides." F. N. Blanco, L. E. Hagopian, W. R. McNamara and **C. Nataro**†. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2006.

"Anodic electrochemistry of 1-diphenylphosphino-1'-(di-tert-butylphosphino)ferrocene." S. L. Kahn† and **C. Nataro**, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"1,1'-Bis(ditertbutylphosphino)ferrocene: Electrochemistry and compounds." F. Blanco[‡], L. E. Hagopian and **C. Nataro**, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"Anodic electrochemistry of Josiphos ligands and complexes of Josiphos ligands." L. A. Sites[‡], S. L. Martinak[‡], B. L. Ghent, **C. Nataro** and A. L. Rheingold, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"BoPhoz derivatives." M. D. Saybolt[‡] and **C. Nataro**, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"Oxidative electrochemistry of Walphos ligands and complexes containing Walphos ligands." A. F. Maddox[‡] and **C. Nataro**, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"Anodic electrochemistry of Mn and Re carbonyl compounds with bis(diphosphino)ferrocene ligands." D. Ménard[‡] and **C. Nataro**, 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006.

"1,1'-bis(ditertbutylphosphino)ferrocene: electrochemistry and compounds." **C. Nataro**[‡], F. N. Blanco and L. E. Hagopian. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2005.

"Electrochemistry and new compounds of BoPhoz and Josiphos ligands." **C. Nataro**[‡], B. L. Ghent and L. A. Sites. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2005.

"Electrochemistry and New Compounds of BoPhozTM Ligands." B. L. Ghent[‡] and **C. Nataro**. 229th National Meeting of the American Chemical Society, San Diego, CA, March, 2005.

"Electrochemistry of gold polypyridyl complexes." K. Palanichamy, A. Ontko, K. P. Barry[‡] and **C. Nataro**. 229th National Meeting of the American Chemical Society, San Diego, CA, March, 2005.

"Electrochemical and Catalytic Studies of Bidentate Phosphines with Metallocene Backbones." **C. Nataro**[‡], A. N. Campbell, M. A. Ferguson, J. H. L. Ong, L. E. Hagopian and S. J. Kolb. Organometallic Chemistry Gordon Research Conference, Providence, RI, July, 2004.

"Exploring the steric and electronic effects of 1,1'-bis(diorganophosphino)metallocenes on the catalytic coupling of aryl bromides and primary amines." A. N. Campbell[‡] and **C. Nataro**. 227th National Meeting of the American Chemical Society, Anaheim, CA, March, 2004.

"Synthesis, characterization and electrochemistry of Cp^{*}Ru(PⁿP)X compounds." K. M. Bocage[‡] and **C. Nataro**. 227th National Meeting of the American Chemical Society, Anaheim, CA, March, 2004.

"Use of Ru⁺² to investigate the chromophore binding site in Phycocyanin." M. A. Ferguson[‡], Y. M. Gindt and **C. Nataro**. 227th National Meeting of the American Chemical Society, Anaheim, CA, March, 2004.

"1,1'-Bis(dicyclohexylphosphino)ferrocene and 1,1'-bis(di-*t*-butylphosphino)ferrocene: electrochemistry and complexation." L. E. Hagopian[‡], **C. Nataro**, and A. L. Rheingold. 227th National Meeting of the American Chemical Society, Anaheim, CA, March, 2004.

"Electrochemistry of dppfE₂ (E = O, S or Se) and dppfOE (E = S or Se)." B. D. Swartz[‡] and **C. Nataro**. 227th National Meeting of the American Chemical Society, Anaheim, CA, March, 2004.

"Steric and electronic influence of 1,1'-bis(diorganophosphino)metallocenes on catalysis." A. N. Campbell^{*} and **C. Nataro**. 226th National Meeting of the American Chemical Society, New York, NY, September, 2003.

"Synthesis and characterization of 1,1'-bis(2-ethanol)ferrocene." K. P. Barry[‡], **C. Nataro**, R. H. Herber and A. L. Rheingold. 226th National Meeting of the American Chemical Society, New York, NY, September, 2003.

"Electrochemistry and reactivity of 1,1'-bis(di-*iso*-propylphosphino)ferrocene." J. H. L. Ong[‡] and **C. Nataro**. 226th National Meeting of the American Chemical Society, New York, NY, September, 2003.

