

Dr. Brycelyn M. Boardman, Ph.D.

Department of Chemistry and Biochemistry
James Madison University
Harrisonburg, VA 22807

phone: 315-725-4417
email: boardmbm@jmu.edu

Education

Department of Chemistry, Columbia University

Post Doctoral Fellow, October 2008-February 2011
Research Advisor: Prof. and Head Collin Nuckolls

Department of Chemistry & Biochemistry, University of California, Santa Barbara

Ph. D. in Chemistry; Organic Materials Concentration, September 2003-June 2008
Research Advisor: Prof. Guillermo C. Bazan

Department of Chemistry & Biochemistry, James Madison University

B.Sc.: Chemistry, Minor: Mathematics, August 1999-May 2003
Research Advisors: Prof. Donna S. Amenta and Prof. John W. Gilje

Professional Experience

James Madison University

College of Science & Mathematics

Assistant Dean, May 2022- Present
Interim Assistant Dean, August 2020- April 2022

College of Science & Mathematics/ College of Integrated Science & Engineering

Director of the Center for Material Science, January 2020- Present

Department of Chemistry & Biochemistry

Associate Professor, August-2017-Present
Assistant Professor, May 2011- August 2017
Course Taught: General Chemistry I&II Lecture and Laboratory, Integrated Organic/Inorganic Laboratory I&II, Introduction to Materials, Polymer Chemistry Lecture and Laboratory

Teaching Assistant

Directed Research Advisor: January 2002 – May 2002, January 2003-May2003
Organic Chemistry Lab Coordinator: August 2001 – May 2003
Honors General Chemistry Lab: August 2000 – May 2001

Department of Chemistry & Biochemistry, Yeshiva University; Stern College for Women

Adjunct Assistant Professor, September 2009- June 2010
Course Taught: General Chemistry: recitation and lecture

Department of Chemistry & Biochemistry, University of California, Santa Barbara

Teaching Assistant
Organic Chemistry Lab: April 2004 – June 2006, April 2008- June 2008
General Chemistry Lab: Sept. 2003 – March 2004

Awards

Office of the Provost, James Madison University

Goodman Faculty Award for excellence in teaching and scholarly, creative activity, 2016.

Nanoscale Science and Engineering Center, Columbia University

Best Artistic Science Poster: Nanoscale Science and Engineering Center annual review 2009.

Department of Chemistry & Biochemistry, University of California, Santa Barbara

Graduate Student Outstanding Service Award 2006-2007

Department of Chemistry & Biochemistry, James Madison University

Nominee for Outstanding Senior in the College of Math and Science; May 2003: 1 of 5

Outstanding Senior in Chemistry (Merck Award); May 2003

Iota Sigma Pi: National Honor Society of Women in Chemistry

Grants

Office of Research & Scholarship, James Madison University

“A collaborative undergraduate research experience in materials science and STEM education to address global problems and strengthen community engagement.” \$5,000, 2021-2022

Provost Diversity Development Grant, James Madison University

“The role of racial injustice and bias in the sciences; Developing a new general education Cluster 3 course that focuses on the personal and systematic racial inequities and injustices in the sciences.” \$3,000, 2021-2022

Research Corporation, Single-Investigator Cottrell College Science Award

“Synthesis of Functional Phosphine Chalcogenides for Polymerizable Cobalt Chalcogenide Clusters.”, \$45,000, 2014-2017.

College of Science and Mathematics, James Madison University

Summer Research Grant, \$4,000, 2014

College of Science and Mathematics, James Madison University

Summer Research Grant, \$4,000, 2012

Publications

Research conducted at James Madison University: Undergraduate authors are underlined

