Curriculum Vitae

Mark P. Heitz

Department of Chemistry and Biochemistry
State University of New York (SUNY) Brockport
350 New Campus Drive
Brockport, New York 14420-2971

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Biographical Information

Name: **Mark P. Heitz**
Place of Birth: Rochester, NY
Citizenship: U.S.A.

Business Address:
Department of Chemistry and Biochemistry
State University of New York at Brockport
350 New Campus Drive
Brockport, NY 14420
(585) 395-5586 (phone)
(585) 395-5805 (FAX)
mheitz@brockport.edu (e-mail)

Home Address:
5333 Brockport-Spencerport Rd
Brockport, NY 14420
(585) 734-1075 (cell)
tisaph@proton.me (personal e-mail)

Professional Experience and Education

2023-2024 **Sabbatical Leave** – Polysaccharide Performance in Binary Aqueous Saline Solutions: Temperature Dependence and Specific Salt Effects; May 2023 – January 2024

2019-present **Professor of Chemistry** - *State University of New York at Brockport*, *Brockport, New York.* Analytical Chemistry, Physical Chemistry

2016-2017 **Sabbatical Leave - Visiting Professor** – *University of Rochester*, *Rochester, New York.* Electronic Energy Dissipation and Solvation Dynamics in Neat and Binary Mixtures of Ionic Liquids; May 2016 – January 2017

2006-2019 **Associate Professor of Chemistry** - *State University of New York at Brockport*, *Brockport, New York.* Analytical Chemistry

1999-2005 **Assistant Professor of Chemistry** - *State University of New York at Brockport*, *Brockport, New York.* Analytical Chemistry

1998-1999 **Visiting Assistant Professor of Chemistry** - *Wittenberg University, Springfield OH*, Physical Chemistry

1995-1997 **Postdoctoral Fellow** - *The Pennsylvania State University***,** *University Park, Pennsylvania.* Research Director: Professor Mark Maroncelli. Research area: solvation dynamics in supercritical fluids.

1992-1995 **Graduate Student (Ph.D., Analytical)** - *State University of New York at Buffalo, Buffalo, New York.* Research Director: Professor Frank V. Bright. Research area: Reverse micelle entrapped hydrophiles. Dissertation Title: "Rotational Reorientation Dynamics within Reverse Micelles Formed in Liquids and Supercritical Fluids"

1988-1990 **Graduate Student (M.S.)** - *University of Rochester, Rochester, New York.* Research Director: Professor James M. Farrar. Research area: Gas phase ion cluster formation.

1986-1988 **Graduate Student/Research Fellow** – *Rochester Institute of Technology, Rochester, New York.* Research Directors: Professors Gerald A. Takacs and Vladimir Vukanovic. Research area: Surface morphology studies of microwave and radio-frequency plasma-driven reactive ion etching of polyimide films.

1985-1986 **New York State Secondary Science Certifications** - *State University of New York at Brockport*, *Brockport, New York.* Certification Areas**:** Chemistry/Physical Science/Earth Science

1981-1984 **Undergraduate (B.A.)** – Chemistry: *The King's College, Briarcliff Manor, New York.*

Awards and Honors

Inducted as a Fellow of the American Chemical Society (2019)
Salutes to Excellence Award, Rochester Section of the American Chemical Society (2019)
Volunteerism Award, Rochester Section of the American Chemical Society (2016)
Recipient of the Allied-Signal Incorporated fellowship (1995-1996)
Who's Who in American Colleges and Universities (1995)

Professional Affiliations

American Chemical Society (ACS)	1981-present
American Association for the Advancement of Science	2017-present
Society for Applied Spectroscopy	1992 – 2007, 2015-present

Grants and Contracts

Total Grants Secured: $667,510 (+ $105,000)

$580,000 co-PI with Carly R. Reed, Michael G. Coleman, and Markus M. Hoffmann, NSF-MRI: Acquisition of a Bruker Avance 400 MHz NMR Spectrometer, (*submitted* October 2024).

$310,000 PI, NSF-MRI: "Acquisition of a Femtosecond Laser/Streak Camera Fluorescence Spectrometer" (August 2022 – July 2025).

$3,500 PI, Provost Post-Tenure Award: "DNA Oligomer Interactions with Ionic Liquids and Deep Eutectic Solvents: Energetics and Dynamics" (May 2023 – December 2024).

$2,262 PI, Faculty/Staff Technology Initiative Grant Program: "Acquisition of IgorPro Analysis Software and SigmaPlot Graphics Software" (July 2022 – June 2023).

$2,000 PI, Faculty/Staff Technology Initiative Grant Program: "Transient Absorption Kinetics in the Physical Chemistry Laboratory" (February 2021 – June 2021).

$3,500 co-PI with Carly R. Reed (Chemistry), Co-PIs, Faculty/Staff Technology Initiative Grant Program: "Computational Chemistry in Undergraduate Teaching and Research" (July 2016 – June 2017).

$1,500 PI, Faculty/Staff Technology Initiative Grant Program: "Molecular Dynamics Simulations in Undergraduate Teaching and Research – Solvation Dynamics in Green Chemistry Solvents" (July 2015 – June 2016).

$27,000 PI, New York State Department of Environmental Conservation: "Ionic Liquids Used as Solvent Replacement" (May 2014 – December 2014).

$850 PI, Scholarly Incentive Award: "Enzymatic Reactivity and Structural Preservation in the Presence of Room Temperature Ionic Liquids" (December 2013 – December 2014).

$4,000 PI, Provost Post-Tenure Award: Protein Denaturation by Ionic Liquids (May 2013 – August 2015).

$97,009 PI, NSF-MRI: "Acquisition of a Multifrequency Phase/Modulation Fluorescence Lifetime Spectrometer" (August 2006 – July 2009).

$60,000 co-PI with Margaret E. Logan (Chemistry), Markus M. Hoffmann (Chemistry), Adam Rich (Biology), and Rey Sia (Biology) for the Merck-AAAS: Interdisciplinary Chemistry/Biology Research Program (2005 – 2008).

$5,000 co-PI with Markus M. Hoffmann, Faculty/Staff Technology Initiative Grant Program: "Modernization of Magnetic Resonance Spectroscopy in the Physical Sciences", (May 2005 – May 2006).

$2,000 PI, Contract extension with Bausch and Lomb for student support: "Characterizing Solvation in "Green" Solvent Systems", (May 2004 – July 2004).

$2,200 PI, Bausch and Lomb Inc.: "Differentiation of Several Polymer Components by Fluorescence Emission Spectroscopy", (Jan 2004 – Aug 2004).

$15,250 PI, Contract with Bausch and Lomb: "Protein Denaturation at Polymer Surfaces", (May 2003 – May 2004).

