

Curriculum Vita for Steven L. Pellizzeri

Department of Chemistry & Biochemistry, Eastern Illinois University | spellizzeri@eiu.edu
600 Lincoln Ave, Charleston, IL 61920 | (217) 581-6237

Education

- Ph.D.** | Syracuse University, Chemistry Department, Syracuse, New York
- December 2013
 - Dissertation title: The Solid-State Simulation of the Structure and Vibrational Modes of Organic, Hybrid organometallic and Inorganic species using the CRYSTAL09 code.
 - Advisor: Professor Jon A. Zubietta
- B.S.** | Polymer Chemistry with High Honors, Rochester Institute of Technology, Rochester, NY
- May 2007
 - Undergraduate Research: Physical and Electronic Interactions Between a Straight Chain Conjugated Polymer and Single Wall Carbon Nanotubes, Probed by Fluorescence Spectroscopy.
 - Advisor: Professor Christopher Collison

Teaching Experience/Appointments

- Associate Professor, Physical Chemistry** 8/25 – present
Department of Chemistry and Biochemistry, Eastern Illinois University,
Charleston, IL
- Assistant Professor, Physical Chemistry** 8/19 – 8/25
Department of Chemistry and Biochemistry, Eastern Illinois University,
Charleston, IL
- General Chemistry Coordinator** 1/21 – 5/24
Department of Chemistry and Biochemistry, Eastern Illinois University,
Charleston, IL
- Lecturer, General Chemistry** 8/18 – 6/19
Department of Chemistry, Clemson University, Clemson, SC
- Teaching Assistant, Multiscale Modeling** 1/18 – 5/18
Department of Chemical and Biomolecular Engineering, Clemson University,
Clemson, SC
- Guest Lecturer, Chemical Reaction Engineering** 10/16 & 10/17
Department of Chemical and Biomolecular Engineering, Clemson University,
Clemson, SC
- Head Teaching Assistant, General Chemistry for Engineers Laboratory** 8/12 – 12/12
Department of Chemistry, Syracuse University, Syracuse, NY
- Graduate Teaching Assistant** 8/08 – 5/13
Department of Chemistry, Syracuse University, Syracuse, NY

Courses Taught

<i>Title</i>	<i>Catalog Number</i>	<i>Semesters Taught</i>
The World of Chemistry Laboratory	CHM 1040	2
General Chemistry I	CHM 1310G	1
General Chemistry Laboratory I	CHM 1315G	2
Honors General Chemistry I	CHM 1390G	1
General Chemistry II	CHM 1410	2
General Chemistry Laboratory II	CHM 1415	3
Chemical Thermodynamics and Kinetics	CHM 3910	7
Physical Chemistry Laboratory	CHM 3915	7
Quantum Chemistry	CHM 3920	7
Chemistry Seminar	CHM 3000-1, 4000-1, 5000-1	2
Bonding and Reactivity	CHM 5210	3
General Chemistry I*	CH 1010	2
General Chemistry I* (six-week summer)	CH 1010	1
General Chemistry Laboratory I*	CH 1011	1
General Chemistry II*	CH 1020	1

* Course taught at Clemson University

Research Experience

Postdoctoral Research Fellow	10/18 – 6/19
Department of Chemistry, Clemson University, <i>Clemson, SC</i>	
- PI: Professor Brian Dominy	
*Postdoctoral Research Fellow	11/14 – 8/18
Department of Chemical and Biomolecular Engineering, Clemson University, <i>Clemson, SC</i>	
- PI: Professor Rachel Getman	
Graduate Research Assistant	8/08 – 12/13
Department of Chemistry, Syracuse University, <i>Syracuse, NY</i>	
- PI: Professor Jon Zubieta.	
Undergraduate Research Assistant	8/05 – 5/07
Department of Chemistry, Rochester Institute of Technology, <i>Rochester, NY</i>	
- PI: Professor Christopher Collison	

Research Students Supervised

Graduate (3)		
<i>Name</i>	<i>Semester(s) in Group</i>	<i>Major</i>
Samual Eccles	Spring 2025 – Summer 2026	Chemistry (MS)
Lauren Hendershot	Spring 2025 – Summer 2026	Chemistry (MS)
Brianna Haase	Spring 2022 – Summer 2023	Chemistry (MS)
Undergraduate (29 Total : 18 EIU)		
<i>Name</i>	<i>Semester(s) in Group</i>	<i>Major</i>
Charlie Stauffer	Summer 2025 – Fall 2025	Chemistry (BS)
Clayton Carey	Summer 2025	Biochemistry (BS)