"Probing the aryl conjugation in semi-conducting group 14 polymers." D. A. Ruddy[‡], **C. Nataro** and D. H. Berry. Frontiers in Undergraduate Research, University of Rochester, NY, October, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ruthenocene and related group 10 compounds." M. A. Ferguson[‡], A. N. Campbell[‡] and **C. Nataro**. Frontiers in Undergraduate Research. University of Rochester, NY, October, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene." A. N. Campbell and **C. Nataro**. Frontiers in Undergraduate Research, University of Rochester, NY, October, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of group 6 metal carbonyls." A. C. Ohs[‡], **C. Nataro** and A. L. Rheingold. Frontiers in Undergraduate Research, University of Rochester, NY, October, 2002.

"Synthesis and electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of Ru₃(CO)₁₂." A. R. O'Connor[‡], **C. Nataro** and A. L. Rheingold, Frontiers in Undergraduate Research, University of Rochester, NY, October, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ruthenocene and related group 10 compounds." **C. Nataro**, M. A. Ferguson[‡] and A. N. Campbell. 224th National Meeting of the American Chemical Society, Boston, MA, August, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene." **C. Nataro** and A. N. Campbell[‡]. 224th National Meeting of the American Chemical Society, Boston, MA, August, 2002.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of group 6 metal carbonyls." **C. Nataro**, A. C. Ohs[‡] and A. L. Rheingold. 224th National Meeting of the American Chemical Society, Boston, MA, August, 2002.

"Synthesis and electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of Ru₃(CO)₁₂." **C. Nataro**, A. R. O'Connor[‡] and A. L. Rheingold. 224th National Meeting of the American Chemical Society, Boston, MA, August, 2002.

"Derivatives of $\text{Ru}_3(\text{CO})_{12}$ with 1,1'-bis(diphenylphosphino)ferrocene." A. R. O'Connor[‡] and **C. Nataro**. 20th annual Ester B. and Bingham J. Humphrey Memorial Symposium, University of Vermont, VT, October, 2001.

"Group 6 Metal Carbonyl Compounds with 1,1'-bis(diphenylphosphino)ferrocene." A. C. Ohs[‡] and **C. Nataro**. 20th annual Ester B. and Bingham J. Humphrey Memorial Symposium, University of Vermont, VT October, 2001.

"Electrochemistry and bond dissociation enthalpies (BDEs) for a series of ruthenium dimers." K. M. Rourke[‡] and **C. Nataro**. Mid-Atlantic Regional Meeting of the American Chemical Society, Towson, MD, May, 2001.

"Analysis of phosphines functionalized with crown ether groups by NMR and cyclic voltammetry." A.R. O'Connor[‡] and **C. Nataro**. Mid-Atlantic Regional Meeting of the American Chemical Society, Towson, MD, May, 2001.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene." A.N. Campbell^{*} and **C. Nataro**. Intercollegiate Student Chemists' Convention, Annville, PA, April, 2001.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ruthenocene and related group 10 compounds." M. A. Ferguson^{*} and **C. Nataro**. Intercollegiate Student Chemists' Convention, Annville, PA, April, 2001.

"Synthesis and electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of $\text{Ru}_3(\text{CO})_{12}$." A. R. O'Connor^{*} and **C. Nataro**. Intercollegiate Student Chemists' Convention, Annville, PA, April, 2001.

"Electrochemistry of 1,1'-bis(diphenylphosphino)ferrocene derivatives of group 6 metal carbonyls." A. C. Ohs^{*} and **C. Nataro**. Intercollegiate Student Chemists' Convention, Annville, PA, April, 2001.

"Electrochemistry of $\text{Ru}_2\text{Cp}'_2(\text{CO})_4$ and $\text{Ru}_2\text{Cp}_2(\text{CO})_3(\text{PMe}_3)$ to determine metal- hydrogen-metal bond dissociation enthalpies." **C. Nataro** and K. M. Rourke[‡]. 221st National Meeting of the American Chemical Society, San Diego, CA, April, 2001.

"Electrochemical and ³¹P NMR study of diphenyl-3,4-18-crown-6-phenylphosphine (PCE)." **C. Nataro**, C. M. Thomas[‡], H. M. Baseski, B. J. Wiza and K. M. Rourke. 220th National Meeting of the American Chemical Society, Washington, DC, August, 2000.

"Calorimetric Studies of the Heats of Protonation as a Measure of the Metal-metal Bond Basicity in a Series of Dimeric Ruthenium Carbonyl Complexes." R. J. Angelici and **C. Nataro**[‡]. 210th National Meeting of the American Chemical Society, Chicago, IL, August, 1995.

"The Methyl Esterification of Two Hydronicotinic Acids with 2,2-dimethoxypropane, Methanol and Aqueous Hydrogen Chloride." **C. Nataro**^{*} and P. S. Fraser. Annual Student/Faculty Meeting of the Sigma Xi Club of South-central Pennsylvania, Emmitsburg, MD, April, 1991.

