

# Jennifer R. Hampton

Hope College  
Department of Physics  
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27 Graves Place  
Holland, MI 49423

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## Professional Experience

### Hope College

Professor of Physics	July 2020 – present
Chair, Department of Physics	July 2019 – present
Associate Professor of Physics	July 2013 – June 2020
Interim Chair, Department of Physics	July 2013 – June 2014
Assistant Professor of Physics	July 2007 – June 2013

### Cornell University

Visiting Scientist Department of Chemistry and Chemical Biology	August 2014 – May 2015
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### Washington & Jefferson College

Assistant Professor of Physics	August 2005 – June 2007
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### The Pennsylvania State University

Postdoctoral Scholar Departments of Chemistry and Physics Advisor: Paul S. Weiss	September 2002 – July 2005
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### Cornell University

Graduate Research Assistant Department of Chemistry and Chemical Biology Department of Physics	January 1998 – August 2002
Graduate Teaching Assistant Department of Physics	Spring 1998, Spring 1999

## Education

### Cornell University

Ph.D., Experimental Physics Minor in Chemistry/Chemical Physics Thesis: Magnetic Studies of Electrodeposited Thin Films and Compositionally Modulated Structures Advisor: Héctor D. Abruña	August 2002
M.S., Physics	May 1999

### University of Cambridge

M.Phil., Physics Thesis: Formation and Properties of Thermally Prepared Copper(I) Oxide Advisor: C. John Adkins	November 1996
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### Oberlin College

B.A., Physics with Highest Honors	May 1995
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## Honors & Awards

Hope College Sigma Pi Sigma	2008
National Physical Science Consortium Fellowship	1996 – 2002
Winston Churchill Foundation Scholarship	1995 – 1996
Oberlin College Sigma Xi	1995
Oberlin College Phi Beta Kappa	1994

## Publications

- S. D. Joffre, P. A. DeYoung, and J. R. Hampton, “Comparing Electrochemical Analysis and Particle Induced X-Ray Emission Measurements of Prussian Blue Analogue Deposits,” submitted to *Discov. Mater.* (2020).
- B. K. Wheatle, J. R. Hampton, G. G. Rodríguez-Calero, J. G. Werner, Y. Gu, U. Wiesner, and H. D. Abruña, “Electrochemical generation of hexacyanoferrate and hexacyanoruthanate electroactive films at nickel electrode surfaces: A promising synthetic approach for new electrode materials in metal ion batteries and supercapacitors,” *J. Electroanal. Chem.* **871**, 114284 (2020).
- A. Rensmo and J. R. Hampton, “Comparison of Charge Storage Properties of Prussian Blue Analogues Containing Cobalt and Copper,” *Metals* **9**, 1343 (2019).
- B. E. Peecher and J. R. Hampton, “Dealloying Behavior of NiCo and NiCoCu Thin Films,” *Int. J. Electrochem.* **2016**, 2935035 (2016).
- M. J. Gira, K. P. Tkacz, and J. R. Hampton, “Physical and electrochemical area determination of electrodeposited Ni, Co, and NiCo thin films,” *Nano Convergence* **3**, 6 (2016).
- S. Feller, J. Hampton, and C. Mader, “How to Make the Most of Your Research Experience,” *SPS Observer*, **XLIX**, 14, (Spring 2015). Unrefereed publication.
- K. R. Koboski, E. F. Nelsen, and J. R. Hampton, “Hydrogen evolution reaction measurements of dealloyed porous NiCu,” *Nanoscale Res. Lett.* **8**, 528 (2013).
- A. A. Frey, N. R. Wozniak, T. B. Nagi, M. P. Keller, J. M. Lunderberg, G. F. Peaslee, P. A. DeYoung, and J. R. Hampton, “Analysis of Electrodeposited Nickel-Iron Alloy Film Composition Using Particle-Induced X-ray Emission,” *Int. J. Electrochem.* **2011**, 604395 (2011).
- N. R. Wozniak, A. A. Frey, L. W. Osterbur, T. S. Boman, and J. R. Hampton, “An electrochemical cell for the efficient turn around of wafer working electrodes,” *Rev. Sci. Instrum.* **81**, 034102 (2010).
- T. J. Mullen, J. N. Hohman, A. A. Dameron, J. R. Hampton, S. D. Gillmor, and P. S. Weiss, “Displaceable Monolayers and Microdisplacement Printing: 1-Adamantanethiol Assembly and Application,” *Material Matters* **1** (2), 8 (2006). Unrefereed publication.
- J. R. Hampton, A. A. Dameron, and P. S. Weiss, “Double-Ink Dip-Pen Nanolithography Studies Elucidate Molecular Transport,” *J. Am. Chem. Soc.* **128**, 1648 (2006).
- J. R. Hampton, A. A. Dameron, and P. S. Weiss, “Transport Rates Vary with Deposition Time in Dip-Pen Nanolithography,” *J. Phys. Chem. B* **109**, 23118 (2005).
- A. A. Dameron, J. R. Hampton, S. D. Gillmor, J. N. Hohman, and P. S. Weiss, “Enhanced molecular patterning via microdisplacement printing,” *J. Vac. Sci. Technol. B* **23**, 2929 (2005).
- R. Stine, M. V. Pishko, J. R. Hampton, A. A. Dameron, and P. S. Weiss, “Heat-Stabilized Phospholipid Films: Film Characterization and the Production of Protein Resistant Surfaces,” *Langmuir* **21**, 11352 (2005).
- A. A. Dameron, J. R. Hampton, R. K. Smith, T. J. Mullen, S. D. Gillmor, and P. S. Weiss, “Microdisplacement Printing,” *Nano Lett.* **5**, 1834 (2005).
- J. Powers, J. R. Manson, C. E. Sosolik, J. R. Hampton, A. C. Lavery, and B. H. Cooper, “Temperature dependent scattering of hyperthermal energy  $K^+$  ions,” *Phys. Rev. B* **70**, 115413 (2004).
- J. R. Hampton, J.-L. Martínez-Albertos, and H. D. Abruña, “SMOKE Studies of Electrodeposited Mono- and Multilayers,” *Langmuir* **19**, 4309 (2003).