$127,201 co-PI with Markus M. Hoffmann, NSF-CCLI Award #0408617: Acquisition of a Bruker Avance 300 MHz NMR Spectrometer, "Incorporation of Modern NMR Spectroscopy into the Chemistry Curriculum of a Four Year Undergraduate Institution", (2003).

$3,000 PI, Faculty/Staff Technology Initiative Grant Program: "Characterizing Solvation in "Green" Solvent Systems", (May 2003 – May 2004).

$500 PI, Scholarly Incentive Award: "Solvation Dynamics in Environmentally Friendly Solvents" (March 2003 – December 2003).

$3,500 PI, Bausch and Lomb Inc.: "Initial Studies on the Fluorescence Spectroscopy of Lysozyme in Solution", (Jan 2002 – Aug 2002).

$2,000 PI, United University Professions (UUP) Individual Development Awards Program, travel funds to attend the 42nd Annual Rocky Mountain Conference on Analytical Chemistry: "Entrapment of Biological Molecules within Reverse Micelles", (July 30, 2000 – August 3, 2000).

$1,000 PI, Scholarly Incentive Award: "Spectroscopic Studies of Small Biomolecules Entrapped Within Reverse Micelles" (January 2000 – December 2000).

Management of grant NSF-RUI, Experimental Physical Chemistry Program, (Grant # CHE9705563, **$105,000**, award period 6/1/97 to 5/31/00). The PI separated from Brockport and I assumed responsibility for implementing the remainder of this grant award.

Research Students

Undergraduate:
A total of **75** undergraduate students from Brockport have worked in my laboratory on independent study projects either as part of the CHM 399/499 Independent Study Course or through Summer Research Grant money.

Visiting:
My lab has also hosted three undergraduate students from Technische Universität, Darmstadt, Germany. Their research activities in the United States were completed in partial fulfillment of their Bachelor theses. These students worked on several projects that included the application of ionic liquids to battery technology, studying yeast alcohol dehydrogenase, and determining the effects of ionic liquid alkyl chain length on a double-stranded, self-complementary DNA oligomer. We had accepted a fourth student but because of 2020 covid restrictions were unable to host that student.

Graduate:
Collaborations have provided me with the opportunity to work with graduate students from other institutions, albeit not in a direct, advisory manner. The one exception is chemical engineering student Emmanual Nsengiyumva from the University at Buffalo.

Publications

Senior/corresponding author(s) noted by *. Co-authors are undergraduate students unless noted by †.

Original Research Papers (Peer Reviewed)

Articles Submitted or in Preparation for Publication:

43) Emmanuel M. Nsengiyumva†, Mark P. Heitz*, and Paschalis Alexandridis*, "Xanthan Gum Polysaccharide Aqueous Structure and Properties Affected by Ionic Liquids", *ACS Sustain. Chem. Eng.*, to be submitted, September 2025.

42) Christian Green, Christopher A. Rumble*, and Mark P. Heitz*, "Do Molecular Cosolvents Mitigate Deep Eutectic Microheterogeneity? Rotation and Solvation Dynamics in Glyceline/Methanol Solutions", *J. Phys. Chem. B*, to be submitted, July 2025.

41) Michelle Seifert, Joshua Raymond, Fatemeh Fadaei†, David Reha†, Natallia Kulik†, Babak Minofar,* and Mark P. Heitz*, "Interactions Between a dsDNA Oligonucleotide and Imidazolium Chloride Ionic liquids: Effect of Alkyl Chain Length, Part II.", *Molecules*, in preparation, July 2025.

40) Mark P. Heitz*, Stephanie M. Robillard, Devin M. Heitz, and David W. McCamant†, "Coumarin 153 Solvation Dynamics in Methanol-Water Binary Mixtures", *Appl. Spectrosc.*, in preparation, July 2025.

39) Tyler A. Johnston and Mark P. Heitz*, "Bradford Assay Bias by Ionic Liquids – Interactions with Bovine Serum Albumin", *Anal. Biochem.*, in preparation, July 2025.

38) Mark P. Heitz*, Rachel I. Riga, and David W. McCamant†, "Dye-Dependent Rotational Dynamics in Phosphonium Ionic Liquids", *J. Phys. Chem. B*, in preparation, July 2025.

37) Devin M. Heitz, and Mark P. Heitz*, "Solvation Dynamics of Coumarin 153 in Ternary Mixtures of Trihexyltetradecylphosphonium Chloride, Water, and Methanol", *J. Ionic Liq.*, in preparation, June 2025.

36) Michael M. Molnar, and Mark P. Heitz*, "Efficient Protein Denaturation by Phosphonium Ionic Liquids", *Anal. Biochem.*, in preparation, June 2025.

Articles in Print:

35) Mark P. Heitz*, Emmanuel M. Nsengiyumva†, and Paschalis Alexandridis, "Solute Energetics in Aqueous Xanthan Gum Solutions: What Can Be Learned from a Fluorescent Probe?", *Polysaccharides*, 2024, 5(4), 892-910.
https://doi.org/10.3390/polysaccharides5040055

34) Emmanuel M. Nsengiyumva†, Mark P. Heitz*, and Paschalis Alexandridis*, "Carboxymethyl Hydroxypropyl Guar Gum Physicochemical Properties in Dilute Aqueous Media", *Int. J. Biol. Macromol.*, **2024**, *262(3)*, 129775.
https://doi.org/10.1016/j.ijbiomac.2024.129775

33) Emmanuel M. Nsengiyumva†, Mark P. Heitz*, and Paschalis Alexandridis*, "Salt and Temperature Effects on Xanthan Gum Polysaccharide in Aqueous Solutions", *Int. J. Molec. Sci.*, **2024**, *25(1)*, 490. https://doi.org/10.3390/ijms25010490

32) Emmanuel M. Nsengiyumva†, Mark P. Heitz*, and Paschalis Alexandridis*, "Thermal hysteresis phenomena in aqueous xanthan gum solutions", *Food Hydrocoll.*, **2023** *144*, 108973. https://doi.org/10.1016/j.foodhyd.2023.108973

31) Fatemeh Fadaei†, Michelle Seifert, Joshua Raymond, David Reha†, Natallia Kulik†, Babak Minofar,* and Mark P. Heitz*, "Interactions Between a dsDNA Oligonucleotide and Imidazolium Chloride Ionic liquids: Effect of Alkyl Chain Length, Part I.", *Molecules* **2021**, 27*(1)*, 116.
https://doi.org/10.3390/molecules27010116

30) Mark P. Heitz*, Tyler J. Sabo, and Stephanie M. Robillard, "C153 Dynamics in Ethylammonium Nitrate: The Effects of Dilution with Methanol", *Sustain. Chem.* **2021**, *155(3)*, 778 – 795.
https://doi.org/10.3390/suschem2040041