15. *Looking to move away from expository General Chemistry labs? We may have a CURE for what ails you.* Blumling, D.; Hughey, C.; **Boardman, B. M.**; Judd, O.; Berndsen, C.; Boekmann, D.; Paunovic, D.; Poe, T. *J. Chem. Ed.*, **2022**, *Revisions Submitted*.
14. *Transforming a classic polymer demonstration into a flexible, inquiry-based laboratory experience for lower and upper division laboratories.* Davis, A. N.; Michaelov, S. G.; Rogers, C. J.; Weber, L. R.; **Boardman, B. M.**; Peters, G. M. *J. Chem Ed.* **2022**, *In Press*.
13. *Synthesis and properties of fluorene based small molecule acceptors containing aromatic malononitrile functionalities.* Brock, S. E.; Yehorova, D.; **Boardman, B. M.** *Results in Chemistry*, **2022**, *4*, 100320.
12. *Understanding the Molecular Level Interactions of Glucosamine-Glycerol Assemblies: A Model System for Chitosan Plasticization.* D. R. Smith; A. P. Escobar; M. N. Andris; B. M. Boardman, G. M. Peters, *ACS Omega*, **2021**, *6*, 25227-25234.
11. *Synthetic Control of Hybrid Photovoltaic Materials via Polymerization of Cobalt Chalcogenide Clusters* D. A. Corbin, D. M. Shircliff, B. J. Reeves, B.M. Boardman, *Polymer Chemistry*, **2017**, *8*, 3801-3809.

10. *Synthesis and Characterization of Pendant Phenyl Ester-Substituted Thiophene Based Copolymers.* D. M. Shircliff, V. J. Pastore, M.L. Poltash, B.M. Boardman, *Materials Today Comm.*, **2016**, 8, 15-22.
9. *Synthesis and Investigation of Cobalt Chalcogenide Clusters with Thienyl Phosphine Ligands as New Acceptor Materials for P3HT.* B. J. Reeves, D. M. Shircliff, J. L. Shott, B.M. Boardman *Dalton Trans.*, **2015**, 44, 718-724.
8. *Synthesis and Characterization of Thienyl Phosphines and Thienyl Phosphine Chalcogenides.* B. J. Reeves, B.M. Boardman *Polyhedron*, **2014**, 73, 118.
7. *Experimental Determination of the Boltzman Constant: An Undergraduate Laboratory Exercise for Molecular Physics or Physical Chemistry.* H. M. Campbell, B. M. Boardman, T. C. DeVore, D. K. Havey *Am. J. Phys.*, **2012**, 80, 1045.

Research conducted at Columbia University

6. *Conductance of Single Cobalt Chalcogenide Clusters.* B.M. Boardman, J. R. Widawsky, Y. S. Park, C. L. Schenck, L. Venkataraman, M. Steigerwald, C. Nuckolls *J. Am Chem Soc.* **2011**, 133, 8455.
5. *Reliable Formation of Single Molecule Junctions with Air-Stable Diphenylphosphine Linkers.* R. Parameswaran, J. R. Widawsky, H. Vazquez, Y. S. Park, B.M. Boardman, C. Nuckolls, M.L. Steigerwald, M. S. Hybertsen, L. Venkataraman *J. Phys.Chem. Lett.* **2010**, 1, 2114.

Research conducted at University of California, Santa Barbara

4. *α -Iminocarboxamide Complexes of Nickel.* B.M. Boardman and G. C. Bazan, *Acc. Chem. Res.*, **2009**, 42, 1597.
3. *Binding Modes of a Dimethyliminopentanone Ligand on Nickel Pre-Catalysts Toward Olefin Polymerization.* B.M. Boardman, G. Wu, R. Rojas, and G.C. Bazan. *J. Organomet. Chem* **2009**, 694, 1380.
2. *Remote Activation of Nickel Complexes by Coordination of $B(C_6F_5)_3$ to an Exocyclic Carbonitrile Functionality.* B.M. Boardman, J.M. Valderrama, F. Munoz, G. Wu, G.C. Bazan, and R. Rojas. *Organometallics*. **2008**, 27, 1671.
1. *A Zwitterionic Nickel-Olefin Initiator for the Preparation of High Molecular Weight Polyethylene.* Y. Chen, B.M. Boardman, G. Wu, and G.C. Bazan *J. Organomet. Chem* **2007**, 692, 4745.

