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EDUCATIONAL AND PROFESSIONAL HISTORY

- 2018-Present **Gabilan Assistant Professor of Chemistry**, University of Southern California
- 2015–2018 **Postdoctoral Associate**, University of Minnesota
NSF Center for Sustainable Polymers
Research Advisor: Prof. William B. Tolman
- 2010–2015 **Ph.D., Inorganic Chemistry**, University of California, Irvine
Thesis: Spectroscopic and Computational Analysis of Rare Earth and Actinide
Complexes in Unusual Coordination Environments and Oxidation States
Ph.D. Advisor: Prof. William J. Evans
- 2006–2010 **B.A., Chemistry**, Washington University in St. Louis
Minor: Women, Gender and Sexuality Studies
Undergraduate Advisor: Prof. Kevin D. Moeller

SCHOLARSHIP AND TEACHING

Accomplishments, Awards, and Honors

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| 2023 | 3M Non-Tenured Faculty Award |
| 2023 | USC President's Sustainability Initiative Award (with Prof. Barry Thompson) |
| 2023 | Cottrell Scholar Award |
| 2022 | USC Mentoring Award for Faculty Mentoring Graduate Students |
| 2021 | Wrigley Faculty Innovation Award |
| 2020 | ACS PRF Doctoral New Investigator Award |
| 2020 | USC Sustainability Across Curriculum Award |
| 2018 | Gabilan Assistant Professorship, USC |
| 2017 | MN ACS Section Postdoc Travel Award (UMN) |
| 2015 | Michael Zach Award: Departmental award recognizing the most promising future |
| 2015 | Regent's Dissertation Fellowship (UCI) |
| 2014 | William Robert Findley Scholarship from the Daughters of the American |
| 2014 | Outstanding Contributions to the Chemistry Department Award (UCI) |
| 2012 | Advanced Level Teaching Assistant Award (UCI) |
| 2011 | NSF GRFP Honorable Mention |
| 2006-2010 | Varsity Softball - 3 rd Team All-American Shortstop (DIII Softball) (2009-2010) |
| 2006–2010 | Enterprise Rent-A-Car Scholar (WUSTL) |

Service, Outreach, and Professional Organizations

Outreach

- 2023-present Faculty organizer of a seminar series (Journal Club), where graduate students in the Chemistry Department present recent literature, USC
- 2023-present Co-Organize Plastic Circularity Workshop with Prof. Barry Thompson and Travis Williams
- 2023 Panelist for 2023 Southern California Graduate Pathways to STEM Conference (SoCal GPS)
- 2022 Instructor for the inaugural Rare Earth Research Conference Summer School - Summer school to introduce undergraduate students to research opportunities using rare earth
- 2021-present Mentor - Wrigley Institute for Environmental Studies Environmental Communications Internship - mentored four interns to design graphics for our research, education and
- 2020-present Mentor - Chemistry Women Mentorship Network
- 2019-present Co-host (with Prof. Michael Inkpen) a monthly coffee hour for graduate students and postdocs - focus on addressing challenges of mental health in academia
- 2019-present Organized Beach cleanups - plan and organize volunteers to clean up a SoCal beach 3 times a year (virtual during the pandemic) - Also organize special events, such as USC
- 2019-present Faculty Mentor of Women in Chemistry (WiC) - Host Book Club for WiC, targeting topics related to struggles women face in the sciences (Imposter Syndrome, for example)
- 2019-present Developed an active learning teaching workshop for incoming graduate students during their orientation with Prof. Jessica Parr
- 2016–2018 UMN Chemistry Department Diversity Committee - Postdoctoral Representative

Conference Organization

- 2023 Co-Organize with Prof. Chris Kozak, session at the 2023 ACS Green Chemistry and Engineering Conference, “Catalytic Approaches to Green Polymer Synthesis”
- 2021-present Member of Organizing Committee of the Angular Momentum Online Talk Series
- 2019 Planned and hosted 2019 Southern California Organometallics Meeting (SC/OM), involving participation from 14 different research groups from universities in southern California

Reviewing Service

Ad hoc referee for NSF CAREER, DOE BES, ACS PRF, Cottrell Scholar Award. Panel referee for NSF CHE and NSF GRFP.

Ad hoc referee for *Journal of the American Chemical Society*, *Macromolecules*, *Inorganic Chemistry*, *Dalton Transactions*, *Organometallics*, *ACS Catalysis*, *Polymer Journal*, *Nature Communications*, *Inorganic Chemistry Frontiers*, *Chemical Science*, *ChemSusChem*, *Chemical Communications*, *Nature Chemistry*, *ACS Sustainable Chemistry and Engineering*, *Materials Horizons*, *Polymer Chemistry*, *Nature Reviews Methods Primers*, *RSC Sustainability*, *Angewandte Chemie*, *Nature Chemistry*

Professional Activities

- 2019-present Faculty Affiliate, USC Wrigley Institute for Environment and Sustainability
- 2018-present Faculty Affiliate, USC Women in Science and Engineering (WiSE)
- 2011–present American Chemical Society, Division of Inorganic Chemistry
- 2008–Present Alpha Chi Sigma - National Professional Chemistry Fraternity

PUBLICATIONS AND PRESENTATIONS

Research Publications

Independent peer reviewed journal articles from USC - Manuscripts Submitted

33) Kosloski-Oh, S. C.; Knight, K. D.; Fieser, M. E.* “Enhanced Control of Isoprene Polymerization with Triallyl Rare Earth Metal Complexes”, *submitted*.