- C. E. Sosolik, J. R. Hampton, A. C. Lavery, B. H. Cooper, and J. B. Marston, "Thermally Enhanced Neutralization in Hyperthermal Energy Ion Scattering," *Phys. Rev. Lett.* **90**, 013201 (2003).
- J. R. Hampton, J.-L. Martínez-Albertos, and H. D. Abruña, "Development of a versatile SMOKE system with electrochemical applications," *Rev. Sci. Instrum.* **73**, 3018 (2002).
- J. Hampton, J. P. Eisenstein, L. N. Pfeiffer, and K. W. West, "Capacitance of two-dimensional electron systems subject to an in-plane magnetic field," *Solid State Commun.* **94**, 559 (1995).

## Other Writing

- J. Hampton, "What I Wish I Had Known, Part 3: At home in the borderlands," Books & Culture Web Exclusives, <https://www.booksandculture.com/articles/webexclusives/2013/march/what-i-wish-i-had-known-part-3.html>, (March 20, 2013).

## Presentations

- J. R. Hampton, "Characterization of Electrogenerated Hexacyanoferrate Thin Films," American Chemical Society National Meeting, Philadelphia, PA (March 23, 2020), invited talk. [Cancelled due to COVID-19]
- J. Hampton, "Measuring Electrochemical Reactions with AC Circuits," Symposium in Honor of Prof. Dan Stinebring, Oberlin OH (May 25, 2019).
- E. A. Rensmo, S. D. Joffre, and J. R. Hampton, "Electrogenerated Hexacyanoferrate Thin Films for Battery Applications," American Physical Society March Meeting, Boston, MA (March 4, 2019), contributed talk.
- J. R. Hampton, "Nickel Hexacyanoferrate: A New Battery Material," West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), invited talk.
- S. D. Joffre, A. Rensmo, and J. R. Hampton, "Characterization of electrogenerated hexacyanoferrate thin films for battery applications," American Chemical Society National Meeting, New Orleans, LA (March 19, 2018), contributed talk.
- B. Peecher and J. Hampton, "Dealloying Behavior of NiCo and NiCoCu Thin Films," American Physical Society March Meeting, New Orleans, LA (March 16, 2017), contributed talk.
- J. R. Hampton, "Nickel Hexacyanoferrate: A New Battery Material," Physics SHARP Seminar Series, Hope College, Holland, MI (May 31, 2016).
- M. Gira, K. Tkacz, and J. Hampton, "Area Determination of Electrodeposited Ni, Co, and NiCo Thin Films," American Physical Society March Meeting, Baltimore, MD (March 17, 2016), contributed talk.
- J. R. Hampton, "New Materials for Batteries: Nickel Hexacyanoferrate Thin Films," Physics & Astronomy Seminar, Calvin College, Grand Rapids, MI (February 16, 2016).
- J. R. Hampton, "New Materials for Batteries: Nickel Hexacyanoferrate Thin Films," West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 21, 2015), invited talk.
- J. R. Hampton, "New Materials for Batteries: Nickel Hexacyanoferrate Thin Films," Physics Seminar, Hope College, Holland, MI (November 13, 2015).
- J. R. Hampton, "Catalysis Applications of Electrodeposited Alloy Thin Films," Physics SHARP Seminar Series, Hope College, Holland, MI (May 28, 2015).
- J. R. Hampton, "Electrochemistry for Making Alloy Thin Films with Catalysis Applications," Eigentalk, Andrews University, Berrien Springs, MI (March 27, 2015).
- M. Gira, M. Milliken, K. Tkacz, and J. R. Hampton, "Electrodeposited alloy thin films for catalysis applications," American Chemical Society National Meeting, Denver, CO (March 25, 2015), contributed talk.
- J. R. Hampton, B. K. Wheatle, G. G. Rodríguez-Calero, and H. D. Abruña, "Hexacyanoferrate Films on Transition Metal Surfaces for Energy Storage Applications," New York State Center for Future Energy Systems Annual Conference, Troy, NY (February 26, 2015), contributed poster.