Presentations

Presentations by Undergraduates from James Madison University: presenting author underlined

* Does not include research presentations by undergraduates given at James Madison University

20. *Chitosan based metallo gels for vapor and aqueous amine sensing.* Pearson, C.; Boardman, B. M. Virginia Academy of Sciences Fall Undergraduate Research Meeting, Hampden-Sydney College, October 30th, 2021.
19. *Donor/Acceptor interactions of new fluorene based small molecule acceptors with P3HT.* Brock, S.E.; Boardman, B.M. ACS National Meeting, Virtual, April 21, 2021. Paper Number: 3557884
18. *Fluorescent bio-based films from chitosan and fluorene based small molecules.* Andris, M. N.; Escobar, A. P.; Boardman, B.M. ACS National Meeting, Virtual, April 21, 2021. Paper Number: 3557901

17. *Donor/Acceptor properties of new small molecule acceptors with conjugated polymers.* Brock, S.E.; Yehorova, D., Boardman, B.M. Presented at ACS National Meeting, Philadelphia, PA, March 21-25, 2020. Paper Number: 3311252
16. *How structure impacts function in new fluorene based small molecule acceptors.* Brock, S.E.; Yehorova, D., Boardman, B.M. Presented at University of Baltimore Maryland County Undergraduate Research Symposium, Baltimore, MD, October 19, 2019. ** Won 1st place
15. *Donor/acceptor versatility of CoSe clusters in cluster:small molecule simple mixtures for flexible solar cell applications.* Yehorova, D.; Boardman, B. M. Presented at University of Baltimore Maryland County Undergraduate Research Symposium, Baltimore, MD, October 20, 2018. ** Won 1st place
14. *The synthesis and characterization of polymerized cobalt selenide clusters with photovoltaic applications.* D. A. Corbin, B. M. Boardman, Presented at the Colonial Academic Alliance 2016 Undergraduate Research Conference, Williamsburg, VA April 15-17, 2016.
13. *The synthesis and characterization of polymerized cobalt selenide clusters with photovoltaic applications.* D. A. Corbin, D. M. Shircliff, B. J. Reeves, B. M. Boardman, Presented at University of Baltimore Maryland County, Baltimore, MD, October 3, 2015. ** Won 1st place
12. *Polymerization and characterization of functionalized Palladium Complexes with benzothiadiazole co-monomers.* A. M. Moore, J. L. Shott, B. M. Boardman, Presented at University of Baltimore Maryland County, Baltimore, MD, October 3, 2015. ** Won 2nd place
11. *Synthesis and characterization of pendant phenyl ester-substituted thiophene based copolymers.* D. M. Shircliff, V. J. Pastore, B. M. Boardman, Presented at University of Baltimore Maryland County, Baltimore, MD, October 3, 2015. ** Won 2nd place
10. *Synthesis and characterization of new low band gap polymers containing ethyl and phenyl ester functionalized polythiophene derivatives.* D. M. Shircliff, B. M. Boardman, Presented at ACS National meeting, Inorganic division Denver, CO, March 22-26 2015.
9. *The synthesis, characterization, and polymerization of thienyl phosphine derivative palladium (II) complexes.* J. L. Shott, B. M. Boardman, Presented at ACS National meeting, Inorganic division Denver, CO, March 22-26 2015. * also chosen for Sci-Mix
8. *Cobalt chalcogenide clusters with thienyl phosphine ligands as new acceptor materials.* D. M. Shircliff, B. J. Reeves, B. M. Boardman, Presented at the Erker-Bazan Symposium, Santa Barbara, CA. February 17, 2015.
7. *The synthesis, characterization, and polymerization of thienyl phosphine derivative palladium (II) complexes.* J. L. Shott, B. M. Boardman, Presented at University of Baltimore Maryland County, Baltimore, MD, October 25, 2014. ** Won 1st place
6. *The investigation of charge transfer between cobalt chalcogenide clusters and thiophene based polymers.* D. M. Shircliff, B. J. Reeves, B. M. Boardman, Presented at University of Baltimore Maryland County, Baltimore, MD, October 25, 2014. ** Won 1st place
5. *The synthesis and characterization of thienyl phosphine ligands for polymerizable metal complexes.* B. J. Reeves, B. M. Boardman, Presented at the Erker-Bazan Symposium, Santa Barbara, CA. March 3, 2014.
4. *Synthesis of thienyl phosphine ligands for polymerizable cobalt clusters.* B. J. Reeves, B. M. Boardman, Presented at ACS National Meeting, Inorganic division New Orleans, LA, April 7-11, 2013. * also chosen for Sci-Mix