Caityln Wattleworth	Spring 2025 – Present	Biological Sciences (BS)
Preston Siewert	Spring 2025	Chemistry (BS)
Noah Kubbs	Spring 2025 – Fall 2025	Chemistry (BS)
George Kacos	Summer 2024 – Spring 2025	Chemistry (BS)
Akizia Aguilar	Spring 2024 – Summer 2024	Chemistry (BS)
Genevieve Biberdorf	Spring 2024 – Spring 2026	Biochemistry (BS)
Samual Eccles	Fall 2023 – Spring 2024	Chemistry (BS)
John Ebinger	Fall 2023 – Spring 2024	Chemistry (BS)
Mark Boyd	Summer 2023 – Spring 2024	Chemistry (BA)
Lauren Hendershot	Spring 2023 – Spring 2024	Chemistry (BS)
Ryan Wang	Summer 2022 – Summer 2023	Biochemistry (BS)
Elizabeth Serna-Sanchez	Fall 2021 – Spring 2023	Chemistry (BS)
Devin Craig	Fall 2021 – Spring 2023	Chemistry (BS)
George Barton	Spring 2021 – Spring 2023	Chemistry (BS)
Ryan Baker	Spring 2020 – Spring 2021	Chemistry (BS)
Payton Stewart	Spring 2020	Chemistry (BS)
Nicole Johnson*	Spring 2018	Chemical Engineering (BS)
Lotanna Nwandu (REU) [^]	Summer 2017	Biomedical Engineering
Bradley Cauble*	Spring 2017	Chemical Engineering (BS)
Nicholas Streiffert*	Spring 2017 – Fall 2017	Chemical Engineering (BS)
Joseph Gagnon*	Spring 2017 – Spring 2018	Chemical Engineering (BS)
Andrew Ney*	Spring 2017 – Fall 2017	Chemical Engineering (BS)
William Hardy*	Summer 2017 – Summer 2018	Chemical Engineering (BS)
Jonathan Cutrone (REU) ^β	Summer 2016	
Isaac Jones*	Spring 2016 – Fall 2017	Chemical Engineering (BS)
Andrew Samstag*	Fall 2015 – Spring 2018	Chemical Engineering (BS)
Liam Monteith*	Spring 2015 – Spring 2016	Chemistry (BS)
* Students Mentored at Clemson University, ^ Rose-Hulman Institute of Technology, Terre Haute, IN, β Winthrop University, Rock Hill, SC		

Leadership/Service

- EIU iSTEM, co-director 8/24 – present
- EIU Graduate School Research/Creative Activity Grants Committee, member 8/23 – 5/23, 8/25 – present
- EIU CLAS Curriculum Committee, member 8/22 – 5/23
- EIU University Grades Appeal Committee, member 8/22 – 5/23
- EIU University Grades Appeal Committee, Chair 8/21 – 5/22
- EIU CLAS Grades Appeals Committee, member 10/19 – 5/21
- Clemson University Postdoctoral Association, President 6/17 – 7/18
- Clemson University Postdoctoral Association, Vice-President 7/16 – 6/17
- Clemson University Postdoctoral Association, council member 11/14 – 7/18
- Clemson University Postdoctoral Association Summer Seminar Series, chair 5/17 – 8/17 & 5/18 – 8/18
- Proposal reviewer for:
 - ACS Petroleum Research fund (ACS-PRF), Dutch Research Council (NWO)

- Journal reviewer for:
 - Journal of Physical Chemistry, Materials Science and Engineering B, Journal of Chemical Crystallography, Journal of Physics and Chemistry of Solids, RSC Advances, Water Research, ChemCatChem, ChemPhysChem, Catalysis Today
- Poster Judge for:
 - ECI ACS Undergraduate Research Conference, 2019 – 2025
 - Chemical and Biomolecular Engineering Graduate Student Research Symposium 2016 – 2018.
 - Clemson University Undergraduate Research Symposium, 2016 and 2017.
 - Southeastern Catalysis Society, 2016 and 2017.

Research Support

<i>Discover ACCESS Allocation, CHE250097, ACCESS</i>	6/25
- Title: “ThermoPFAS: A DFT-Based Thermodynamic Database for Group Additivity Modelling” Funding period: 6/11/2025 – 6/10/2026; Service Units: 1,500,000; Estimated Value: \$17,540	
<i>Spring 2025 Undergraduate Research, Scholarship, and Creative Activities (URSCA) Award</i>	12/24
Eastern Illinois University, Charleston, IL Title: “PFOA Decomposition via Pyrolysis Utilizing Shomate Parameterization and Micro-Kinetic Modeling” Awarded to Genevieve Biberdorf (B.S. '26) (\$300)	
<i>Spring 2025 Undergraduate Research, Scholarship, and Creative Activities (URSCA) Award</i>	12/24
Eastern Illinois University, Charleston, IL Title: “Utilizing Computational Nanoreactors to Predict and Map the Thermal Decomposition of PFAS Molecules” Awarded to George Kacos (B.S. '25) (\$300)	
<i>*Discover ACCESS Allocation, CHE220091, Renewal ACCESS</i>	5/24
- Title: “Non-oxidative methane coupling with subnanometer catalysts: Assessment of the effects of subnanometer catalyst configuration” Funding period: 5/27/2024 – 5/26/2025; Estimated Value: \$17,080	
<i>Eastern Illinois University Early Career Grant</i>	10/23
Eastern Illinois University, Charleston, IL Title: “Utilizing Computational Nanoreactors to Predict and Map the Thermal Decomposition of PFAS Molecules” Funding period: 10/1/2023 – 6/30/2024; Amount: \$5,000 Total	
<i>*Richard L. and Ellen A. Keiter Undergrad Research Fellowship</i>	4/23
Eastern Illinois University, Charleston, IL - Awarded to Ryan Wang (B.S. '25) to engage in research during the summer (\$4000)	