Independent Non-Peer Reviewed Journal Articles From USC - Manuscripts in press or published

32) (Commentary) Kosloski-Oh, S. C.; Fieser, M. E.* “From source to disposal: Cracking the code for sustainable polymers” *One Earth* **2023**, *6*, 587–590.

Independent Peer Reviewed Journal Articles From USC - Manuscripts in press or published

31) Bush, N. G.; Dinh, C. H.; Catterton, C. L.; Fieser, M. E.* “Understanding Lewis Acidity Trends in the Depolymerization of Poly(Ethylene Terephthalate) with Metal-Containing Ionic Liquids”, *RSC Sustainability* **2023**, *1*, 938–947. (Featured in Themed Collection: *Sustainable Chemistry*)

30) Bush, N. G.†; Assefa, M. K.†; Bac, S.; Mallikarjun Sharada, S.*; Fieser, M. E.* “Controlling Selectivity for Dechlorination of Poly(Vinyl Chloride) with XantphosRhCl”, *Mater. Horiz.* **2023**, *10*, 2047–2052. †Authors contributed equally to this work. (Featured in Themed Collections: *Polymer Upcycling* and *Materials Horizons Emerging Investigator Series*)

29) Manjarrez, Y.; Clark, A. M.; Fieser, M. E.* “Rare Earth Metal-Containing Ionic Liquid Catalysts for Synthesis of Epoxide/Cyclic Anhydride Copolymers”, *ChemCatChem* **2023**, *15*, e202300219. (Featured in the Front Cover of *ChemCatChem* and in a Themed Collection: *Catalysis Talents*)

28) Wood, Z. A.; Fieser, M. E.* “Understanding Differences in Rate versus Product Determining Steps to Enhance Sequence Control in Epoxide/Cyclic Anhydride Copolymers” *Polym. Chem.* **2023**, *14*, 821–827.

27) Assefa, M. K.; Fieser, M. E.* “Divergent Silylium Catalysis Enables Facile Poly(vinyl chloride) Upcycling to Poly(ethylene-co-styrene) Derivatives” *J. Mat. Chem. A* **2023**, *11*, 2128–2132. (Featured in Themed Collection: *Polymer Upcycling* and Highlighted by guest editors of the Themed Collection and by McAllister and Kalow in *Chem Catalysis*)

26) Wood, Z. A.†; Assefa, M. K.†; Fieser, M. E.* “Simple yttrium salts as highly active and controlled catalysts for the atom-efficient synthesis of high molecular weight polyesters” *Chem. Sci.* **2022**, *13*, 10437–10447. †Authors contributed equally to this work.

25) Kosloski-Oh, S. C.; Manjarrez, Y.; Boghossian, T. J.; Fieser, M. E.* “Controlled, One-Pot Synthesis of Recyclable Poly(1,3-diene)-Polyester Block Copolymers Catalyzed by Yttrium β -Diketiminate Complexes” *Chem. Sci.* **2022**, *13*, 9515–9524. (Featured on the Back Cover of *Chemical Science*)

24) Manjarrez, Y.; Cheng-Tan, M. D. C. L.; Fieser, M. E.* “Perfectly Alternating Copolymerization of Cyclic Anhydrides and Epoxides with Yttrium β -Diketiminate Complexes” *Inorg. Chem.* **2022**, *61*, 7088–7094.

23) Bac, S.; Fieser, M. E.†; Mallikarjun Sharada, S.* “A computational study of the mechanism of chloroalkane dichlorination with Rh(I) complexes” *Phys. Chem. Chem. Phys.* **2022**, *24*, 3518–3522.