3. *Emission spectroscopy of polymerizable phosphine ligands.* E.Park, B. J.Reeves, B. A. DeGraff, D. K. Havey, B. M. Boardman, Presented at ACS National Meeting, Physical chemistry division, New Orleans, LA, April 7-11, 2013

2. *Investigation of N-sulfide bond formation in soluble precursors for metal chalcogenide thin films.* B. J. Reeves, B. M. Boardman, Presented at the Erker-Bazan Symposium, Santa Barbara, CA. February 21, 2012.

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

Invited/Research Presentations by B.M. Boardman: undergraduate contributors underlined

21. *Framing science to fit the audience: developing communication skills in an upper level polymer course.* Boardman, B.M.; Peters, G.M. Presented at ACS National Meeting, Philadelphia, PA, March 21-25, 2020.

20. *Direct polymerization of cobalt chalcogenide clusters for hybrid photovoltaic materials.* Boardman, B.M.; Corbin, D.A., Shircliff, D.M., Reeves, B.J. Presented at the 2nd International Conference on Interface Properties in Organic and Hybrid Electronics: Perspectives & Key Challenges, Cergy Pontoise, France, July 8-11 2019. Paper Number ipoe2019:257101

19. *Developing novel materials for organic and hybrid photovoltaic applications.* Boardman, B. M. Presented at the Executive Advisory Committee Meeting, Harrisonburg, VA, October 13th, 2017.

18. *Thienyl phosphine palladium(II) complexes: An introduction to hybrid materials in undergraduate laboratories.* B. M. Boardman, J. L. Shott, Presented at ACS National Meeting, Chem Ed division San Francisco, CA, April 3, 2017.

17. *Direct polymerization of cobalt chalcogenide clusters for hybrid photovoltaic materials.* B. M. Boardman, D.A Corbin, Presented at ACS National Meeting, Inorganic division San Francisco, CA, April 4, 2017.

16. *Hybrid systems vs. hybrid materials for photovoltaic applications* B. M. Boardman, B. J.Reeves, J. L. Shott, D. M. Shircliff, D.A Corbin Invited presentation at University of North Carolina, Charlotte, Charlotte, NC, January 30, 2017.

15. *Direct polymerization of cobalt chalcogenide clusters for hybrid photovoltaic materials.* B. M. Boardman, D.A Corbin Invited presentation at Virginia Commonwealth University, Physics Colloquia, Richmond, VA, February 12, 2016.

14. *Cobalt chalcogenide clusters with thienyl phosphine ligands as new acceptor materials for Hybrid Photovoltaic Devices.* B. M. Boardman, B. J.Reeves, J. L. Shott, D. M. Shircliff, Presented at 12th International Symposium on Functional π -Electron Systems, Seattle, WA, July 19-24 2015.

13. *Synthesis, characterization, and investigation of cobalt chalcogenide clusters with thienyl phosphine ligands as new acceptor materials for P3HT.* B. M. Boardman, B. J.Reeves, D.A Corbin Presented at ACS National meeting, Inorganic division Denver, CO, March 22-26 2015.

12. *Rational Design of New Materials.* Presented at the annual Iota Sigma Pi meeting at Radford University, September 2011.

11. *Cobalt Chalcogenide Clusters.* Presented at the Energy Frontiers Research Center. Columbia

University, New York, NY November 19, 2010.

10. *The Synthesis and Electronic Properties of Cobalt Chalcogenide Clusters*. Presented at both the Nanoscale Science and Engineering Center and Energy Frontiers Research Center's annual review meetings. Columbia University, New York, NY April 23 and May 21, 2010.