Explore ACCESS Allocation, CHE230015	2/23
ACCESS	
- Title: "Investigation of CH ₄ Activation on Modified Metalloporphyrin Graphene Sheets"	
Funding period: 2/10/2023 – 2/10/2024; Estimated Value: \$9,080	
Illinois State Academy of Science Student Research Grant	12/22
Illinois State Academy of Science	
Title: "Investigation of CH ₄ Activation on Modified Metalloporphyrin Graphene Sheets"	
Awarded to Brianna Haase (M.S. '23) (\$500)	
Fall 2022 Graduate School Research/Creative Activity Award	12/22
Eastern Illinois University, Charleston, IL	
Title: "Investigation of CH ₄ Activation on Modified Metalloporphyrin Graphene Sheets"	
Awarded to Brianna Haase (M.S. '23) (\$300)	
*Discover ACCESS Allocation, CHE220091	11/22
ACCESS	
- Title: "Non-oxidative methane coupling with subnanometer catalysts: Assessment of the effects of subnanometer catalyst configuration"	
Funding period: 11/27/2022 – 11/26/2023; Estimated Value: \$18,160	
Explore ACCESS Allocation, CHE220084	11/22
ACCESS	
- Title: "Investigation of CH ₄ Activation on Modified Metalloporphyrin Graphene Sheets"	
Funding period: 11/10/2022 – 11/9/2023; Estimated Value: \$4,968	
*ACS PRF UNI, 65913-UNI6	6/22
American Chemical Society Petroleum Research Fund – Undergraduate New Investigator	
- Title: "Non-Oxidative Methane Coupling with Subnanometer Catalysts: Assessment of the Effects of Subnanometer Catalyst Configuration"	
- Funding period: 9/1/2022 – 8/31/2024; Amount: \$55,000 Total	
2021 Summer Research/Creative Activity Award	4/21
Eastern Illinois University, Charleston, IL	
- Provides support for PI during the summer (\$4000)	
*Richard L. and Ellen A. Keiter Undergrad Research Fellowship	4/21
Eastern Illinois University, Charleston, IL	
- Awarded to George Barton (B.S. '23) to engage in research during the summer (\$3000)	
Student Impact Grant for Faculty Mentors	10/20
Eastern Illinois University, Charleston, IL	
- Grant to support direct expenses of student research (\$1500)	
Richard L. and Ellen A. Keiter Undergrad Research Fellowship	4/20
Eastern Illinois University, Charleston, IL	
- Awarded to Ryan Baker (B.S. '21) to engage in research during the summer (\$3000)	

Teaching Support

Redden Fund Grant	6/25
Eastern Illinois University, Charleston, IL	
- Title: "Modernization and Improvement for Equipment for CHM3915: Physical Chemistry Lab"	
Funding period: 6/30/2025 – 6/30/2026; Amount: \$1616	
Explore ACCESS Allocation, CHE220097	12/22
ACCESS	
- Title: "Eastern Illinois University - CHM 3915 Physical Chemistry Lab - Spring 2023"	
Funding period: 12/27/2022 – 12/27/2023; Estimated Value: \$3,664	

Awards and Scholarships

College of Liberal Arts & Sciences (CLAS) Student Deans Outstanding Faculty Award	4/24
Eastern Illinois University, Charleston, IL	
Achievement and Contribution Award – Research/Creative Activity	11/22
Eastern Illinois University, Charleston, IL	
College of Liberal Arts & Sciences (CLAS) Travel Award	9/21 & 9/23
Eastern Illinois University, Charleston, IL	
- Two travel awards \$199 (9/21) and \$500 (9/23)	
Clemson University Postdoctoral Association Travel Award	6/16 & 9/17
Clemson University, Clemson, SC	
- Two travel awards (\$600 total)	
Distinguished Research Scholar	5/07
Rochester Institute of Technology, Rochester, NY	
Pasto Undergraduate Co-Op Fellowship	1/06
Rochester Institute of Technology, Rochester, NY	
- Fellowship to support undergraduate research (\$3000)	
Summer Undergraduate Research Grant	5/06
Rochester Institute of Technology, Rochester, NY	
- Grant to support summer research (\$3000)	
Undergraduate Polymer Chemistry Award	5/06
Rochester Institute of Technology, Rochester, NY	
- Awarded to the top-performing student in the Polymer Chemistry program	
RIT Presidential Scholarship	8/03
Rochester Institute of Technology, Rochester, NY	
- Merit-based scholarship (\$20,000)	