29) Mary M. LaRocca, Gary A. Baker†, and Mark P. Heitz*, "Assessing Rotation and Solvation Dynamics in Ethaline Deep Eutectic Solvent and Its Solutions with Methanol", *J. Chem. Phys.* **2021**, *155(3)*, 034505.
https://doi.org/10.1063/5.0056653

28) Vidiksha Bhushan†, Mark P. Heitz, Gary A. Baker†, and Siddharth Pandey*, "Ionic Liquid-Controlled Shape Transformation of Spherical to Nonspherical Polymersomes via Hierarchical Self-Assembly of a Diblock Copolymer", *Langmuir* **2021**, *37(16)*, 5081–5088.
https://doi.org/10.1021/acs.langmuir.1c00821

27) Mark P. Heitz*, Zackary C. Putney, and Joel Campaign, "Spectroscopic Studies of a Phosphonium Ionic Liquid in Supercritical CO_2", *ChemEngineering*, **2020**, *4*(*2*), 20.
https://doi.org/10.3390/chemengineering4020020

26) Sudhir Ravula†, Nathaniel E. Larm†, Mohammad A. Mottaleb†, Mark P. Heitz*, and Gary A. Baker*, "Vapor Pressure Mapping of Ionic Liquids and Low-Volatility Fluids using Graded Isothermal Thermogravimetric Analysis", *ChemEngineering*, **2019**, *3(2)*, 42-53.
https://doi.org/10.3390/chemengineering3020042.

25) Chip J. Smith II†, Sascha Gehrke†, Oldamur Hollóczki†, Durgesh V. Wagle†, Mark P. Heitz*, and Gary A. Baker*, "NMR Relaxometric Probing of Ionic Liquid Dynamics and Diffusion Under Mesoscopic Confinement Within Bacterial Cellulose Ionogels", *J. Chem. Phys.*, **2018**, *148(19)*, 1-9.
https://doi.org/10.1063/1.5016337

24) Mark P. Heitz*, Jason W. Rupp, and Kim W. Horn, "Biocatalytic Activity of Mushroom Tyrosinase in Ionic Liquids: Specific Ion Effects and the Hofmeister Series", *Insights Enzyme Res.*, **2018**, *2(1)*:12, 1-9.
https://dx.doi.org/ 10.21767/2573-4466.100012

23) Jason W. Rupp, and Mark P. Heitz*, "Determining Mushroom Tyrosinase Inhibition by Imidazolium Ionic Liquids: A Spectroscopic and Molecular Docking Study", *Int. J. Biol. Macromol.*, **2018**, *107 Part B*, 1971-1981.
https://dx.doi.org/10.1016/j.ijbiomac.2017.10.066

22) Kaitlyn A. Ordiway, Kristina L. Fuller, and Mark P. Heitz*, "Dissolution of Trihexyltetradecylphosphonium Chloride in Supercritical CO_2", *ChemEngineering*, **2017**, *1(2)*, 12-29.
http://dx.doi.org/10.3390/chemengineering1020012

21) Mark P. Heitz*, "Calculation of Excess Gibbs Energy of Activation for Viscous Flow in (Ionic Liquid + Cosolvent)", *J. Chem. Thermodyn.*, **2017**, *108*, 143-144.
http://dx.doi.org/10.1016/ j.jct.2017.01.017

20) Kim W. Horn, Jason W. Rupp, and Mark P. Heitz*, "Inhibition of Tyrosinase Activity by Imidazolium Ionic Liquids", *J. Undergrad. Chem. Res.*, **2016**, *15(4)*, 117-121.

19) Leeza M. Kerr, Shane W. Colvin, Stephen A. Godleski†, and Mark P. Heitz*, "Synthesis and Characterization of Alkyltriphenylphosphonium Chloride Ionic Liquids: Water Solubility Compared to Trihexyl(tetradecyl)phosphonium Chloride", *J. Undergrad. Chem. Res.*, **2016**, *15(2)*, 58-61.

18) Zachery P. McAtee, and Mark P. Heitz*, "Density, Viscosity and Excess Properties in the Trihexyltetradecylphosphonium Chloride Ionic Liquid/Methanol Cosolvent System", *J. Chem. Thermodyn.*, **2016**, *93*, 34-44.
http://dx.doi.org/10.1016/j.jct.2015.09.030

17) Michael G. Nicholson, and Mark P. Heitz*, "Using Ratiometric Probes to Estimate Aqueous Nanodomain Acidity", *J. Undergrad. Chem. Res.*, **2015**, *14(3)*, 54-58.

16) Kathleen M. Barra, Randy P. Sabatini, Zachery P. McAtee, and Mark P. Heitz*, "Solvation and Rotation Dynamics in the Trihexyl(tetradecyl)phosphonium Chloride Ionic Liquid / Methanol Co-Solvent System", *J. Phys. Chem. B.*, **2014**, *118(45)*, 12979-12992.
http://dx.doi.org/10.1021/jp5092784

15) M.M. Hoffmann*, J.T. Caccamis, Mark P. Heitz*, and K.D. Schlecht†, "Quantitative Analysis of Nail Polish Remover Using Nuclear Magnetic Resonance Spectroscopy Revisited", *J. Chem. Educ.* **2008**, *85(10)*, 1421-1423.

14) James W. Hutchings, Kristina L. Fuller, Mark P. Heitz*, and Markus M. Hoffmann*, "Surprisingly High Solubility of the Ionic Liquid Trihexyltetradecylphosphonium Chloride in Dense Carbon Dioxide", *Green Chem.* **2005**, *6*, 475-478.
https://doi.org/10.1081/DIS-120019966

13) N. Ito, S. Arzhantsev†, M. Heitz*, and M. Maroncelli*, "Solvation Dynamics of Coumarin 153 in Alkylphosphonium Ionic Liquids", *J. Phys. Chem. B.*, **2004**, *108*, 5771-5777.

12) S. Arzhantsev†, N. Ito†, M. Heitz*, and M. Maroncelli*, "Solvation Dynamics of Coumarin 153 in Several Classes of Ionic Liquids: Cation Dependence of the Ultrafast Component", *Chem. Phys. Lett.* **2003**, *381*, 278-286.

11) A.B. Sturdevant, and Mark P. Heitz*, "Spectroscopic Study of DCM as Fluorescent Probe of Solute-Solvent Interactions", *Proc. Natl. Conf. Undergrad. Res.*, **2003**.

10) M.M. Hoffmann* Mark P. Heitz* J.B. Carr, and J.D. Tubbs, "Surfactants in Green Solvent Systems – Current and Future Research Directions", *J. Disp. Sci. Tech.* **2003**, *24(2)*, 155-171.

9) Mark P. Heitz, and M. Maroncelli*, "Rotation of Aromatic Solutes in Supercritical CO_2: Are Rotation Times Anomalously Slow in the Near Critical Regime?", *J. Phys. Chem. A* **1997**, *101*, 5852-5868.