9. *The Synthesis and Electronic Properties of Metal Chalcogenide Clusters*. Presented at the Erker-Bazan Symposium, Santa Barbara, CA February 8, 2010.

8. *Nickel Initiators for Olefin Polymerization and The Synthesis and Electronic Properties of Metal Chalcogenide Clusters*. Presented as the Keynote speech at James Madison University's REU Symposium. Harrisonburg, VA July 31, 2009.

7. *The Transition from Molecules to Solids: Synthesis and Electronic Properties of Iron and Nickel Clusters*. Presented at the Nanoscale Science and Engineering Center, Columbia University, New York, NY March 13, 2009

6. *The Transition from Molecules to Solids: Synthesis of Iron and Nickel Clusters*. Presented at the Erker-Bazan Symposium, Santa Barbara, CA. March 2nd, 2009.

5. *Binding Modes of a Dimethyliminopentanone Ligand on Nickel Pre-Catalysts*. Presented at the International Workshop for Frontiers in Materials Research IV, Vina del Mar, Chile, May 21-24, 2008.

4. *Remote Activation of Nickel Complexes by Coordination of B(C₆F₅)₃ to an Exocyclic Carbonitrile Functionality*. Presented at the 234th ACS National Meeting, Boston, MA. August 19-23, 2007.

3. *Zwitterionic Nickel-Olefin Initiators for Olefin Polymerization*, Presented at the 232nd ACS National Meeting, San Francisco, CA, Sept. 10-14, 2006

2. *Reactions of Mg{Al(OiPr)₄}₂ with Catechol and Related Aromatic Diols*. Presented at the 225th ACS National Meeting, New Orleans, LA March 23-27, 2003.

1. *Reactions of Mg{Al(OiPr)₄}₂ with Catechol and Related Aromatic Diols*. Presented at the National Conference for Undergraduate Research, University of Wisconsin, Whitewater, WI April 5, 2002.

Research

Department of Chemistry & Biochemistry, James Madison University

- 1.) Synthesis of cobalt chalcogenide clusters with thienyl phosphine derivatives.
- 2.) Optical and electronic investigation of thienyl phosphine derivatives.
- 3.) The synthesis and characterization of model push-pull polymers with ordered domains.
- 4.) Investigation of charge transfer between cobalt chalcogenide clusters and P3HT.
- 5.) Optical, electronic and solid-state characterization of hybrid materials from direct polymerization of functionalized cobalt chalcogenide clusters.
- 6.) The synthesis and characterization of small molecule acceptors.
- 7.) Investigation of plasticization of biopolymers
- 8.) Developing amine sensing biomaterials

Department of Chemistry, Columbia University

Advisor: Prof. and Head Colin Nuckolls, 2008 - Present

- 1.) Synthesis and electronic investigation of metal chalcogenide clusters, for use in optio-electronic devices.
- 2.) Developing magnetic solids from magnetic clusters.

Department of Chemistry & Biochemistry, University of California, Santa Barbara

Advisor: Prof. Guillermo C. Bazan, 2004 –2008

Design and synthesis of new nickel based pre-catalysts for olefin polymerization.

Department of Chemistry, James Madison University

Advisor: Prof. and Head Donna S. Amenta and Prof. John Gilje, 2001 – 2003

- 1). Synthesis and stabilization of magnesium aluminum isopropoxide with various aromatic diols.
- 2). Synthesis and reactivity studies of migratory insertion reactions from a Mo(Cp)(CO)₃ starting material.

Rome Research Labs, Department of Defense, June 1998- December 2000

Design of microfluidic cells for combat field assays.