- J. Hampton, “Nanomaterials & Nanotechnology,” Hope Academy of Senior Professionals Curriculum Presentations, Hope College, Holland, MI (June 9 and 16, 2014).
- K. R. Koboski, E. F. Nelsen, and J. R. Hampton, “Dealloyed porous NiCu for hydrogen evolution reaction catalysis,” American Chemical Society National Meeting, Dallas, TX (March 17, 2014), contributed talk.
- J. R. Hampton, “Electrochemistry for Making Nanoporous Alloys,” Physics and Astronomy Department Colloquium, Ball State University, Muncie, IN (November 7, 2013).
- J. R. Hampton, “Electrochemistry for Making Nanoporous Alloys,” Seminar, Oak Ridge National Laboratory, Oak Ridge, TN (December 17, 2012).
- J. R. Hampton, “Electrochemistry for Making Nanoporous Alloys,” Physics SHARP Seminar Series, Hope College, Holland, MI (June 12, 2012).
- K. Koboski, N. Graber, E. Nelsen, and J. Hampton, “Fabrication and Characterization of Electrodeposited Nanoporous Alloys,” American Physical Society March Meeting, Boston, MA (February 28, 2012), contributed talk.
- M. E. Anderson and J. R. Hampton, “Reading and Writing on the Nanoscale: Imaging and Manipulating Nanoparticles, Molecules, and Atoms,” Winter Happening, Hope College, Holland MI (January 28, 2012).
- N. Wozniak, D. McNeel, A. Frey, and J. Hampton, “X-Ray Characterization of Electrodeposited Alloy Thin Films,” American Physical Society March Meeting, Dallas, TX (March 25, 2011), contributed talk.
- J. R. Hampton, “Characterization of Electrodeposited Nickel-Iron-Copper Thin Films,” Physics and Engineering Seminar, Hope College, Holland, MI (April 16, 2010).
- A. A. Frey, N. R. Wozniak, and J. R. Hampton, “Particle-Induced X-ray Emission analysis of electrodeposited alloy film composition,” American Chemical Society National Meeting, San Francisco, CA (March 24, 2010), contributed talk.
- J. R. Hampton, “Characterization of Electrodeposited Nickel-Iron-Copper Thin Films,” Physics and Astronomy Department Seminar, Calvin College, Grand Rapids, MI (March 9, 2010).
- J. R. Hampton, “Characterization of Electrodeposited Nickel-Iron-Copper Thin Films,” Physics Department Seminar, Grand Valley State University, Allendale, MI (October 19, 2009).
- T. S. Boman, M. J. Ouma, and J. R. Hampton, “Characterization of electrodeposited nickel, iron, and nickel-iron thin films,” American Chemical Society National Meeting, Salt Lake City, UT (March 25, 2009), contributed poster.
- J. R. Hampton, “Characterization of Electrodeposited Magnetic Thin Films,” Chemistry Department Seminar, Hope College, Holland, MI (January 23, 2009).
- J. R. Hampton, “Magnetic Measurements of Electrodeposited Thin Films and Multilayers,” Physics Department Colloquium, Western Michigan University, Kalamazoo, MI (March 17, 2008).
- J. R. Hampton, “Magnetic Measurements of Electrodeposited Thin Films and Multilayers,” Physics and Engineering Seminar, Hope College, Holland, MI (October 19, 2007).
- J. R. Hampton, A. A. Dameron, R. K. Smith, and P. S. Weiss, “The Effect of Substrate Hydrophobicity in Ink Transport During Dip-Pen Nanolithography,” American Physical Society March Meeting, Los Angeles, CA (March 24, 2005), contributed talk.
- J. R. Hampton, P. S. Weiss, A. A. Dameron, and A. M. Moore, “Molecular Engineering of Single Molecular Switches and Molecular Assemblies,” American Physical Society March Meeting, Los Angeles, CA (March 23, 2005), invited talk.
- J. R. Hampton, A. A. Dameron, R. K. Smith, and P. S. Weiss, “The Limits of Soft Lithographic Techniques: Pattern Stability and Molecular Order,” Sponsors Days Poster Session, Department of Chemistry, The Pennsylvania State University, University Park, PA (October 12, 2004).
- J. R. Hampton, R. K. Smith, A. A. Dameron, C. E. Inman, J. E. Hutchison, and P. S. Weiss, “Pattern stability in microcontact printed self-assembled monolayers,” American Chemical Society National Meeting, Philadelphia, PA (August 23, 2004), contributed poster.