8) Mark P. Heitz, C. Carlier†, J. deGrazia†, K.L. Harrison, K.P. Johnston*, T.W. Randolph*, and F.V. Bright*, "Water Core Within Perfluoropolyether-Based Microemulsions Formed in Supercritical Carbon Dioxide" *J. Phys. Chem. B* **1997**, *101*, 6706-6714.

7) S. Sun†, Mark P. Heitz, S.A. Perez, L.A. Colon*, S. Bruckenstein*, and F.V. Bright*, "6-Propionyl-2-(*N,N*-Dimethylamino)Naphthalene (PRODAN) Revisited" *Appl. Spectrosc.* **1997**, *51*, 1316-1322.

6) Mark P. Heitz, J.C. Horne†, G.J. Blanchard*, and F.V. Bright*, "T_1 Relaxation of Perylene in Supercritical Ethane. Pressure-Dependent Changes in Short-Range Reorganization" *Appl. Spectrosc.* **1997**, *51*, 30-36.

5) Mark P. Heitz, and F.V. Bright*, "Rotational Reorientation Dynamics of Aerosol-OT Reverse Micelles Formed in Nearcritical Propane" *Appl. Spectrosc.* **1996**, *50*, 732 - 739.

4) Mark P. Heitz, and F.V. Bright*, "Probing the Scale of Local Density Augmentation in Supercritical Fluids: A Picosecond Rotational Reorientation Study" *J. Phys. Chem.* **1996**, *100*, 6889 - 6897.

3) K. P. Johnston*, K.L. Harrison, M.J. Clarke†, S.M. Howdle*, Mark P. Heitz, F.V. Bright*, C. Carlier†, and T.W. Randolph*, "Water-in-Carbon Dioxide Microemulsions: An Environment for Hydrophiles Including Proteins" *Science* **1996**, *271*, 624 - 626.

2) J.S. Lundgren†, Mark P. Heitz, and F.V. Bright*, "Dynamics of Acrylodan-Labeled Bovine and Human Serum Albumins Sequestered Within Aerosol-OT Reverse Micelles" *Anal. Chem.* **1995**, *67*, 3775 - 3781.

1) Mark P. Heitz, and F.V. Bright*, "Rotational Reorientation Dynamics of Xanthene Dyes Within the Interior of Aerosol-OT Reversed Micelles" *Appl. Spectrosc.* **1995**, *49*, 20 - 30.

Original Research Papers (Non-Peer Reviewed)

1) Mark P. Heitz* "Spectral Deconvolution in Supercritical Fluids" in *The Galactic Enquirer: A Newsletter for Galactic Software Users*; September **1996**.

Topical Reviews (Peer Reviewed)

1) Mark P. Heitz and F.V. Bright*, "PeakSolve: A Software Review." *Anal. Chem.* **1996**, *68*, 426A - 427A.

Conference, Symposia or Colloquium Presentations

(Notations: *Undergraduate students*, senior author(s) denoted by * and speaker underlined)

Invited Presentations:

15) Mark P. Heitz*, "Solvation in Ionic Liquids and Deep Eutectic Solvents: Cosolvent Solutions with Methanol and Methanol/Water Mixtures", presented: American Chemical Society, Mid-Atlantic Regional Meeting (MARM), University Park, PA, (June 2024).

14) Mark P. Heitz*, "Solvation in Ionic Liquids and Deep Eutectic Solvents: Cosolvent Solutions with Methanol and Methanol/Water Mixtures", presented: Rochester Institute of Technology Seminar Speaker, Rochester, NY, (April 2024).

13) Mark P. Heitz*, "Characterizing Solvation in Green Solvent Systems", presented: The Ohio State University, Columbus, Ohio (March 2003).

12) Mark P. Heitz*, "Hosting Proteins in Water-Limited Environments", presented: State University of New York at Brockport, Brockport, New York (April 2000).

11) Mark P. Heitz*, "Chemistry Within Reverse Micelles Formed in Liquid and Supercritical Solvents", presented: State University of New York at Brockport, Brockport, New York (May 1998).

10) Mark P. Heitz*, "Reverse Micelles: Surfactant Chemistry Turned Inside Out", presented: University of Central Florida, Orlando Florida (April 1998).

9) M. Maroncelli*, J.E. Lewis, Mark P. Heitz, S.J. Frankland, and A.G. Robinson, "Studies of Solvation and Rotational Dynamics in Supercritical Fluids" presented: 215th American Chemical Society Meeting, Dallas, TX (April 1998).

8) Mark P. Heitz*,"Reverse Micelles: Surfactant Chemistry Turned Inside Out", presented: Wheaton College, Wheaton, Illinois (March 1997).

7) Mark P. Heitz*, "Reverse Micelles: Surfactant Chemistry Turned Inside Out", presented: Eastern Illinois University, Charleston, IL (February 1997).

6) Mark P. Heitz*, "Reverse Micelles: Surfactant Chemistry Turned Inside Out", presented: Calvin College, Grand Rapids, MI (January 1997).

5) F.V. Bright*, J.K. Rice, Mark P. Heitz, R.A. Dunbar, and E.D. Niemeyer, "Probing Dynamical Processes in Supercritical Fluids" presented: 47th Pittsburgh Conference, Chicago, IL (March 1996).

4) F.V. Bright*, J.K. Rice, Mark P. Heitz, M. Li, and E.D. Niemeyer, "Probing Molecular Charisma in Supercritical Fluids" presented: 22nd FACSS Conference, Cincinnati, OH (October 1995).

3) J.S. Lundgren, F.V. Bright*, Mark P. Heitz and C.M. Ingersoll, "Are Protein Accessibility and Hydration Important to Biosensing?" presented: 22nd FACSS Conference, Cincinnati, OH (October 1995).

2) F.V. Bright*, J.K. Rice, Mark P. Heitz, M. Li, and E.D. Niemeyer, "Dynamical Processes in Supercritical Fluids" presented: 208th American Chemical Society Meeting, Anaheim, CA (April 1995).

1) F.V. Bright*, J.K. Rice, Mark P. Heitz and M. Li, "Studying Solute-Fluid Clusters in Supercritical Fluids by Time-Resolved Spectroscopy" presented: Symposium on the Structure and Dynamics of the Clusters Formed in Supercritical Solution, Okazaki, Japan (March 1994).

Contributed Presentations:

79) Mark P. Heitz*, *Mandy Huynh,* and Gary A. Baker, "Solvation in Novel Ionic Liquids: Cosolvent Solutions with Water?", presented: 2024 Gordon Research Conference, Newry, ME, (August 2024).

78) Mark P. Heitz*, "Solvation in Ionic Liquids and Deep Eutectic Solvents: Cosolvent Solutions with Methanol and Methanol/Water Mixtures", presented: American Chemical Society, Mid-Atlantic Regional Meeting (MARM), University Park, PA, (June 2024).