Service Highlights

James Madison University Department of Chemistry & Biochemistry

Faculty Co-Advisor for Alpha Chi Sigma (Fall 2011-Fall 2020)

- Professional chemistry fraternity, which has student members who major in chemistry, biology and health and human services.
- Increased and diversified membership over the past nine
- Lead group to be recognized as a three-star chapter three times (2012, 2014, 2016) and a one star chapter once (2015) in five years.
- Helped develop “Chemfest”, a large outreach event in Waynesboro, VA for elementary students. Transitioned to an on-campus event that now bring 600+ visitors from the surrounding communities
- Coordinated an annual unique education community service event in collaboration with Turner Ashby High School in Harrisonburg, VA.
- Organized seven Daniel K. Havey Memorial 5K to raise money for the Daniel K. Havey memorial scholarship.
- Developed the organization NERDS (Nerds Encouraging awareness for Depression and Suicide). This organization is meant to spread awareness not stigma for mental illness and to give the students a safe place to talk openly about how depression and suicide have impacted their lives. The students have become very passionate about this organization and have involved other Alpha Chi Sigma chapters in our southeastern district. This has resulted in these chapters instituting their own section of NERDS on their own campus.
- Help students organize and develop programing for district conclave that was held at JMU in February of 2018.

Alumni Roundtable Chair (Fall 2012-Fall 2020)

- Responsible for contacting and securing three alumni speakers for the event.
- Also responsible for the organization of this event which involves, travel, housing and dinner for the alumni.
- Facilitate event, meet arriving alumni, develop homecoming program booklet and ensure the event itinerary is followed.
- Contact emeritus faculty to invite them back to the Department to catch up with returning alumni.
- Aided students in organizing an alumni tailgate for alumni speakers, other visiting alumni, current students, and faculty.

Head of 5-year plan committee (Spring 2013-2014)

- The conclusion of the Departments’ Research Corporation for Scientific Advancement development grant required the Department as a whole to develop a 5-year plan with projected growth in faculty, curriculum and research.
- I was responsible for composing the document from departmental discussions and suggestions.
- I performed the majority of edits to the document as a result of faculty discussions from the initial drafts.
- Responsible for surveying young and mid career faculty to determine the most pressing issues and give the Department as a whole a starting point for tackling the goals we had outlined.
- Maintain contact with the department head to update progress on the plan.
- As acting spokesperson for the non-tenured faculty, I organized meetings and discussions of developing a peer evaluation form. I attended a campus workshop on teaching evaluation and brought these ideas back to the department. A peer observation form was drafted, discussed at length with all faculty and a revised form was accepted for use by all faculty in February of 2014.

Co-Head of General Chemistry Laboratory Revision Committee (Spring 2015-Summer 2020)

- Attended Project Kaleidoscope (PKAL) Summer Leadership Institute for STEM Faculty to develop leadership skills in order to accomplish the task of reworking our general chemistry laboratory curriculum (Summer 2014).
- Responsible for aiding the committee in prioritizing changes in the general chemistry laboratory curriculum.
- Assessed faculty survey to understand department wide laboratory practices as well as effectiveness.
- Helped in developing instructional videos for laboratory techniques

- Developed a general CANVAS page for all general chemistry laboratory faculty with all modified laboratories and video resources.
- Facilitate communication between laboratory coordinator and member of the committee so changes and updates can be distributed to all instructors and teaching assistants.
- Helped develop, implement, and optimize new inquiry-based laboratory curriculum. Full Chem 131L roll out Fall 2019
- Facilitated departmental workshop on implementing faculty research into new Chem 132L

Advising

- I serve as a departmental advisor for student on all chemistry degree programs.
- I serve as the advisor for the materials concentration in chemistry. I have also worked with other faculty in the center for materials science to restructure the requirements for the cross-disciplinary minor in materials science.
- The development of NERDS has really opened the dialogue of mental health amongst the students in the department. It has also allowed them to view me as a safe place to discuss sensitive topics that may be happening in their lives outside of the classroom. This has resulted in many students seeking professional counseling. These conversations can at times take a large amount of my time, but I believe maintaining the mental health of our majors is a very important part of the overall health and productivity of our department.
- Actively seek out workshops on mentoring, teaching and advising BIPOC students and faculty.