Pellizzeri Research Student Awards

– All awards are for EIU undergraduates, *denotes an EIU graduate student

Research Awards

- Undergraduate Research, Scholarship, and Creative Activities (URSCA) Award, Eastern Illinois University.
 - o Awarded to Genevieve Biberdorf (2024) to facilitate research activities for undergraduate research.
 - o Awarded to George Kacos (2024) to facilitate research activities for undergraduate research.
- Scholars in Undergraduate Research at Eastern (SURE) Award, Eastern Illinois University.
 - o Awarded to George Barton (2023) to facilitate research activities for undergraduate research.
- Graduate Student Investigator (GSI) Award, Eastern Illinois University.
 - o Awarded to Brianna Haase* (2023) for superior graduate student research.

Presentation and Poster Awards

- East Central Illinois ACS Undergraduate Research Conference
 - East Central Illinois ACS Outstanding Poster Presentation award.
 - George Kacos (2024)
 - Wolfram Outstanding Student Presentation.
 - John Ebinger (2023)
 - Elizabeth Serna-Sanchez (2022)
 - Advancing Chicanos/Hispanics & Native Americans in Science (SACNAS) Outstanding Poster Presentation.
 - George Barton (2022)
 - Elizabeth Serna-Sanchez (2021)

Travel Awards

- Catalysis Science and Technology Division, American Chemical Society.
 - Brianna Haase* (2023)
- Eastern Illinois University
 - Brianna Haase*, Williams Travel Grant award, (2023)

Professional Training

- New Faculty Workshop, American Chemical Society, Virtual, 2021.
- Online Course Development Institute (OCDI), Faculty Development and Innovation Center, Eastern Illinois University, Charleston, IL, 2020.
- CCIT workshop: Introduction to Machine Learning Techniques and Tools, Clemson, SC, 2017.
- SUNCAT Summer Institute 2015: Heterogeneous Catalysis for Energy & Society, Stanford, CA, 2015.
- Software Carpentry workshop: The Unix shell, Git and GitHub, Programming with Python, Clemson, SC, 2015.
- Refinement of Solvent Disorder with SHELXL, Non-Merohedral Twinning, Crystallography Workshops by Peter Mueller, Syracuse, NY, 2012.

Professional Affiliations

- American Chemical Society (ACS) – member since 2005
- National Postdoc Association – member for 2 years
- National Center for Faculty Development & Diversity – member for 2 years