GRADUATED RESEARCH STUDENTS

Holly (Baseski) Shackman ('00) - EXCEL Spring 2000
Ph. D. in Analytical Chemistry - University of Michigan with Robert Kennedy

Senior Research Investigator II with Bristol Meyers Squibb in New Brunswick, NJ

Gina (Nubile) Betts ('01) – Volunteer Fall 1999, Spring 2000

Ph. D. in Biochemistry - University of California-San Diego with Elizabeth Komives

Technical Support Scientist III at Thermo Fisher Scientific in San Diego, CA

Kelly (Rourke) Gannon ('01) – Volunteer Fall 1999, Spring 2000; Thesis Fall 2000, Spring 2001

Account Manager for Cell Signaling Technologies in Beverly, MA

Christine Thomas ('01) – EXCEL Summer 2000, Fall 2000; Ind. Res. Spring 2001

Ph. D. in Inorganic Chemistry – California Institute of Technology with Jonas Peters

Post-doctoral with Marcetta Darensbourg – Texas A&M

Professor of Chemistry – Ohio State University in Columbus, OH

Becky Wiza ('01) – EXCEL Fall 1999, Interim 2000, Spring 2000; Ind. Res. Fall 2000

M.S. in Food Science from Colorado State University

Senior Manager for DaVita Kidney Care in Denver, CO

Abby O'Connor ('03) – EXCEL Fall 2000, Interim 2001, Spring 2001, Summer 2001, Fall 2001, Spring 2002; Thesis Fall 2002, Spring 2003

Ph. D. in Inorganic Chemistry – University of North Carolina with Maurice Brookhart

Post-doctoral with Karen Goldberg – University of Washington

Professor of Chemistry – The College of New Jersey in Ewing, NJ

Amanda (Ohs) Herr ('03) – EXCEL Interim 2001, Summer 2001, Fall 2001, Spring 2002; Thesis Fall 2002, Spring 2003

M.S. in Inorganic Chemistry – University of California – San Diego with Karsten Meyer

Quality Manager at Conklin in Shakopee, MN

Dan Ruddy ('03) – EXCEL Spring 2001; Thesis Fall 2002, Spring 2003

Ph. D. in Inorganic Chemistry – University of California – Berkeley with Don Tilley

Senior Scientist with the National Renewable Energy Laboratory in Golden, CO

Katie (Bocage) Berdini ('04) – EXCEL Summer 2003, Spring 2004

Senior Research Manager with Church and Dwight in Princeton, NJ

Alison (Campbell) Brewer ('04) – EXCEL Fall 2001, Interim 2002, Spring 2002, Fall 2002, Interim 2003, Spring 2003; Thesis Fall 2003, Spring 2004

Ph. D. in Inorganic Chemistry – University of North Carolina with Mike Gagné

Post-doctoral with Shannon Stahl – University of Wisconsin

Senior Research Scientist with Eli Lilly in Indianapolis, IN

Michelle (Ferguson) Homsher ('04) – EXCEL Interim 2002; Thesis Fall 2003, Spring 2004

Ph. D. in structural biology, biochemistry & biophysics – Syracuse University with Bruce Hudson

Post-doctoral at C.H.o.P.