College and University

Interim Assistant Dean (August 2020- Present)

- Advise and monitor students on academic probation and suspension
- Focus on new programs for student success
- Analysis of DFW data by race for bridging equity gaps in the college

Director for the Center of Material Science (January 2020-Present)

- Manage center budget
- Facilitate collaboration between faculty in CSM and CISE
- Work with CSM and CISE faculty to review material science minor curriculum in order to diversify majors that can obtain the minor

COPUS (Classroom Observation Protocol for Undergraduate STEM) Coder (Fall 2015)

- Program was funded by a 4-VA grant awarded between two faculty of the Biology and Mathematics and Statistics Departments.
- Attended training on the COPUS technique provided by these two faculty. Session involved the explanation of coding symbols for both the student learners and the instructor.
- Examples lectures were given in order to ensure coding was correct and to practice the two-minute timing intervals necessary for data collection
- I attended 5 STEM classrooms, in biology, geology, mathematics (2), and computer science with a second coder to collect data.
- Data was delivered to program directors for collection and analysis.
- Data used to provide the university with specific data on the active learning that occurs in classrooms in STEM departments.

Valley Scholars Program (Spring 2015)

- Selected by the Associate Dean to represent the Department of Chemistry and Biochemistry as a part of the Valley Scholars visit to the College of Science and Mathematics (CSM).
- Developed three interactive hands on programs for the scholars to participate in with the assistance of chemistry majors.
- Recruited over thirty chemistry majors to help in the program as giving the scholars one-on-one interactions with current is a major goal of the program. My efforts were recognized by the director of the program in a message to the associate dean.

Faculty Advisor for Noteiety (2014-2019)

- All female A'Capella group on campus made up of majors from all over campus

Professional

Iota Sigma Pi

- National honor society for women in chemistry. I was the vice president (Fall 2011-Spring 2015) and am currently the president (Spring 2015-present) for the Argentum chapter, which includes, Bridgewater College, Mary Baldwin College, JMU, and Radford University.
- Organize yearly meeting, which involves student induction and a seminar.
- Provide yearly reports of chapter activities nationals

Reviewer for Funding Agencies

- Research proposals for NSF-DMR-polymers division
- Research proposals for FONDECYT (a national science funding body in Chile)
- Reviewed proposals and participated on a panel review for the US Agency for International Development's Middle East Regional Cooperation Program (MERC) in the "energy Greenhouses" section. I was selected for this panel based on my publication record and my previous experience with the culture of orthodox Jewish students at Stern College for Women.
- Research proposals for Research Corporation for Scientific Advancement
- Research proposals for the M.J. Murdock Charitable Trust

Organizing Committee, Judge and Session Chair

- Served as judge for the 16th-19th, Annual Undergraduate Research Symposium in the Chemical and Biological Sciences at the University of Baltimore Maryland County (UMBC).
- Session chair for two sessions for the Division of Inorganic Chemistry on organometallic synthesis at the *National Meeting of the American Chemical Society*, Denver, CO, 3/35/15.
- Session chair for Materials session at *12th International Symposium on Functional π -Electron Systems*, Seattle, WA, 7/23/15
- Organizing committee for the *Erker-UCSB Symposium*, Santa Barbara, CA 2005-2015
- Session chair at the *Erker-UCSB Symposium*, Santa Barbara, CA, 2/12, 3/13, and 3/15.

References

Colin Nuckolls, cn37@columbia.edu, 212-854-6289

Prof. and Head of Chemistry, Columbia University

Michael Steigerwald, mls2064@columbia.edu, 212-854-0185

Associate Research Scientist, Columbia University

Guillermo C. Bazan, bazan@chem.ucsb.edu, 805-893-5538

Prof. of Chemistry & Biochemistry and Materials, University of California, Santa Barbara

Thuc-Quyen Nguyen, quyen@chem.ucsb.edu, 805-893-4851

Prof. of Chemistry & Biochemistry, University of California, Santa Barbara

Gerhard Erker, erker@uni-muenster.de, +49-251-833-3221

Prof. of Chemistry, University of Münster

Donna S. Amenta, amentads@jmu.edu, 540-568-6246

Prof. of Chemistry & Biochemistry, James Madison University

For references please feel free to contact any or all of the individuals listed above.