Peer-reviewed Publications – Google Scholar: h-index: 13

21. Eccles, Samuel;* **Pellizzeri, Steven**. *Expanded Group Additivity Framework for Thermochemical Prediction of Fluorocarbons and PFAS from Large Scale DFT Data*, Submitted, **2026**.
*Eastern Illinois University Graduate mentee
20. Serna-Sanchez, Elizabeth;* **Pellizzeri, Steven**. *Predicting Pyrolysis Decomposition of PFOA Using Computational Nanoreactors: A Thermodynamic Study*, RSC Advances, **13**, **2023**, 25699-25703.
*Eastern Illinois University Undergraduate mentee
19. Shabbir, Hafeera; **Pellizzeri, Steven**; Ferrandon, Magali; Kim, In Soo; Vermeulen, Nicolaas A.; Farha, Omar K.; Delferro; Massimiliano; Martinson, Alex B.F.; Getman, Rachel B. *Influence of spin state and electron configuration on the active site and mechanism for catalytic hydrogenation on metal cation catalysts supported on NU-1000: insights from experiments and microkinetic modeling*, Catalysis Science & Technology, **10**, **2020**, 3594-3602.
18. Pellizzeri, Tiffany M. Smith; Sanjeewa, Liurukara D.; **Pellizzeri, Steven**; McMillen, Colin D.; Garlea, V. Ovidiu; Ye, Feng; Sefat; Athena S.; Kolis, Joseph W. *Single Crystal Neutron and Magnetic Measurements of $Rb_2Mn_3(VO_4)_2CO_3$ and $K_2Co_3(VO_4)_2CO_3$ with Mixed Honeycomb and Triangular Magnetic Lattices*, Dalton Transactions, **49**, **2020**, 4323-4335.
17. Ateia, Mohamed; Arifuzzaman, Md; **Pellizzeri, Steven**; Attia, Mohamed F.; Tharayil, Nishanth; Anker, Jeffrey N.; Karanfil, Tanju. *Cationic polymer for selective removal of GenX and short-chain PFAS from surface waters and wastewaters at ng/L levels*, Water Research, **163**, **2019**, 114874.
16. Duval, Christine E.; Hardy, William A.*; **Pellizzeri, Steven**; DeVol, Timothy A.; Husson, Scott M. *Phosphonic acid and alkyl phosphate-derivatized resins for the simultaneous concentration and detection of uranium in environmental waters*, Reactive and Functional Polymers, **312**, **2018**, 149-157.
*Undergraduate mentee
15. **Pellizzeri, Steven**; Barona, Melissa; Bernales, Varinia; Miró, Pere; Liao, Peilin; Gagliardi, Laura; Snurr, Randall Q.; Getman, Rachel B. *Catalytic Descriptors and Electronic Properties of Single Atom Catalysts for Ethene Dimerization to 1-Butene*, Catalysis Today, **312**, **2018**, 149-157.
14. Kim, In Soo; Li, Zhanyong; Zheng, Jian; Platero-Prats, Ana; Mavrandonakis, Andreas; **Pellizzeri, Steven**; Ferrandon, Magali; Vjunov, Aleksei; Gallington, Leighanne C.; Webber, Thomas; Vermeulen, Nicolaas A.; Penn, R. Lee; Getman, Rachel B.; Cramer, Christopher J.; Chapman, Karena W.; Camaioni, Donald M.; Fulton, John L.; Lercher, Johannes A.; Farha, Omar K.; Hupp, Joseph T.; Martinson, Alex B. F. *Sinter-Resistant Platinum Catalyst Supported by Metal-Organic Framework*, Angewandte Chemie International Edition, **57**, **2018**, 909-913.
13. Pellizzeri, Tiffany M. Smith; McMillen, Colin D; **Pellizzeri, Steven**; Wen, Yimei; Getman, Rachel B.; Chumanov, George; Kolis, Joseph W. *Strontium Manganese Vanadates from Hydrothermal Brines: Synthesis and Structure of $Sr_2Mn_2(V_3O_{10})(VO_4)$, $Sr_3Mn(V_2O_7)_2$, and $Sr_2Mn(VO_4)_2(OH)$* , Journal of Solid State Chemistry, **255**, **2017**, 225-233.
12. **Pellizzeri, Steven**; Jones, Isaac A.*; Doan, Hieu A.; Snurr, Randall Q., Getman, Rachel B. *Using Gas Phase Clusters to Screen Porphyrin Supported Nanocluster Catalysts for Ethane Oxidation to Ethanol*, Catalysis Letters, **146**, **2016**, 2566-2573.
*Clemson Undergraduate mentee

11. **Pellizzeri, Steven;** Delaney, Sean P.; Korter, Timothy M.; Zubieta, Jon. *Using Terahertz Spectroscopy and Solid-State Density Functional Theory to Characterize a New Polymorph of 5-(4-pyridyl)tetrazole*, Journal of Physical Chemistry A, **118**, **2014**, 417-426.
10. **Pellizzeri, Steven;** Smith, Tiffany M.; Delaney, Sean P.; Korter, Timothy M.; Zubieta, Jon. *Crystal Structure and Terahertz Spectroscopy of α,α',α' -tetrabromo-*p*-xylene Modeled using Solid-State Density Functional Theory*, Journal of Molecular Structure, **1058**, **2014**, 265-271.
9. **Pellizzeri, Steven;** Delaney, Sean P.; Korter, Timothy M.; Zubieta, Jon. *Using Solid-state Density Functional Theory and Terahertz Spectroscopy to Spectroscopically Distinguish the Various Hydrohalide Salts of 5-(4-pyridyl)tetrazole*, Journal of Molecular Structure, **1050**, **2013**, 27-34.
8. **Pellizzeri, Steven;** Witko, Ewelina M.; Korter, Timothy M.; Zubieta, Jon. *A Solid-State Density Functional Theory Investigation of the Effect of Metal Substitution (Metal = Mn, Cd, Co) on the Terahertz Spectra of Isomorphous Molecular Metal 5-(4-pyridyl)tetrazolato Complexes*, Journal of Molecular Structure, **1048**, **2013**, 214-222.
7. Jones, Stephanie; Vargas, Jose M., **Pellizzeri, Steven;** O'Connor, Charles J.; Zubieta, Jon. *Solid state coordination chemistry: Structural consequences of varying diphosphonate tether length and fluoride incorporation in the copper-bisterpy / oxomolybdenum / organodiphosphonate system (bisterpy = 2,2':4',4'':2'',2'''-quarterpyridyl-6',6''-di-2-pyridine)*, Inorganica Chimica Acta, **395**, **2013**, 44-57.
6. Darling, Kari; Ouellette, Wayne; **Pellizzeri, Steven;** Smith, Tiffany; Vargas, Jose; Tomaszfski, Steven; O'Connor, Charles J.; Zubieta, Jon. *One- and two-dimensional coordination polymers of substituted tetrazoles with cadmium(II)*, Inorganica Chimica Acta, **392**, **2013**, 417-427.
5. Bartholomae, Mark; Chueng, Hoi; **Pellizzeri, Steven;** Ellis-Guardiola, Kenneth; Jones, Stephanie; Zubieta, Jon. *Novel building units in the construction of materials of the oxomolybdate-organodiphosphonate/copper(II)-dipodal-organonitrogen ligand system: Structural influences of dipodal ligand tether length and flexibility*, Inorganica Chimica Acta, **389**, **2012**, 90-98.
4. Darling, Kari; Burkholder, Eric M.; **Pellizzeri, Steven;** Nanao, Max; Zubieta, Jon. *A bimetallic oxide network constructed from oxomolybdoarsenate clusters and copper(II)-tetrapyridylpyrazine building blocks*, Inorganic Chemistry Communications, **14**, **2011**, 1745-1748.
3. **Pellizzeri, Steven;** Korter, Timothy M.; Zubieta, Jon. *A solid-state density functional theory investigation of the structure and vibrational modes of vanadium phosphate polymorphs*, Journal of Molecular Structure, **1003**, **2011**, 21-30.
2. Collison, Christopher J.; Spencer, Susan; Preske, Amanda; Palumbo, Chad; Helenic, Alysha; Bailey, Rebecca; **Pellizzeri, Steven.** *A New Model for Quantifying the Extent of Interaction between Soluble Polyphenylene-Vinylenes and Single-Walled Carbon Nanotubes in Solvent Dispersions*, Journal of Physical Chemistry B, **114**, **2010**, 11002-11009.
1. Collison, Christopher J.; **Pellizzeri, Steven;** Ambrosio, Filip. *Spectroscopic Evidence for Interaction of Poly[2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylene] Conformers and Single-Walled Carbon Nanotubes in Solvent Dispersions*, Journal of Physical Chemistry B, **113**, **2009**, 5809-5815.