Associate Principle Scientist with Merck in West Point, PA

- Joyce Ong ('04) - EXCEL Summer 2002
Product Manager at B. Braun Medical in Selangor, Malaysia
- Brett Swartz ('04) - EXCEL Summer 2003, Spring 2004
Ph. D. in Inorganic Chemistry - University of Rochester with Bill Jones
Post-doctoral with Todd Krauss - University of Rochester in Rochester, NY
- Kevin Barry ('05) - EXCEL Summer 2002, Summer 2003, Fall 2003; Thesis Fall 2004, Spring 2005
Ph. D. in Biochemistry - Wesleyan University with Ericka Anne Taylor in 2015
Regulatory Affairs Manager with Carrubba Incorporated in Milford, Ct
- Liz Dethoff ('05) - Ind. Res. Spring 2005
Ph. D. in Physical Chemistry - University of Michigan with Hashim Al-Hashimi
Post-doctoral Biological Chemistry with Kevin Weeks - University of North Carolina in Chapel Hill, NC
Scientist at Ribometrix, Inc. Chapel Hill, NC
- Brenna (Ghent) Wright ('05) - Thesis Fall 2004, Spring 2005
Web developer in Raleigh, NC
- Laura Hagopian ('06) - EXCEL Summer 2003, Fall 2003
M.D. - University of Massachusetts in 2010
Medical Director at Well in Newton, MA
- Seth Kahn ('06) - Ind. Res. Fall 2005
Masters in Chemistry Education - University of Massachusetts
Upper School IB MYP Math and Chemistry Teacher at Dwight School in New York, NY
- Bill McNamara ('06) - Ind. Res. Spring 2006
Ph. D. in Inorganic Chemistry - Yale University with Bob Crabtree
Post-doctoral with Rich Eisenberg - University of Rochester
Associate Professor - College of William and Mary in Williamsburg, VA
- Danièle Ménard ('06) - Ind. Res. Fall 2005
Scientist at Pfizer in Andover, MA
- Matt Saybolt ('06) - EXCEL Fall 2004, Interim 2005, Spring 2005; Ind. Res. Fall 2005
M.D. - Robert Wood Johnson in 2010
Interventional Cardiology Fellow at Penn Medicine in Philadelphia, PA
- Kate Buettner ('07) - Ind. Res. Spring 2007
Ph. D. in Inorganic Chemistry - Yale University with Ann Valentine
Post-doctoral with Ann Valentine - Temple University
Post-doctoral at the Fox Chase Cancer Institute
Assistant Professor - Gettysburg College in Gettysburg, PA
- Dan Jarem ('07) - EXCEL Summer 2006; Thesis Fall 2006, Spring 2007
Ph.D. in Biochemistry - Brown University with Sarah Delaney
Manager at Roche in Pleasanton, CA
- Sarah (Kolb) Johnstone ('07) - EXCEL Summer 2004

Obtained a M.S. Ed. in Secondary Science Education from Lehman College ('10)
Instructional Coach and Science Educator at Broome Street Academy Charter High
School in New York, NY

Annalese Maddox ('07) - EXCEL Summer 2004, Summer 2006; Ind. Res. Spring 2005, Fall 2006,
Spring 2006

M.S. in Inorganic Chemistry - University of Vermont with Rory Waterman
Technical Service Specialist at Gelest in Morrisville, PA

Jim Berstler ('08) - Ind. Res. Fall 2006, Spring 2006, Fall 2007, Spring 2007

M.S. in Chemistry with Thomas Selby at Bucknell University
Project Manager at the Children's Hospital of Philadelphia in Philadelphia, PA

Sarah (Martinak) Swisher ('08) - EXCEL Summer 2005, Spring 2006; Ind. Res. Fall 2006

Instructional Designer at Oaks Christian School in Camarillo, CA

Barie (Salmon) Miller ('08) - Ind. Res. Spring 2006

M.D. at St. George's University in 2013
Clinical Assistant Professor of Observation Medicine at NYU Langone Medical Center in
New York, NY

Tracy Salmon ('08) - Ind. Res. Spring 2006

M.D. at St. George's University in 2013
Clinical Assistant Professor of Observation Medicine at NYU Langone Medical Center in
New York, NY

Lauren (Sites) Berstler ('08) - EXCEL Summer 2005, Interim 2006, Spring 2006; Thesis Fall 2007,
Spring 2008

M.S. in Biochemistry with Squire Booker at Penn. State University
Product Manager at Agilent Technologies, Inc. in Philadelphia, PA

Aman Seth ('08) - EXCEL Summer 2005; Ind. Res. Fall 2006

Pursuing a M.S. in Pharmacology at Tulane University
Pursuing a D.O. at Midwestern University

April Tang ('08) - EXCEL Summer 2006

M.S. in Organic Chemistry at the University of Michigan with Pavel Nagorny in 2014
Technical Manager at Henkel in Ann Arbor, MI

Nick Albano ('09) - EXCEL Summer 2008

M.D. at New York University in 2015
Resident Physician at the University of Wisconsin Hospital and Clinics in Madison, WI

Daniela Duca ('09) - Thesis Fall 2008, Spring 2009

M.A. in International Economics from the London School of Economics in 2010
Ph.D. in Innovation Management from the National Institute of Economic Research in
2014
Head of Product Innovation for SAGE Publishing in London, UK

Shannon (Kleinbach) Nolthenius ('09) - EXCEL Summer 2008; Ind. Res. Fall 2008, Spring 2009

M.B.A. at Saint Leo University in 2021
Site Head with Heraeus in West Conshohocken, PA