77) Mark P. Heitz*, "Solvation in Ionic Liquids and Deep Eutectic Solvents: Cosolvent Solutions with Methanol and Methanol/Water Mixtures", presented: Rochester Institute of Technology Seminar Speaker, Rochester, NY, (April 2024).

76) *Kennedy A. Mueller* and Mark P. Heitz*, "Molecular Solvation in PEG200 Solutions", presented: 68th Rochester American Chemical Society Collegiate Research Symposium, SUNY Brockport, Brockport, NY, (April 2024).

75) *Mandy Huynh*, Gary A. Baker, and Mark P. Heitz*, "Solvation in Novel Ionic Liquids: Cosolvent Solutions with Water?", presented: 68th Rochester American Chemical Society Collegiate Research Symposium, SUNY Brockport, Brockport, NY, (April 2024).

74) Mark P. Heitz*, "Coumarin 153 solvation dynamics in methanol-water binary mixtures: Are there implications for ionic liquid solutions?" Abstract ID: 3778318, presented: 43rd Annual Northeast Regional Meeting (NERM) 2022, Rochester, NY, (October 2022).

73) *Christian J. Green* and Mark P. Heitz*, "Assessing Rotation and Solvation Dynamics in Glyceline Deep Eutectic Solvent and Its Solutions with Methanol" presented: 43rd Annual Northeast Regional Meeting (NERM) 2022, Rochester, NY, (October 2022).

72) *Derek McNeil* and Mark P. Heitz*, "Molecular Interaction of Imidazolium-based Ionic Liquids with a DNA-Oligonucleotide" presented: 39th Annual Scholar's Day, SUNY Brockport, Brockport, NY, (April 2022).

71) *Christian J. Green* and Mark P. Heitz*, "Solvation Dynamics in Glyceline Deep Eutectic Solvents" presented: 39th Annual Scholar's Day, SUNY Brockport, Brockport, NY, (April 2022).

70) *Derek McNeil* and Mark P. Heitz*, "Molecular Interaction of Imidazolium-based Ionic Liquids with a DNA-Oligonucleotide" presented: 67th Annual Rochester American Chemical Society Collegiate Research Symposium, University of Rochester, Rochester, NY, (April 2022). ****WON OUTSTANDING POSTER**

69) *Christian J. Green* and Mark P. Heitz*, "Solvation Dynamics in Glyceline Deep Eutectic Solvents" presented: 67th Annual Rochester American Chemical Society Collegiate Research Symposium, University of Rochester, Rochester, NY, (April 2022).

68) Emmanuel M. Nsengiyumva, Mark P. Heitz, Paschalis Alexandridis, "Xanthan Gum Polysaccharide in in High-Ionic Strength Aqueous Solutions" presented: 2021 24th Annual CBE Graduate Student Research Symposium, University at Buffalo, Buffalo, NY, (October 2021).

67) Mark P. Heitz*, *Zachary C. Putney* and *Joel Campaign*, "Dissolution of Ionic Liquids in Supercritical Fluids: A Spectroscopic Study" presented: 2019 American Chemical Society Northeast Regional Meeting (NERM), Saratoga, NY, (June 2019).

66) *Tyler A. Johnston* and Mark P. Heitz*, "Interference of Ionic Liquids on the Bradford Assay: A Spectroscopic Study" presented: 12th Annual Western New York American Chemical Society Undergraduate Research Symposium, D'Youville College, Buffalo, NY, (April 2019).

65) *Zachary C. Putney* and Mark P. Heitz*, "Solvation of Phosphonium Ionic Liquids in Supercritical Carbon Dioxide" presented: 12th Annual Western New York American Chemical Society Undergraduate Research Symposium, D'Youville College, Buffalo, NY, (April 2019).

64) *Rachel I. Riga* and Mark P. Heitz*, "Molecular Solvation in Phosphonium Ionic Liquids" presented: 12th Annual Western New York American Chemical Society Undergraduate Research Symposium, D'Youville College, Buffalo, NY, (April 2019).

63) *Mary M. LaRocca* and Mark P. Heitz*, "Solvation Dynamics in Deep Eutectic Solvents" presented: 12th Annual Western New York American Chemical Society Undergraduate Research Symposium, D'Youville College, Buffalo, NY, (April 2019).

62) *Tyler A. Johnston* and Mark P. Heitz*, "Interference of Ionic Liquids on the Bradford Assay: A Spectroscopic Study" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

61) *Zachary C. Putney* and Mark P. Heitz*, "Solvation of Phosphonium Ionic Liquids in Supercritical Carbon Dioxide" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

60) *Justin M. Scheg* David W. McCamant and Mark P. Heitz*, "Viscosity-Controlled Electron Transfer in Water Splitting" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

59) *Rachel I. Riga* and Mark P. Heitz*, "Molecular Solvation in Phosphonium Ionic Liquids" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

58) *Mary M. LaRocca* and Mark P. Heitz*, "Solvation Dynamics in Deep Eutectic Solvents" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

57) *Dylan J. Bader* and Mark P. Heitz*, "Determining Enzymatic Mobility in the Presence of Molecular Crowding Agents" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2019).

56) *Zachary C. Putney* and Mark P. Heitz*, "Solvation of Phosphonium Ionic Liquids in Supercritical Carbon Dioxide" presented: 64th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, Rochester, NY, (April 2019).

55) *Justin M. Scheg* David W. McCamant and Mark P. Heitz*, "Viscosity-Controlled Electron Transfer in Water Splitting" presented: 64th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, Rochester, NY, (April 2019).

54) *Rachel I. Riga* and Mark P. Heitz*, "Molecular Solvation in Phosphonium Ionic Liquids" presented: 64th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, Rochester, NY, (April 2019).

53) *Mary M. LaRocca* and Mark P. Heitz*, "Solvation Dynamics in Deep Eutectic Solvents" presented: 64th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, Rochester, NY, (April 2019).

52) *Dylan J. Bader* and Mark P. Heitz*, "Determining Enzymatic Mobility in the Presence of Molecular Crowding Agents" presented: 64th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, Rochester, NY, (April 2019).

51) *Tyler A. Johnston* and Mark P. Heitz*, "Interference of Ionic Liquids on the Bradford Assay: A Spectroscopic Study" presented: 45th Annual Rochester Academy of Science, SUNY Geneseo, Geneseo, NY, (November 2018).

50) *Kimberly W. Horn* and Mark P. Heitz*, "Inhibition of Tyrosinase Activity by Imidazolium Ionic Liquids" presented: 61st Annual Rochester American Chemical Society Undergraduate Research Symposium, St. John Fisher College, Rochester, NY, (April 2016).

49) *Leeza M. Kerr* and Mark P. Heitz*, "Synthesis and Characterization of Alkyltriphenylphosphonium Chloride Ionic Liquids: Water Solubility Compared to Trihexyl(tetradecyl)phosphonium Chloride" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2016).

48) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Imidazolium Ionic Liquid Solvation" presented: 60th Annual Rochester American Chemical Society Undergraduate Research Symposium, SUNY Geneseo, Geneseo, NY, (April 2015).

47) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Imidazolium Ionic Liquid Solvation" presented: 8th Annual Western New York American Chemical Society Undergraduate Research Symposium, D'Youville College, Buffalo, NY, (April 2015).

46) *Colby M. Raymond* and Mark P. Heitz*, "Determination of the Ion Association Constant in Binary Solutions of (Methanol + Phosphonium Ionic Liquid) and (Methanol + Imidazolium Ionic Liquid)" presented: 1st Annual SUNY Undergraduate Research Conference, The College at Brockport, Brockport, NY, (April 2015).

45) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Ionic Liquid Solvation" presented: 1st Annual SUNY Undergraduate Research Conference, The College at Brockport, Brockport, NY, (April 2015).

44) *Stephanie M Robillard* and Mark P. Heitz*, "Solvation Dynamics of Coumarin 153 in Binary Solvents" presented: 1st Annual SUNY Undergraduate Research Conference, The College at Brockport, Brockport, NY, (April 2015).

43) *Stephanie M Robillard* and Mark P. Heitz*, "Solvation Dynamics of Coumarin 153 in Binary Solvents" presented: 41st Annual Rochester Academy of Science, The College at Brockport, SUNY, (November 2014).

42) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Ionic Liquid Solvation" presented: 41st Annual Rochester Academy of Science, The College at Brockport, SUNY, (November 2014).

41) *Colby M. Raymond* and Mark P. Heitz*, "Electrochemical Characterization of Trihexyltetradecylphosphonium Chloride and Decylmethylimidazolium Chloride Measurements in Meoh" presented: 41st Annual Rochester Academy of Science, The College at Brockport, SUNY, (November 2014).

40) *Zachary McAtee* and Mark P. Heitz*, "Rheological Studies of Ionic Liquids/Methanol Co-solvents" presented: presented: 59th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, (April 2014).

39) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Trihexyltetradecylphosphonium Chloride Ionic Liquid Solvation" presented: 59th Annual Rochester American Chemical Society Undergraduate Research Symposium, Rochester Institute of Technology, (April 2014).

38) *Zachary McAtee* and Mark P. Heitz*, "Rheological Studies of Ionic Liquids/Methanol Co-solvents" presented: presented: 7th Annual Western New York American Chemical Society Undergraduate Research Symposium, University at Buffalo, (April 2014).

37) *Jeffrey Ellison* and Mark P. Heitz*, "Computational Study of Trihexyltetradecylphosphonium Chloride Ionic Liquid Solvation" presented: 7th Annual Western New York American Chemical Society Undergraduate Research Symposium, University at Buffalo, (April 2014).

36) *Zachary McAtee* and Mark P. Heitz*, "Rheological Studies of Ionic Liquids/Methanol Co-solvents" presented: 40th Annual Rochester Academy of Science, Nazareth College, (November 2013).

35) *Michael M. Molnar* and Mark P. Heitz*, "Protein Denaturation using Traditional Surfactants and Ionic Liquids" presented: 6th Annual Western New York American Chemical Society Undergraduate Research Symposium, Niagara University, Lewiston, NY, (April 2013).

34) *Michael M. Molnar* and Mark P. Heitz*, "Bovine Albumin Serum Denatured by Multiple Surfactants" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2013).

33) *Kathleen M. Barra* and Mark P. Heitz*, "Solvation Dynamics of Phosphonium Ionic Liquids in Methanol Cosolvent Solutions" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2011).

32) *Kathleen M. Barra* and Mark P. Heitz*, "Solvation Dynamics of Phosphonium Ionic Liquids in Methanol Cosolvent Solutions" presented: American Chemical Society Undergraduate Research Symposium, Rochester, NY (April 2011).

31) *Kathleen M. Barra* and Mark P. Heitz*, "Solvation Dynamics of Phosphonium Ionic Liquids in Methanol Cosolvent Solutions" presented: National Conference on Undergraduate Research, Ithaca, NY (April 2011).

30) *Randy P. Sabatini* and Mark P. Heitz*, "Solvation Dynamics of Phosphonium Ionic Liquids in Supercritical CO_2" presented: National Conference on Undergraduate Research, LaCrosse, WI (April 2009).

29) *Peter C. Apps* and Mark P. Heitz*, "Dissolution of the Ionic Liquid Trihexyltetradecylphosphonium Bis(Trifluoromethylsulfonyl)Amide in Supercritical CO_2" presented: National Conference on Undergraduate Research, Asheville, NC (April 2006).

28) *Jonathan P. Strizak* and Mark P. Heitz*, "Fluorescence Spectroscopic Studies of Various Probes in Ionic Liquids" presented: National Conference on Undergraduate Research, Virginia Military Institute, Lexington, VA (April 2005).

27) *Ashley A. Campanali* and Mark P. Heitz*, "Characterization of Lysozyme at a Polymer Surface" presented: National Conference on Undergraduate Research, Virginia Military Institute, Lexington, VA (April 2005).

26) *JoAnn M. Viterna* and Mark P. Heitz*, “Fluorescence Studies of Lysozyme as a Function of Temperature, pH, and Chemical Denaturation” presented: National Conference on Undergraduate Research, Virginia Military Institute, Lexington, VA (April 2005).
25) Mark P. Heitz*, *Kristina L. Fuller*, *James W. Hutchings*, Markus M Hoffmann, “Dissolution of Ionic Liquids in Supercritical CO_2” presented: American Chemical Society: Northeast Regional Meeting, Rochester, NY (November 2004).

24) *Kristina L. Fuller* and Mark P. Heitz*, “Steady-State Fluorescence Spectroscopic Study of Fluorophores Dissolved in Room Temperature Ionic Liquids” presented: American Chemical Society: Northeast Regional Meeting, Rochester, NY (November 2004).

23) *Kristina L. Fuller* and Mark P. Heitz*, "Molecular Solvation in Room-Temperature Phosphonium Ionic Liquids" presented: National Conference on Undergraduate Research, IUPUI, Indianapolis, IN, (April 2004).

22) *Kristina L. Fuller* and Mark P. Heitz*, "Using Fluorescence Emission Spectroscopy to Study Room-Temperature Phosphonium Ionic Liquids" presented: The American Chemical Society Undergraduate Research Symposium, University of Rochester Medical Center, Rochester, NY, (November 2003).

21) *Kristina L. Fuller* and Mark P. Heitz*, "Characterizing Solvation in Room-Temperature Phosphonium Ionic Liquids" presented: The 5th Robert A. Laudise Symposium, Union College, Schenectady, NY, (October 2003).