Invited Talks and Conference Presentations

25. *Unraveling PFOA Pyrolysis: From Nanoreactor Simulations to Microkinetic Reaction Networks.*
Physical & Environmental Chemistry Seminar, University of Iowa, Iowa City, Iowa
Steven Pellizzeri, March 2026, *invited oral presentation*.
24. *Computational Study of Glaserites for Non-linear Optical and Lasing Properties.*
2023 Midwest and Great Lakes ACS Regional Meeting, St. Charles, Missouri
Steven Pellizzeri and *Devin Craig, October 2023, *oral presentation*.
23. *Using Computational Nanoreactors to Provide Mechanistic Insight into Pyrolysis of PFOA.*
2023 Midwest and Great Lakes ACS Regional Meeting, St. Charles, Missouri
Steven Pellizzeri and *Elizabeth Serna-Sanchez, October 2023, *oral presentation*.
22. *A Semiempirical Tight-binding-based Approach for the Simulation of Platinum Clusters on Graphene.*
2023 Midwest and Great Lakes ACS Regional Meeting, St. Charles, Missouri
Steven Pellizzeri, *Ryan Wang, *Lauren Hendershot, and *Mark Boyd, October 2023, *oral presentation*.
21. *Mechanistic insight into thermal decomposition of PFOA using computational nanoreactors.*
Spring 2023 ACS National Meeting, Indianapolis, Indiana
Steven Pellizzeri and *Elizabeth Serna-Sanchez, March 2023, *oral presentation*.
20. *Reparametrizing a semiempirical tight-binding-based approach for the simulation of platinum clusters on graphene.*
Spring 2023 ACS National Meeting, Indianapolis, Indiana
Steven Pellizzeri, *George D. Barton, and *Ryan Wang, March 2023, *oral presentation*.
19. *Investigating the Absorption Characteristics of Wastewater Contaminants on Graphenic Surfaces.*
Fall 2021 ACS National Meeting, Atlanta, Georgia (Virtual)
*Ryan Baker and **Steven Pellizzeri**, August 2021, *poster presentation*.
18. *Noncentrosymmetric brackebuschite structure type from hydrothermal brines investigated with density functional theory.*
69th Southeast regional Meeting of the American Chemical Society, Columbia, South Carolina
Steven Pellizzeri, Tiffany M. Smith Pellizzeri, Colin D. McMillen, Joseph W. Kolis, and Rachel B. Getman, November 2017, *oral presentation (invited seminar)*.
17. *Computationally-Driven Design of Cation-Based Catalysts for Ethene Conversions.*
Annual Southeastern Catalysis Society Meeting, Asheville, North Carolina
Steven Pellizzeri, Pere Miró, Varinia Bernales, Melissa Barona, Peilin Liao, Laura Gagliardi, Randall Q. Snurr, Rachel B. Getman, September 2017, *oral presentation*.