- Meghan Breheny ('10) – Sherma Scholar Summer 2008
M.D. at UMDNJ in 2014
Resident at the Mount Sinai Hospital in New York, NY
- Hilary (Carroll) McGuire ('10) – EXCEL Summer 2007
B.S. in Nursing from Johns Hopkins University
DNP from the University of Washington
Nurse Practitioner at Brigham and Women's Hospital in Boston, MA
- Stephanie Fosbenner ('10) – EXCEL Summer 2007, Spring 2008
M.S. in Public Health from Harvard University in 2012
M.D. from University of South Florida in 2016
Child and Adolescent Psychiatrist at Cambridge Health Alliance in Cambridge, MA
- Dave Goodwin ('10) – Thesis Fall 2009, Spring 2010
Ph. D. in Analytical Chemistry - Johns Hopkins University with Howard Fairbrother in 2016
Research Chemist at the National Institute of Standards and Technology in Gaithersburg, MD
- Owen Henn ('10) – Ind. Res. Fall 2009, Spring 2010
Research Chemist with Church and Dwight in Princeton, NJ
- Kyle Reichl ('10) – Sherma Scholar Summer 2009; Thesis Fall 2009, Spring 2010
Ph.D. in Organic Chemistry – Penn State University with Alex Radosevich in 2015
Post-doctoral with John Porco – Boston University
Senior Scientist at AstraZeneca in Waltham, MA
- Jeff Beatty ('11) – Ind. Res. Fall 2010, Spring 2011
Associate Registrar at Montclair State University in Montclair, NJ
- Patti Plumeri ('11) – Ind. Res. Fall 2010
M.S. in chemistry from Bucknell University in 2014
- Ashley (Seibert) Bunnell ('11) – EXCEL Summer 2008, Fall 2008, Fall 2009, Summer 2009, Summer 2010; Thesis Fall 2010, Spring 2011
B.S. in nursing from DeSales University in 2015
Registered nurse
- Chelsea Mandell ('12) – EXCEL Summer 2009, Fall 2009, Spring 2010, Summer 2010, Fall 2010, Spring 2011; Ind. Study Fall 2011; Thesis Fall 2011, Spring 2012
Pursuing a D.Pharm. at Thomas Jefferson University in Philadelphia, PA
- Justin Pagano ('12) – Thesis Fall 2011, Spring 2012
Ph. D. in Inorganic Chemistry – University of Vermont with Rory Waterman in 2017
Post-doctoral with Jackie Kiplinger at Los Alamos National Laboratory
Staff Scientist at Los Alamos National Laboratory in Los Alamos, NM
- Katie Gramigna ('13) – EXCEL Summer 2011, Summer 2012, Interim 2013; Thesis Fall 2012, Spring 2013
Ph. D. in Inorganic Chemistry – Brandeis University with Christine Thomas in 2018

Research Scientist at DuPont in Wilmington, DE

Andrew Rowland ('13) – EXCEL Summer 2012, Interim 2013; Thesis Fall 2012, Spring 2013
Ph. D. in Physical Chemistry – Penn. State University with Christine Keating in 2019
Scientist III with Thermo-Fisher in San Francisco, CA

Annycardeli Lopez ('14) – EXCEL Summer 2011, Summer 2013

Maggie (Tiedemann) Whalley ('14) – EXCEL Summer 2011, Fall 2011, Spring 2012, Summer 2012,
Interim 2014; Ind. Res. Fall 2012, Spring 2013; Thesis Fall 2013, Spring 2014
M.A. in Chemistry with Brad Carrow at Princeton University in 2016
Laboratory Technician with Saint Arnold Brewing Company in Houston, TX

Brittany Blass ('15) – EXCEL Summer 2014, Interim 2015
M.S. in Physical Assistant Studies – DeSales University in 2019
Physician Associate at the University of Colorado Anschutz Medical Campus in Denver,
CO

Michael Robinson ('15) – Ind. Res. Fall 2014
Pursuing a MS in Artificial Intelligence at DePaul University in Chicago, IL

Gino Warnick ('15) – EXCEL Summer 2012, Summer 2013, Fall 2013, Interim 2015; Thesis Fall
2014, Spring 2015
M.D. from Thomas Jefferson University in Philadelphia, PA in 2020

Ryan Dupuis ('16) – EXCEL Summer 2015; Ind. Res. Spring 2015
Pursing a B.A. in music education from University of Colorado in Boulder, CO

Sage Hartlaub ('16) – Sherma Scholar Summer 2015; Thesis Fall 2015, Spring 2016
Sustainability Manager with BASF in New Brunswick, NJ

Emily Lubas ('16) – EXCEL Summer 2013
M.D. from Cooper Medical School of Rowan University in Camden, NJ

Christine McCarthy ('16) – EXCEL Summer 2014
Solid Waste Specialist with the Pennsylvania Department of Environmental Protection in
Norristown, PA

Tori Decker ('17) – EXCEL Summer 2014, Summer 2015
Senior Customer Support Specialist with HubSpot in Boston, MA