20) *Amanda B. Sturdevant* and Mark P. Heitz*, “Spectroscopic Study of DCM as Fluorescent Probe of Supercritical Fluid Solvents” presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2003).

19) *Amanda B. Sturdevant* and Mark P. Heitz*, “Spectroscopic Study of DCM as Fluorescent Probe of Solute-Solvent Interactions” presented: National Conference on Undergraduate Research, Salt Lake City, UT, (March 2003).

18) *Lindsey A. Harrington* and Mark P. Heitz*, “Fluorescent Molecules as Probes of Supercritical Fluids” presented: National Conference on Undergraduate Research, Whitewater, WI, (April 2002).

17) *Larry A. Ducady* and Mark P. Heitz*, “Spectral Effects of pH and Hydration on Lysozyme in AOT Reverse Micelles” presented: National Conference on Undergraduate Research, Whitewater, WI, (April 2002).

16) *Lindsey A. Harrington* and Mark P. Heitz*, “DCM: A Molecular Probe for Solvation” presented: American Chemical Society, Local Section Undergraduate Research Symposium, Hobart and William Smith Colleges, Geneva, NY, (April 2002).

15) *Lindsey A. Harrington* and Mark P. Heitz*, “DCM: A Molecular Probe for Solvation” presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2002).

14) Mark P. Heitz* and *Diana M. Topolnycky*, “Luminescence of Biomolecules Entrapped within Reverse Micelles” presented: Rocky Mountain Conference on Analytical Chemistry, Denver, CO (August 2001).

13) *Diana M. Topolnycky* and Mark P. Heitz*, "Enzyme Kinetics in AOT Reverse Micelles" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2001).

12) *Michael G. Nicholson* and Mark P. Heitz*, "The Apparent pH Within AOT Reverse Micelles" presented: Scholar's Day, SUNY College at Brockport, Brockport, NY, (April 2001).

11) *Diana M. Topolnycky* and Mark P. Heitz*, "Enzyme Kinetics in AOT Reverse Micelles" presented: National Conference on Undergraduate Research, Lexington, KY, (March 2001).

10) *Michael G. Nicholson* and Mark P. Heitz*, "The Apparent pH Within AOT Reverse Micelles" presented: National Conference on Undergraduate Research, Lexington, KY, (March 2001).

9) Emily D. Niemeyer, Mark P. Heitz and Frank V. Bright*, "Effects of CO_2 Sorption on the Dynamics within Molten Polymers" presented: 47th Pittsburgh Conference, Chicago, IL (March 1996).

8) Mark P. Heitz and Frank V. Bright*, "Probing Molecular Charisma in Supercritical Fluids" presented: 13th Student Symposium, SUNY at Buffalo, Buffalo, NY (May 1995).

7) Jeffrey S. Lundgren, Mark P. Heitz and Frank V. Bright*, "Effects of Hydration on Protein Dynamics" presented: 13th Graduate Student Symposium, SUNY at Buffalo, Buffalo, NY (May 1995).

6) Mark P. Heitz and Frank V. Bright*, "Probing Molecular Charisma in Supercritical Fluids" presented: 46th Pittsburgh Conference, New Orleans, LA (March 1995).

5) Mark P. Heitz and Frank V. Bright*, "Rotational Motion of Reverse Micelles in Compressible Fluids" presented: 46th Pittsburgh Conference, New Orleans, LA (March 1995).

4) Jeffrey S. Lundgren, Mark P. Heitz and Frank V. Bright*, "Effects of Hydration on Protein Dynamics" presented: 46th Pittsburgh Conference, New Orleans, LA (March 1995).

3) Mark P. Heitz and Frank V. Bright*, Rotational Dynamics of AOT Reverse Micelles formed in Supercritical Fluids" presented: 21st FACSS Conference, St. Louis, MO (October 1994).

2) Mark P. Heitz and Frank V. Bright*, "Reorientational Dynamics of Aerosol-OT Micelles in Liquid and Supercritical Solvents" presented: 12th Graduate Student Symposium, SUNY at Buffalo, Buffalo, NY (May 1994).

1) Mark P. Heitz and Frank V. Bright*, "Reorientational Dynamics of Aerosol-OT Micelles in Liquid and Supercritical Solvents" presented: 45th Pittsburgh Conference, Chicago, IL (March 1994).

Administrative and Service Work

Chaired Positions

Department Chair, SUNY Brockport	2024-present
Interim Department Chair, SUNY Brockport	2005-2006, 2022, 2024
Assistant Department Chair, SUNY Brockport	2003-2005, 2007-2021, 2023-present
Chair, Awards Committee	2024-present

Chair, Advancement, Promotion, and Tenure, Member, SUNY Brockport	2015-2022
Computing Facilities Coordinator, SUNY Brockport	1999-present
Chair, Curriculum Committee, SUNY Brockport	2015, 2018-2020
Chair, Analytical Chemistry Search Committee, SUNY Brockport	2015-2016
Chair, Brockport Budget and Resource Committee, SUNY Brockport	2012-2016
Chair, Laboratory Instructor Search Committee, SUNY Brockport	2012-2013
Chair, College Senate Graduate Curriculum Committee, SUNY Brockport	2004-2006
Chair, Facilities and Equipment Committee, SUNY Brockport	1999-2003

Campus Wide Committees

Engineering Technology Program Development, SUNY Brockport	2022-2023
Energy Policy Committee, SUNY Brockport	2020-2021
College Technology Council, Technology Grant Committee, SUNY Brockport	2019
Budget and Resource Committee Member (Chair Elect), SUNY Brockport	2011-2012
College Senate Member, SUNY Brockport	2002-2008
College Technology Council, SUNY Brockport	2003-2004
Academic Priorities Committee, SUNY Brockport	2002-2004

Department Committees

Director of Graduate Studies	2024-present
Advancement, Promotion, and Tenure, Member, SUNY Brockport	2011-2022
Curriculum Committee Member, SUNY Brockport	2011-2022
Biochemistry Search Committee, SUNY Brockport	2018-2019
Lecturer Search Committee, SUNY Brockport	2017-2018
Analytical Chemistry Search Committee, SUNY Brockport	2016-2017
Webmaster, SUNY Brockport	2004-2017
Inorganic Chemistry Search Committee, SUNY Brockport	2011-2012
Inorganic Chemistry Adjunct Search Committee, SUNY Brockport	2010-2011
Biochemistry Search Committee, SUNY Brockport	2009-2010
Analytical Chemistry Search Committee, SUNY Brockport	2008-2009
Chemistry Website Committee, SUNY Brockport	1999-2001
Organic/Biochemistry Search Committee, SUNY Brockport	2000-2001
Chemistry Club Advisor, SUNY Brockport	1999-2001
Physical Chemistry Search Committee, Wittenberg University	1998-1999