16. *Computationally-driven design of cation-based catalysts supported in metal-organic frameworks for upgrading of light hydrocarbons.*
254th ACS National Meeting, Washington, DC
Steven Pellizzeri, Pere Miró, Varinia Bernales, Melissa Barona, Peilin Liao, Laura Gagliardi, Randall Q. Snurr, Rachel B. Getman, August 2017, *oral presentation*.
15. *Screening Supported Nanocatalysts for Ethene Conversions.*
2017 Post Doc Summer Seminar Series, Clemson, South Carolina
Steven Pellizzeri and Rachel Getman, June 2017, *oral presentation*.
14. *Computationally-Driven Design of Cation-Based Catalysts for Ethene Dimerization.*
2017 Clemson University Research Symposium, Clemson, South Carolina
Steven Pellizzeri, Pere Miró, Varinia Bernales, Melissa Barona, Peilin Liao, Laura Gagliardi, Randall Q. Snurr, Rachel B. Getman, May 2017, *poster presentation*.
13. *Post-synthetic modification of metal organic frameworks for catalysis; a computational study.*
68th Southeast regional Meeting of the American Chemical Society, Columbia, South Carolina
Steven Pellizzeri, *Isaac Jones, and Rachel B. Getman, October 2016, *oral presentation (invited seminar)*.
12. *Extending scaling relationships from surfaces to atoms.*
252th ACS National Meeting, Philadelphia, Pennsylvania
Steven Pellizzeri, *Liam Monteith, Pere Miró, Randall Q. Snurr and Rachel B. Getman, June 2016, *oral presentation (invited seminar)*.
11. *Screening for Activity and Selectivity in Small Metal-Based Oxidation Catalysts.*
2016 Post Doc Summer Seminar Series, Clemson, South Carolina
Steven Pellizzeri, *Andrew Samstag, *Liam Monteith, *Isaac Jones, Rachel Getman, August 2016, *oral presentation*.
10. *Screening for activity and selectivity in the oxidative upgrading of ethane to ethanol with small metal-based catalysts.*
2016 Clemson University Research Symposium, Clemson, South Carolina
Steven Pellizzeri, Andrew Samstag, Liam Monteith, Isaac Jones, Pere Miró, Randall Q. Snurr, Rachel Getman, May 2016, *poster presentation*.
9. *Predicting small metal-based cluster catalysts supported in metal-organic frameworks for the selective oxidation of ethane to ethanol using density functional theory.*
AIChE National Meeting, Salt Lake City, Utah
Steven Pellizzeri, Rachel Getman, November 2015, *oral presentation*.
8. *NU-1000 and Related MOF-based Materials as Platforms for Catalyst Design.*
2015 EFRC Principal Investigators' Meeting, Washington, D.C.
Steven Pellizzeri, Anthony B. Thompson, Camille D. Malonzo, Thomas Webber, Timothy Wang, Pere Miró, Peilin Liao, Melissa Barona, Omar Farha, Joseph T. Hupp, Lee Penn, Andreas Stein, Randall Q. Snurr, Laura Gagliardi, Rachel Getman, Connie C. Lu, October 2015, *poster presentation*.

7. *Using density functional theory to predict small metal-based cluster catalysts supported in metal-organic frameworks for the selective oxidation of ethane to ethanol.*
Annual Southeastern Catalysis Society Meeting, Clemson, South Carolina
Steven Pellizzeri, Rachel Getman, September 2015, *oral presentation*.
6. *Solid State investigation of polymorphs and halide salts of 5-(4-pyridyl)tetrazole.*
St. Lawrence University, Canton, NY
Steven Pellizzeri, Timothy Korter, Jon Zubieta, April 2013, *oral presentation (invited seminar)*.
5. *Solid-state simulation of the vibrational modes and intensities of simple vanadium phosphates.*
240th ACS National Meeting, Boston, Massachusetts
Steven Pellizzeri, Timothy Korter, Jon Zubieta, August 2010, *poster presentation*.
4. *Characterization of the mixing between MEH-PPV and single wall carbon nanotubes using fluorescence spectroscopy.*
RIT Undergraduate Symposium 2006, Rochester, New York
Steven Pellizzeri, Christopher Collison, August 2007, *oral presentation*.
3. *Characterization of the mixing between MEH-PPV and single wall carbon nanotubes using fluorescence spectroscopy.*
RIT Undergraduate Symposium 2006, Rochester, New York
Steven Pellizzeri, Christopher Collison, August 2007, *poster presentation*.
2. *Characterization of the mixing between MEH-PPV and single wall carbon nanotubes using fluorescence spectroscopy.*
34th Northeast regional Meeting of the American Chemical Society, Binghamton, New York
Steven Pellizzeri, Christopher Collison, October 2006, *poster presentation*.
1. *Physical and electronic interactions between a straight chain conjugated polymer and single wall carbon nanotubes, probed by fluorescence spectroscopy.*
232nd ACS National Meeting, San Francisco, California
Steven Pellizzeri, Christopher Collison, April Colleton, September 2006, *poster presentation*.