Aliza Furneaux ('17) – EXCEL Summer 2014, Interim 2015
M.S. in Environmental Engineering – University of Illinois with Roland Cusick in 2019
Technical and Regulatory Programs Director with WateReuse Association in
Washington, DC

Allyssa Connor ('18) – Ind. Res. Spring 2018
Pursuing a Ph.D. in Organic Chemistry with Donald Watson at the University of
Delaware in Newark, DE

Nicole Lauricella ('18) – EXCEL Fall 2015, Interim 2016, Spring 2016, Summer 2016, Fall 2016,
Spring 2017

M.S. Physician Assistant from Saint Elizabeth University in 2021
Emergency Medicine Physician's Assistant at Robert Wood Johnson University Hospital
in New Brunswick, NJ

Toni Michaels ('18) – Ind. Res. Fall 2017, Spring 2018
Pursuing a D.V.M. at University College in Dublin, Ireland

Rachna Ball ('19) – EXCEL Summer 2017, Fall 2017, Spring 2018, Summer 2018; Thesis Fall 2018,
Spring 2019
Pursuing a Ph.D. in Inorganic Chemistry at the University of Cincinnati

Nicole Wamser ('19) – EXCEL Summer 2016, Fall 2016, Spring 2017, Summer 2017, Fall 2017,
Spring 2018; Thesis Fall 2018, Spring 2019
Global Skincare Fragrance Scientist with Unilever in Trumbull, CT

Morena Koorie ('20) – EXCEL Summer 2017, Summer 2018
Clinical Research Assistant at Northeast Clinical Research Center in Easton, PA

Xiaoyu Xu ('20) – Thesis Fall 2018, Spring 2019; Independent Research Spring 2020

Reilly Gwinn ('21) – Ind. Study Fall 2018, Spring 2019; EXCEL Summer 2019, Fall 2019, Spring
2020, Summer 2020; Thesis Fall 2020, Spring 2021
Pursuing a Ph.D. in Inorganic Chemistry with Diana Iovan at Virginia Tech University

Michelle Hendricks ('21) – EXCEL Summer 2019; Independent Research Experience Fall 2019,
Spring 2020, Fall 2020; Independent Research Spring 2021
Pursuing a Ph.D. in Biochemistry with Rudi Fasan at the University of Rochester

Nick Colicchio ('21) – EXCEL Summer 2019; Independent Research Experience Fall 2019, Spring
2020; Independent Research Spring 2021
Pursuing a Ph.D. in Inorganic Chemistry at the University of Rochester

Tash Miner ('22) – EXCEL Summer 2019, Summer 2021; Independent Research Experience Fall
2019, Spring 2020; Independent Research Fall 2020; Thesis Spring 2021, Fall 2021
Pursuing a M.D. at Temple University

Sadie Wolfarth ('22) – EXCEL Summer 2019, Summer 2021; Independent Research Experience
Fall 2019, Spring 2020; Independent Research Fall 2020; Thesis Spring 2021, Fall 2021
Pursuing a Ph.D. in Inorganic Chemistry at Yale University

Lizzy Winter ('22) – EXCEL Summer 2021; Independent Research Fall 2021, Spring 2022

Anna Boggess ('23) – EXCEL Summer 2021, Fall 2021, Spring 2023; Independent Research Spring
2022, Fall 2022