- J. R. Hampton, “Nanoscale Ferroic Materials for Use in Data Storage,” Physics and Astronomy Department Colloquium, Oberlin College, Oberlin, OH (February 27, 2003).
- J. R. Hampton, J.-L. Martínez-Albertos, and H. D. Abruña “SMOKE Measurements of Electrochemically Deposited Co Thin Films and Co-Cu Multilayers,” American Physical Society March Meeting, Indianapolis, IN (March 2002), contributed talk.
- J. R. Hampton, C. E. Sosolik, A. C. Lavery, and B. H. Cooper, “Temperature-Dependent Scattering Dynamics of Hyperthermal-Energy K<sup>+</sup> Incident on Cu(001),” American Physical Society March Meeting, Minneapolis, MN (March 2000), contributed talk.
- J. R. Hampton, C. E. Sosolik, A. C. Lavery, A. Shundrovskaya, and B. H. Cooper, “Temperature Dependent Alkali Ion Scattering from Cu(001),” European Science Foundation Conference, Particle-Solid Interactions: Dynamic Phenomena, San Sebastian, Spain (September – October 1999), contributed poster.

### **Student Presentations (National and Regional)**

- E. Rulison, P. DeYoung, and J. Hampton, “Effects of Electrosynthesis Duration on Surface Structure and Storage Capabilities of Prussian Blue Analogue Films,” West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute (virtual), Grand Rapids, MI, (November 7, 2020), contributed poster.
- B. Devlin and J. Hampton, “How Surface Roughness of Prussian Blue Analogues Affects Charge Storage Capacity,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 17, 2019), contributed poster.
- J. Kelley and J. Hampton, “Study of Charge Transfer Quantities of Prussian Blue Analogues” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 17, 2019), contributed poster.
- K. Wilcox and J. Hampton, “Aqueous and Non-Aqueous Characterization of the Charge Storage of Prussian Blue Analogues with Varying Modification Procedures” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 17, 2019), contributed poster.
- K. Wilcox and J. Hampton, “The Effect of Potassium Hexacyanoferrate (III) Concentration on Prussian Blue Analogue Charge Storage,” West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 10, 2018), contributed poster.
- B. Devlin and J. Hampton, “Comparing the Intercalation of Na, Mg, and Al in Prussian Blue Analogues,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), contributed poster.
- S. Joffre and J. Hampton, “Comparing Electrochemical Analysis and Particle Induced X-Ray Emission Measurements of Prussian Blue Analogue Deposits,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), contributed poster.
- J. Kelley and Jennifer Hampton, “Study of Charge Transfer Quantities of Prussian Blue Analogues using Electrochemical Impedance Spectroscopy,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), contributed poster.
- E. Rulison, J. Hampton, and P. DeYoung, “Ion beam Analysis for Silicon Carbide Crystals and Battery Materials,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), contributed poster.
- K. Wilcox and J. Hampton, “The Effect of Potassium Hexacyanoferrate (III) Concentration on Prussian Blue Analogue Charge Storage,” West Michigan Nanoscience and Quantum Technology Conference, Grand Valley State University, Grand Rapids, MI (July 25, 2018), contributed poster.
- S. D. Joffre and J. R. Hampton, “Comparing Electrochemical Calculations and Particle Induced X-Ray Emission Measurements of Prussian Blue Analogue Deposits,” American Chemical Society National Meeting, New Orleans, LA (March 18 and 19, 2018), contributed poster (chosen for SCI-MIX).