Journal Editorships

Editorial Board, ChemEngineering, MDPI Publishers	2020-present
Reviewer Board, Molecules, MDPI Publishers	2022-present
Topical Editor, Molecules, MDPI Publishers	2020-2021

Special Issue Editor

Molecules, MDPI Publishers: Supercritical Fluid Techniques	2022
ChemEngineering, MDPI Publishers: Advanced Ionic Liquid-Mixed Solvent Systems II	2021-2022
Molecules, MDPI Publishers: Biomolecules in Non-aqueous Media	2020-2021
ChemEngineering, MDPI Publishers: Advanced Ionic Liquid Solutions Special Issue	2018-2019

Service Activities within Local and National Professional Organizations

Secretary; Northeast Region ACS (NERACS)	2023-present
Treasurer; ACS, Rochester Local Section	2008-2016, 2018-present
Co-chair, 68th Annual Collegiate Research Symposium; ACS, Rochester Local Section	2024
Treasurer; ACS, 2022 Northeast Regional Meeting	2018-2022
Financial Committee; ACS, Rochester Local Section	2016-present
Co-chair, 63rd Annual Student Research Symposium; ACS, Rochester Local Section	2017-2018
Session Chair; ACS, Rochester Local Section Undergraduate Research Symposium	2011
Chair; Elections Committee, ACS, Rochester Local Section	2006-2009
Session Organizer and Chair; ACS, Northeast Regional Meeting	2004
Chair; Public Relations, ACS, Northeast Regional Meeting Organizing Committee	2002-2004
Co-Chair; Exhibition, ACS, Northeast Regional Meeting Organizing Committee	2004
Chair; Society for Applied Spectroscopy, Local Section Affairs Committee	2003-2004
Member; Wittenberg University: Chemistry Outreach Program Committee	1998-1999
Co-chair; ACS Western NY Local Section National Chemistry Week – Elementary/High School	1994

Reviewer/Referee Assignments

Funding Agencies

National Science Foundation – Major Research Instruments (NSF-MRI)	2023
National Science Foundation – Major Research Instruments (NSF-MRI)	2006
ACS Petroleum Research Fund (ACS-PRF)	2004

Ph.D. Thesis Committee

Shiv Nadar, Delhi NCR, India, Arnab Sil, Biswajit Guchhait (Advisor) External Reader	May 2025
Indian Institute of Technology Delhi, Shreya Juneja, Siddarth Pandey (Advisor) External Reader	August 2024
University at Buffalo, Emanuel Nsengiyumva, Paschalis Alexandridis (Advisor)	May 2023

Undergraduate Thesis Committees (SUNY Brockport unless otherwise indicated)

Troy Smith, Markus Hoffmann (Advisor)	2025
Mathew Too, Markus Hoffmann (Advisor)	2021
Joseph Kealy, Markus Hoffmann (Advisor)	2021
Tyler Johnston, Mark Heitz (Advisor)	2019
**Michelle Seifert, (co-Advisor)*	2019
Justin Scheg, Mark Heitz (Advisor)	2018
**Miriam Seebach, (co-Advisor)*	2018
Elise Cade, Markus Hoffmann (Advisor)	2015
Megan Bennett, Markus Hoffmann (Advisor)	2014
Nathan Scharf, Markus Hoffmann (Advisor)	2012
James Parry, Department of Physics, Mark Heitz (Advisor)	2005
Lindsay Harrington, Mark Heitz (Advisor)	2012
Kathleen Barra, Mark Heitz (Advisor)	2011
Amanda Sturdevant, Mark Heitz (Advisor)	2003
Michael Nicholson, Mark Heitz (Advisor)	2001

Tracy Weisner, Mark Heitz (Advisor) 2000
Roderick Fry, Mark Heitz (Advisor) 2000

* *Technical University of Darmstadt, Germany*

Journal Reviewer – (39)

Journal of the American Chemical Society
ACS Omega
ACS Sustainable Chemistry and Engineering
Advances in Colloid and Interface Science
Aims Biophysics
American Institute of Chemical Engineers Journal
Angewante Chimie International Edition
Applied Science
Applied Spectroscopy
Canadian Journal of Chemistry
ChemCatChem
ChemEngineering
Chemistry An Asian Journal
ChemistryOpen
ChemistrySelect
ChemPlusChem
Colloids and Surfaces B
Colloids and Interfaces
Dyes and Pigments
European Journal of Inorganic Chemistry
Green Chemistry Letters and Reviews
Industrial and Engineering Chemistry Research
Journal of Chemical and Engineering Reference Data
Journal of Chemical Education
Journal of Chemical Physics
Journal of Chemical Thermodynamics
Journal of Colloid and Interface Science
Journal of Fluorescence
Journal of Molecular Liquids
Journal of Physical and Chemical Reference Data
Journal of Physical Chemistry (A, B, C, Letters)
Journal of the American Chemical Society
Journal of Undergraduate Chemistry Research
Liquids
Molecules
Physical Chemistry Chemical Physics
Sustainable Chemistry
Sustainability

Teaching Experience – Specific Courses Taught

State University of New York at Brockport (1999 - present)

Department of Chemistry

CHM 171: Elements of Forensic Science
CHM 205: College Chemistry I Lecture and Laboratory
CHM 206: College Chemistry II Lecture and Laboratory
CHM 303: Analytical Chemistry I, Quantitative Analysis
CHM 372: Environmental Issues
CHM 400/401: Seminar I and II
CHM 404: Physical Chemistry for Life Sciences
CHM 405/406: Physical Chemistry I and II
CHM 408/409: Physical Methods Laboratory I and II
CHM 413: Spectral Interpretation
CHM 414/416: Analytical Chemistry II, Instrumental Analysis and Laboratory
CHM 417: Computational Chemistry

Criminal Justice

CRJ 371: Introduction to Forensic Science

Wittenberg University (1998-1999)

CHM 121: General Chemistry I, Lecture and Laboratory
CHM 162: General Chemistry II, Lecture and Laboratory
CHM 311: Physical Chemistry I, Lecture and Laboratory
CHM 352: Physical Chemistry II, Lecture and Laboratory

State University of New York at Buffalo (Summer 1995)

Department of Chemistry, Educational Opportunity Program (EOP) Instructor: General Chemistry

State University of New York at Buffalo (1992–1994)

Teaching assistant for freshman level chemistry
Teaching assistant for undergraduate instrumental analysis
Teaching assistant for undergraduate quantitative analysis

Keshequa Central School (1990-1992)

Chemistry teacher for Regent's chemistry classes and Physical Science classes

University of Rochester (1988–1990)

Teaching assistant for freshman level and honors chemistry
Teaching assistant for undergraduate thermodynamics
Teaching assistant for undergraduate chemistry and society topics course

Rochester Institute of Technology (1987-1988)

Teaching assistant for freshman level and honors chemistry