Camile Carthy ('23) – Independent Research Fall 2022, Spring 2023

Jenn Soika ('23) – Independent Research Spring 2023

Martin Familetti ('23) – EXCEL Summer 2023

Ian Leiby ('25) – EXCEL Summer 2022, Summer 2023

Virginia Parparcen ('25) – EXCEL Summer 2022

Tyler Roberts ('25) – EXCEL Summer 2023

Kelsey Wong ('25) – EXCEL Summer 2022, Summer 2023

ADDITIONAL RESEARCH STUDENTS

Fawn (Blanco) Wolfe – EXCEL Summer 2005, Fall 2005

B.S. in Nursing from Moravian College in Bethlehem, PA

RN at St. Luke's Cancer Center in Easton, PA

Kristin Cabrera – EXCEL Summer 2016; Ind. Res. Fall 2016

B.S. in Animal Sciences from University of Connecticut, Storrs, CT in 2019

Project Administrator with STOP Spillover in Medford, MA

Myria Zambas (High school student) – In lab Summer 2015

B.B.A. in Finance and Math from University of Notre Dame, South Bend, IN in 2020

Product Specialist, Content and Technology Solutions, New York, NY

Catherine Ryczek (High school student) – In lab Summer 2016

B.S. in Physics from Hamilton College, Clinton, NY in 2021

Pursuing a Ph.D. in Applied Physics at Cal Tech

Justine Dell (High school student) – In lab Summer 2017

Currently an undergraduate student at Haverford College, Haverford, PA

Olivia Pritchard – EXCEL Summer 2018

B.A. in Biology from Northwestern University, Evanston, IL in 2021

Nur Bookwala (High school student) – In lab Summer 2018

B.S. in Biology from American University, Washington, DC in 2022

Maisie Jackson (High school student) – In lab Summer 2021

Currently an undergraduate at University of San Francisco, San Francisco, CA

Natasha Ding (High school student) – In lab Summer 2022

Klara Kunz (High school student) – In lab Summer 2022

Currently an undergraduate at Georgia Tech, Atlanta, GA

Kanchan Gupta (High school student) – In lab Summer 2023

VISITING SCIENTISTS HOSTED

Emily (Sylvester) Volpe – In lab 2011

Teaching Assistant Professor of Chemistry at Duquesne University in Pittsburgh, PA

Jon Melton – In lab 2012

Retired Senior Lecturer at Messiah College in Mechanicsburg, PA

REVIEWING ACTIVITIES

Journal Manuscripts Reviewed:

Science; (3/16)

Inorganic Chemistry; (6/21 (2 manuscripts), 11/18, 3/18, 8/17, 4/17, 7/15, 8/14, 10/13, 9/13, 7/13, 4/13, 7/04)

Organometallics; (12/23, 9/21, 5/21, 3/20, 9/19, 12/18, 5/16, 5/14, 12/13, 5/13, 3/13, 5/12, 11/11, 10/10 (2 manuscripts), 8/10, 5/10, 4/10, 1/10, 7/08, 5/08, 5/07, 12/06, 5/06, 3/06, 6/05, 4/05, 8/04, 4/04, 1/04, 12/03, 3/03)

Dalton Transactions; (10/23, 8/23, 12/22, 8/22, 3/22, 1/22, 11/21, 9/21 (2 manuscripts), 7/21, 4/21, 3/21, 11/20, 10/20, 8/20, 6/20, 3/20, 12/19, 11/19, 9/19, 9/18, 2/18, 1/18, 9/17, 7/17, 6/17, 1/17, 11/16, 5/16, 1/16, 11/15, 10/15, 9/15, 6/15, 8/14, 6/14, 5/14)
Chemical Communications; (8/22, 7/22, 2/22, 2/20)
Inorganica Chimica Acta; (4/20, 11/19, 8/19, 1/19, 12/18, 10/18, 7/18, 3/16 (2 manuscripts), 12/15, 2/14, 8/13, 5/13, 4/12, 5/10)
Journal of Organometallic Chemistry; (6/23, 5/23, 3/23, 2/23, 2/21, 5/20, 4/20, 12/19, 11/19, 4/18, 1/18, 5/17, 4/17, 3/17, 2/17, 1/17 (2 manuscripts), 4/16, 2/16, 8/14, 5/14, 10/13, 9/13, 5/13, 4/13, 2/13, 12/12, 11/12, 6/12 (2 manuscripts), 5/12, 4/12, 1/12, 1/11, 2/09, 1/09, 2/07, 1/07, 10/06 (2 manuscripts), 6/06, 5/06, 10/05, 8/05, 9/03)
Chemistry – A European Journal; (8/18, 4/15)
Pure and Applied Chemistry; (11/16)
Transition Metal Chemistry; (10/23, 9/23, 8/23 (2 manuscripts), 7/23, 3/23, 1/23)
Polyhedron; (4/21, 1/21, 11/15)
European Journal of Inorganic Chemistry; (12/21, 11/21, 9/16, 7/16, 11/13)
Inorganic Chemistry Communications; (5/16, 7/13)
Inorganic Chemistry Frontiers; (4/23, 3/21, 3/17)
Journal of Molecular Structure; (7/20, 5/20)
Analyst; (9/14, 8/14)
Journal of Inorganic and Organometallic Polymers and Materials; (8/13)
Journal of Chemical Education; (8/23, 8/22, 5/22, 7/21, 4/21, 11/20, 9/20, 11/16, 9/16, 8/15, 5/13, 9/12, 9/10, 3/10, 2/08, 11/07, 10/05, 8/05, 8/04)
Chem Educator; (3/14)
Synthesis and Reactivity in Inorganic and Metal-organic Chemistry; (1/04, 9/03, 3/03, 1/03, 12/02, 11/02)
International Journal of Inorganic Chemistry; (5/12)
Crystal Growth and Design; (3/08)
Molecular Diversity; (4/03)
Journal of the Pennsylvania Academy of Science; (2/10)
Analytical Letters; (3/10, 2/10)

Book Chapters Reviewed:

NMR Spectroscopy in the Undergraduate Curriculum Vol. 4; (1 chapter: Fall 2020)
Advances in Teaching Inorganic Chemistry; (1 chapter: Summer 2020)
Modern NMR in Undergraduate Education; (1 chapter: Summer 2006)
NMR Spectroscopy in the Undergraduate Curriculum; (1 chapter: fall 2012)
Prentice Hall (4th ed. of a general chemistry text); (7 chaps.: summer 2003)
McGraw-Hill (8th ed. of a general chemistry text); (1 chap.: spring 2004)
McGraw-Hill (3rd ed. of a general chemistry text); (1 chap.: fall 2004)
McGraw-Hill (4th ed. of a general chemistry text); (1 chap.: spring 2005)
McGraw-Hill (1st ed. of a general chemistry text); (4 chaps.: spring 2005)
McGraw-Hill (1st ed. of a general chemistry text); (1 chap.: spring 2006)
Oxford Univ. Press (2nd ed. of an organometallic chemistry text); (4 chaps.: fall 2007)
McGraw-Hill (1st ed. of a general chemistry text); (1 chap.: fall 2007)
Oxford Univ. Press (2nd ed. of an organometallic chemistry text); (3 chaps.: summer 2008)
Oxford Univ. Press (2nd ed. of an organometallic chemistry text); (2 chaps.: fall 2008)
W.W. Norton & Co. (3rd ed. of a general chemistry text); (1 chap.: spring 2010)
McGraw-Hill (1st ed. of a general chemistry text); (3 chaps.: fall 2010)
Wiley (4th ed. of an inorganic chemistry text); (6 chaps.: spring 2012)

VIPER Online Submissions Reviewed:

Literature Discussion; (12/24, 10/23, 5/22, 10/19, 6/19, 5/19, 6/18, 10/17, 1/17 (x2), 12/16, 11/16, 7/16, 7/15, 7/14, 6/13 (x2), 8/12)
Problem Sets; (6/23, 9/22, 8/22, 2/22, 4/19, 10/18, 8/17 (x6), 4/17, 1/17, 7/16 (x2), 6/16, 6/15 (x5), 4/15 (x6), 3/15 (x2), 1/15 (x3), 5/14 (x2), 6/13 (x3), 1/13, 3/12, 2/12, 6/11, 3/11, 2/11 (x 2))
In-class Activity; (11/23, 9/23, 6/23, 2/23, 10/22, 9/22, 5/20 (x2), 4/20, 1/19, 6/18, 2/17, 12/16, 6/16, 5/16 (x3), 10/15, 6/15, 1/15 (x2), 8/14 (x2), 7/14 (x2), 6/14, 11/13, 9/13, 6/13 (x2), 9/12 (x 2), 8/11, 2/11)
Web Resources; (5/23, 3/23, 9/22, 1/21, 12/20, 4/17, 1/17 (x2), 12/16, 11/16, 7/15, 6/15 (x5), 5/15, 2/15, 1/15, 7/14, 6/14, 6/13, 1/12)
Five Slides About; (8/17 (x14), 2/17, 7/16, 6/16, 8/14 (x2), 7/14, 7/13, 6/13, 12/12)
Laboratory (3/20 (x2), 3/17, 7/15, 9/14, 8/14)
Collection (9/22, 12/20, 10/19, 12/16, 6/15 (x2), 9/14)
Textbook (1/17)
Syllabus (6/23 (x3), 9/21, 5/19 (x2), 4/19)

Grant Proposals Reviewed:

National Science Foundation; (1/17 (5 - review panel), 2/13, 1/13 (5 - review panel), 10/12, 10/10, 3/10, 2/10, 9/09, 8/07 (4 proposals), 2/05, 2/04, 5/03)
American Chemical Society (Petroleum Research Fund); (12/22, 1/22, 7/21, 1/21, 2/20, 6/19, 1/18, 6/16, 1/16, 6/15, 6/14, 1/14, 12/12, 6/11, 12/09, 2/09, 6/07, 2/07, 8/05, 7/02, 1/02)
Czech Science Foundation; (7/20, 6/14)
Pennsylvania Academy of Science; (9/01)
International Union of Pure and Applied Chemistry Project Proposal; (10/18)

External Reviews:

Departmental review; (4/22, 4/11)
Promotion review; (9/20, 8/18)
Tenure reviews; (9/23, 8/22 (x2), 9/21, 11/16, 8/15, 9/14, 12/13, 7/11, 11/08)
Mid-term review; (1/16, 12/15)

Ph.D. Committees:

Columbia University; (2009)
Lehigh University; (2021, 2014-2017)