* Undergraduate student co-author

Student Presentations

19. *Thermal Decomposition of PFOA: Insights from Computational Microkinetics*
10th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Genevieve Biberdorf** and Steven Pellizzeri, November 2025, *poster presentation*.
18. *Computational Study of Trihalomethane Adsorption on Carbon Nanotubes for Water Treatment*
10th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Caitlyn Wattleworth** and Steven Pellizzeri, November 2025, *poster presentation*.

17. *Multifaceted Computational Approach to Study the Thermal Decomposition of PFOA*
 9th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
 ***George Kacos**, ‡Sam Eccles, *John Ebinger, *Elizabeth Serna-Sanchez and Steven Pellizzeri, October 2024, poster presentation.
 - Award: East Central Illinois ACS Outstanding Poster Presentation award.
16. *Decoding the Pyrolysis of Perfluorooctanoic Acid (PFOA): A Computational Nanoreactor Approach*
 8th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
 ***John Ebinger**, *Elizabeth Serna-Sanchez and Steven Pellizzeri, October 2023, poster presentation.
 - Award: Wolfram Award for Outstanding Student Presentation
15. *Optimizing Metal Catalysis Models: A Comparative Study of GFN-xTB Parameterization and DFT Approaches on Platinum and Graphene Surfaces.*
 8th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
 ***Mark Boyd**, *Lauren Hendershot, *Ryan Wang, Steven Pellizzeri, October 2023, poster presentation.
14. *Investigating the Reparameterization of the GFN-xTB Method for Enhanced Simulation of Dynamic Reactions in Nanoparticle-Based Platinum Catalysts.*
 8th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
 ***Lauren Hendershot**, *Ryan Wang, *Mark Boyd, Steven Pellizzeri, October 2023, poster presentation.
13. *Reparametrizing platinum-carbon interactions for GFN2-XTB calculations.*
 2023 Midwest and Great Lakes ACS Regional Meeting, St. Charles, Missouri
 ***Lauren Hendershot**, *Ryan Wang, *Mark Boyd, Steven Pellizzeri, October 2023, poster presentation.
12. *Investigation of CH₄ adsorption on modified metalloporphyrin graphene sheets.*
 Spring 2023 ACS National Meeting, Indianapolis, Indiana
 ‡**Brianna Haase** and Steven Pellizzeri, March 2023, oral presentation.
11. *Mapping of the Thermal Decomposition of PFOA.*
 Spring 2023 ACS National Meeting, Indianapolis, Indiana
 ***Elizabeth Serna-Sanchez** and Steven Pellizzeri, March 2023, poster presentation.
10. *Computational Study of Glaserites for Non-Linear Optical and Lasing Properties.*
 Spring 2023 ACS National Meeting, Indianapolis, Indiana
 ***Devin Craig** and Steven Pellizzeri, March 2023, poster presentation.
9. *Modeling CO adsorption of platinum nanocluster ensembles on graphene.*
 Spring 2023 ACS National Meeting, Indianapolis, Indiana
 ***George D. Barton**, *Ryan Wang, *Lauren Hendershot, and Steven Pellizzeri, March 2023, poster presentation.
8. *Mapping of the Thermal Decomposition of PFOA.*
 7th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
 ***Elizabeth Serna-Sanchez** and Steven Pellizzeri, November 2022, poster presentation.
 - Award: Wolfram Award for Outstanding Student Presentation

7. *Computational Study of Glaserites for Non-Linear Optical and Lasing Properties.*
7th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Devin Craig** and Steven Pellizzeri, November 2022, poster presentation.
6. *Modeling CO Adsorption of Platinum Nanocluster Ensembles on Graphene.*
7th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***George D. Barton**, *Ryan Wang, and Steven Pellizzeri, November 2022, poster presentation.
- Award: The Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) and Friends Outstanding Presentation
5. *Reparametrizing a Semiempirical Tight-binding-based Approach for the Simulation of Platinum Clusters on Graphene.*
7th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Ryan Wang**, *George D. Barton and Steven Pellizzeri, November 2022, poster presentation.
4. *Modeling of the Thermal Decomposition Pathway of PFOA.*
6th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Elizabeth Serna-Sanchez** and Steven Pellizzeri, November 2021, poster presentation.
- Award: The Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) and Friends Outstanding Presentation
3. *Computational Study of Glaserites for Non-Linear Optical and Lasing Properties.*
6th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Devin Craig** and Steven Pellizzeri, November 2021, poster presentation.
2. *An Exploration of Non-Oxidative Methane using Platinum Catalysts through Computational Means.*
6th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
* **George D. Barton** and Steven Pellizzeri, November 2021, poster presentation.
1. *Adsorption Dynamics of Halogenated Disinfection Byproducts on Graphenic Surface.*
5th East Central IL ACS Undergraduate Research Conference, Champaign, Illinois
***Ryan Baker** and Steven Pellizzeri, October 2020, poster presentation.

* Undergraduate student presenter, ‡ Graduate student presenter