- A. Rensmo and J. R. Hampton, "Comparison of Charge Storage Capacity of Prussian Blue Analogues Containing Copper and Cobalt," American Chemical Society National Meeting, New Orleans, LA (March 18 and 19, 2018), contributed poster (chosen for SCI-MIX).
- A. Rensmo and J. Hampton, "Comparison of Charge Storage Capacity of Prussian Blue Analogues Containing Copper and Cobalt," 2018 Conference for Undergraduate Women in Physics, University of Toledo, Toledo, OH (January 14, 2018), contributed poster.
- S. Joffre and J. Hampton, "Comparing Electrochemical Calculations and Particle Induced X-Ray Emission Measurements of Prussian Blue Analogue Deposits," 2017 Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science, University of Chicago, Chicago, IL (November 4, 2017), contributed poster.
- B. Peecher and J. Hampton, "Electrochemical vs X-ray Spectroscopic Measurements of NiFe(CN)<sub>6</sub> Crystals," American Physical Society March Meeting, New Orleans, LA (March 14, 2017), contributed poster.
- A. Lunderberg and J. Hampton, "Exploring the Effects of Copper on Composition and Charge Storage of Prussian Blue Analogue Pseudocapacitors," 2017 Conference for Undergraduate Women in Physics, Wayne State University, Detroit, MI (January 14, 2017), contributed poster.
- R. Prafke and J. Hampton, "Response of Surface Bound Hexacyanoferrate Films to Binary and Tertiary Metal Alloys," 2016 American Institute of Chemical Engineers Annual Meeting, San Francisco, CA (November 14, 2016), contributed poster.
- S. Joffre and J. Hampton, "Characterization of Cation Intercalation in Surface Bound Prussian Blue Analogues," West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 5, 2016), contributed poster.
- A. Lunderberg and J. Hampton, "Exploring the Effects of Copper on Composition and Charge Storage of Prussian Blue Analogue Pseudocapacitors," West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 5, 2016), contributed poster.
- R. Prafke and J. Hampton, "Response of Surface Bound Hexacyanoferrate Films to Binary and Ternary Metal Alloys," West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 5, 2016), contributed poster.
- D. Clark and J. Hampton, "Characterization of the Pseudocapacitive Nature of Surface Bound Prussian Blue Analogues," American Physical Society March Meeting, Baltimore, MD (March 15, 2016), contributed poster.
- B. Peecher and J. Hampton, "Dealloying NiCo and NiCoCu Alloy Thin Films Using Linear Sweep Voltammetry," American Physical Society March Meeting, Baltimore, MD (March 15, 2016), contributed poster.
- M. Gira and J. R. Hampton, "Capacitance and hydrogen evolution reaction characterization of electrodeposited nickel alloy thin films," American Chemical Society National Meeting, Denver, CO (March 22, 2015), contributed poster.
- M. Milliken and J. R. Hampton, "Quantitative characterization of methanol oxidation catalysis on dealloyed NiCu films," American Chemical Society National Meeting, Denver, CO (March 22, 2015), contributed poster.
- D. Clark, J. Veazey, and J. Hampton, "Utilizing Scanning Electron Microscopy to Characterize Conductive AFM Tip Degradation and Microsphere Deposition," Midwestern Symposium on Undergraduate Research in Chemistry, Michigan State University, East Lansing, MI (October 11, 2014), contributed poster.
- M. Gira and J. Hampton, "Capacitance and Hydrogen Evolution Reaction Characterization of Electrodeposited Nickel Alloy Thin Films," Midwestern Symposium on Undergraduate Research in Chemistry, Michigan State University, East Lansing, MI (October 11, 2014), contributed poster.
- B. Peecher and J. Hampton, "Electrodeposition and Dealloying of Nickel-Cobalt and Nickel-Cobalt-Copper Thin Films," Midwestern Symposium on Undergraduate Research in Chemistry, Michigan State University, East Lansing, MI (October 11, 2014), contributed poster.
- M. J. Gira and J. R. Hampton, "Area and capacitance characterization of nickel, cobalt, and nickel-cobalt electrodeposited thin films," American Chemical Society National Meeting, Dallas, TX (March 16, 2014), contributed poster.

- W. F. Washington and J. R. Hampton, “Characterization of electrodeposited and dealloyed NiFeCu thin films,” American Chemical Society National Meeting, Dallas, TX (March 16, 2014), contributed poster.
- B. Peecher and J. Hampton, “Electrodeposition and Dealloying of Nickel-Cobalt Thin Films,” West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 16, 2013), contributed poster.
- M. Gira and J. Hampton, “Area and Capacitance Characterization of Nickel, Cobalt, and Nickel-Cobalt Electrodeposited Thin Films,” 2013 Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science, University of Chicago, Chicago, IL (October 16, 2013), contributed poster.
- M. Gira and J. Hampton, “Area and Capacitance Characterization of Nickel, Cobalt, and Nickel-Cobalt Electrodeposited Thin Films,” Midwestern Symposium on Undergraduate Research in Chemistry, Michigan State University, East Lansing, MI (October 5, 2013), contributed poster.
- W. Washington and J. Hampton, “Characterization of Electrodeposited and Dealloyed NiFeCu Thin Films,” Kansas City Section of the American Chemical Society Spencer Award Poster Session, Park University, Parkville, MO (September 20, 2013), contributed poster.
- K. Koboski and J. Hampton, “Characterization of Electrodeposited Nanoporous Ni and NiCu Films,” American Physical Society March Meeting, Baltimore, MD (March 19, 2013), contributed poster.
- K. Tkacz and J. Hampton, “Characterization of Nickel-Zinc Electrodeposition,” American Physical Society March Meeting, Baltimore, MD (March 19, 2013), contributed poster.
- J. Yarranton and J. Hampton, “Electrodeposition and Characterization of Nickel, Iron, Copper Thin Films and the Creation of Nanoporous Structures,” American Physical Society March Meeting, Baltimore, MD (March 19, 2013), contributed poster.
- K. Koboski and J. Hampton, “Characterization of Electrodeposited Nanoporous Ni and NiCu Films,” West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI (November 17, 2012), contributed poster.
- J. Yarranton and J. Hampton, “Electrodeposition and Characterization of Nickel, Iron, Copper Thin Films and the Creation of Nanoporous Structures,” 2012 Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science, Washington University, St. Louis, MO (November 3, 2013), contributed poster.
- E. Nelsen and J. Hampton, “Electrodeposition and Characterization of Nanoporous Nickel-Copper Alloy Films,” Society of Physics Students Zone 10 Conference, Henderson State University, Arkadelphia, AR (March 10, 2012), contributed talk.
- E. Nelsen and J. Hampton, “Electrodeposition and Characterization of Nanoporous Nickel-Copper Alloy Films,” American Association of Physics Teachers Winter Meeting 2012, Ontario, CA (February 6, 2012), contributed poster.
- K. Koboski and J. Hampton, “Characterization of Electrodeposited Nanoporous Materials,” 2012 Conference for Undergraduate Women in Physics, Case Western Reserve University, Cleveland, OH (January 14, 2012), contributed poster.
- D. McNeel and J. Hampton, “A Study of the Uniformity of NiFe Electrodeposition on a Au Substrate,” West Michigan Regional Undergraduate Science Research Conference, Van Andel Research Institute, Grand Rapids, MI, (October 30, 2010), contributed poster.
- E. Berger and J. Hampton, “Characterization of Hydrogen Evolution during Electrodeposition,” Regional Chemistry REU Symposium, Hope College, Holland, MI (July 30, 2010), contributed poster.
- D. McNeel and J. Hampton, “A Study of the Uniformity of NiFe Electrodeposition on a Au Substrate,” Regional Chemistry REU Symposium, Hope College, Holland, MI (July 30, 2010), contributed poster.
- N. Wozniak and J. Hampton, “Characterization of Electrodeposited Thin Films Created for Giant Magnetoresistance,” Regional Chemistry REU Symposium, Hope College, Holland, MI (July 30, 2010), contributed poster.

A. Frey, N. Wozniak, and J. Hampton, “Electrodeposition and Characterization of Thin Films Created for Giant Magnetoresistance,” American Physical Society April Meeting, Washington DC (February 14, 2010), contributed poster.

A. Frey, N. Wozniak, and J. Hampton, “Electrodeposition and Characterization of Thin Films Created for Giant Magnetoresistance,” Science and Engineering Summer Undergraduate Research Symposium, Notre Dame University, Notre Dame, IN, (July 31, 2009), contributed poster.

## Funding

Hope College, “Energy Storage Applications of Electrofabricated Prussian Blue Analogues,” Hope College Jacob E. Nyenhuis Faculty Development Grant, \$7,488, PI: J. R. Hampton, Student Researcher: F. D. Rulison, (2020 – 2021).

National Science Foundation, “RUI: Electrochemically Modified Electrodeposited Alloy Materials for Energy Storage Applications,” RUI-DMR Grant, \$169,279, PI: J. R. Hampton, (2016 – 2021).

Hope College, “Electroactive Thin Films for Energy Storage Applications,” Hope College Jacob E. Nyenhuis Faculty Development Grant, \$7,200, PI: J. R. Hampton, Student Researcher: D. E. Clark, (2015 – 2016).

National Science Foundation, “RUI: Microstructuring and Catalytic Behavior of Electrodeposited Nanoporous Alloys,” RUI-DMR Grant, \$134,626, PI: J. R. Hampton, (2011 – 2016).

Hope College, “Area Characterization of Electrodeposited Alloys,” Hope College Jacob E. Nyenhuis Faculty Development Grant, \$7,200, PI: J. R. Hampton, Student Researcher: M. J. Gira, (2014 – 2015).

National Science Foundation, “MRI: Acquisition of an Atomic Force Microscope for Materials Characterization at Hope College,” MRI-CHE Grant, \$214,750, PI: J. R. Hampton, Co-PI: M. E. Anderson, (2011 – 2014).

National Science Foundation “REU Site: Research Experiences for Undergraduates in Physics at Hope College,” REU-PHY/DMR Grant, \$187,317, PI: S. K. Remillard, Co-PI: J. R. Hampton, (2010 – 2014).

Midstates Consortium for Math and Science, “Morphology of Electrodeposited Samples Characterized with Atomic Force Microscopy,” Short Term Consultation Award, \$1,250, PI: J. R. Hampton, Consultation Partner: E. N. Flater (Luther College), (2007 – 2008).

## Professional Activities

Member of: American Physical Society, American Chemical Society, Electrochemical Society, Council on Undergraduate Research, American Association of Physics Teachers, American Scientific Affiliation  
Reviewer for: ACS Nano, Applied Sciences, Batteries, Corrosion and Materials Degradation, Electrochem, Energies, Journal of Electroanalytical Chemistry, Journal of Materials Engineering and Performance, Journal of Physical Chemistry B, Journal of Vacuum Science & Technology A, Langmuir, Metals, Materials, Nano Letters, Nanomaterials, Nanoscale, Polymers, Scanning, Thin Solid Films, NSF  
Guest Editor for Metals special issue “Metals and Alloys for Energy Conversion and Storage Applications”, 2018 – 2019

## College and Committee Service

Health Professions Advisory Committee, Hope College	2010 – 2013, 2016 – present
Secretary, Phi Beta Kappa, Hope College	2013 – 2014, 2016 – present
Academic Computing Committee, Hope College	2019 – 2020
Director, Physics Summer Research Program, Hope College	2009 – 2013, 2015 – 2019
Library Committee, Hope College	2011 – 2014, 2018 – 2019
Boerigter Task Force, Hope College	2016 – 2017
NetVUE Vocational Exploration Project Planning Team, Hope College	2016 – 2017
President’s Advisory Committee, Hope College	2015 – 2017
Mid-Career Faculty Development Committee, Hope College	2015 – 2016
Co-Director, Physics Summer Research Program, Hope College	2013 – 2014
Natural and Applied Sciences Division Safety Committee, Hope College	2010 – 2014
Co-Director, Physics and Engineering Summer Research Program, Hope College	2007 – 2009



Faculty Advisor, Society of Physics Students, Hope College  
Project Kaleidoscope Leadership Initiative Team, Washington & Jefferson College  
Student Life Advisory Committee, Washington & Jefferson College  
Committee on Prizes, Awards, and Fellowships, Washington & Jefferson College

2007 – 2008  
2006 – 2007  
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