22) Kosloski-Oh, S. C.; Wood, Z. A.; Manjarrez, Y.; de los Rios, J. P.; Fieser, M. E.* “Catalytic methods for recycling or upcycling of commercial polymers” *Mater. Horiz.* **2021**, *8*, 1084–1129. (Featured in *Celebrating International Women’s Day: Women in Materials Science* Web Collection and awarded *Materials Horizons* 2021 Outstanding Review Award)

Pre-Independent Peer Reviewed Journal Articles

- 21) Fieser, M. E.; Schimmler, S. D.; Mitchell, L. A.; Wilborn, E. G.; John, A.; Hogan, L. T.; Benson, B.; LaPointe, A. M.;* Tolman, W. B.* *Chem. Commun.* **2018**, 54, 7669–7672.
- 20) Palumbo, C. T.; Halter, D. P.; Voora, V. K.; Chen, G. P.; Chan, A. K.; Fieser, M. E.; Ziller, J. W.; Hieringer, W.; Furche, F.;* Meyer, K.;* Evans, W. J.* *Inorg. Chem.* **2018**, 57, 2823–2833.
- 19) Fieser, M. E.;† Sanford, M. J.;† Mitchell, L. A.; Dunbar, C. R.; Mandal, M.; Van Zee, N. J.; Urness, D. M.; Cramer, C. J.;* Coates, G. W.;* Tolman, W. B.* *J. Am. Chem. Soc.* **2017** 139, 15222–15231. †Authors contributed equally to this work.
- 18) Palumbo, C. T.; Fieser, M. E.; Ziller, J. W.; Evans, W. J. *Organometallics* **2017**, 36, 3721–3728.
- 17) Fieser, M. E.; Palumbo, C. T.; La Pierre, H. S.; Halter, D. P.; Voora, V. K.; Ziller, J. W.; Furche, F.; Meyer, K.; Evans, W. J. *Chem. Sci.* **2017**, 8, 7424–7433.
- 16) Fieser, M. E.;† Ferrier, M. G.;† Su, J.;† Batista, E.; Cary, S. K.; Engle, J. W.; Evans, W. J.; Lezama, J. S.; Kozimor, S. A.; Olson, A. C.; Ryan, A. J.; Stein, B. W.; Wagner, G. L.; When, D. H.; Vitova, T.; Yang, P. *Chem. Sci.* **2017**, 8, 6076–6091. †Authors contributed equally to this work.
- 15) Fieser, M. E.; Woen, D. H.; Corbey, J. F.; Mueller, T. M.; Ziller, J. W.; Evans, W. J. *Dalton Trans.* **2016**, 45, 14634–14644.
- 14) Langeslay, R. R.; Fieser, M. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2016**, 138, 4036–4045.
- 13) Kotyk, C. M.; Fieser, M. E.; Palumbo, C. T.; Ziller, J. W.; Darago, L. E.; Long, J. R.; Furche, F.; Evans, W. J. *Chem. Sci.* **2015**, 6, 7267–7273.
- 12) Fieser, M. E.; Johnson, C. W.; Bates, J. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *Organometallics* **2015**, 34, 4387–4393.
- 11) Meihaus, K. R.; Fieser, M. E.; Corbey, J. F.; Evans, W. J.; Long, J. R. *J. Am. Chem. Soc.* **2015**, 137, 9855–9860.
- 10) Corbey, J. F.; Woen, D. H.; Palumbo, C. T.; Fieser, M. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *Organometallics* **2015**, 34, 3909–3921.
- 9) Fieser, M. E.; MacDonald, M. R.; Krull, B. T.; Bates, J. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2015**, 137, 369–382.
- 8) Langeslay, R. R.; Fieser, M. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *Chem. Sci.* **2015**, 6, 517–521.
- 7) Fieser, M. E.; Mueller, T. J.; Ziller, J. W.; Evans, W. J. *Organometallics* **2014**, 33, 3882–3890.
- 6) MacDonald, M. R.; Fieser, M. E.; Bates, J. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2013**, 135, 13310–13313.
- 5) Kindra, D. R.; Casely, I. J.; Fieser, M. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2013**, 135, 7777–7787.
- 4) Fieser, M. E.; Bates, J. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2013**, 135, 3804–3807.
- 3) Schmiede, B. M.; Fieser, M. E.; Ziller, J. W.; Evans, W. J. *Organometallics* **2012**, 31, 5591–5598.
- 2) MacDonald, M. R.; Bates, J. E.; Fieser, M. E.; Ziller, J. W.; Furche, F.; Evans, W. J. *J. Am. Chem. Soc.* **2012**, 134, 8420–8423.
- 1) Mueller, T. J.; Fieser, M. E.; Ziller, J. W.; Evans, W. J. *Chem. Sci.* **2011**, 2, 1992–1996.

Invited Presentations from USC

- 39) 3M Non-Tenured Faculty Award Symposium, Minneapolis, MN (August 2023)
- 38) 2023 Cottrell Scholar Conference, Tucson, AZ (July 2023)
- 37) Plastics Recycling and Upcycling Gordon Research Conference, Homogeneous Catalysis for Plastics Deconstruction, Manchester, NH (July 2023)

- 36) 27th Annual ACS Green Chemistry and Engineering Conference, Catalytic Approaches to Green Polymer Synthesis, Long Beach, CA (June 2023)
- 35) 27th Annual ACS Green Chemistry and Engineering Conference, Sustainable Membrane Separations: From Polymers to Processes, Long Beach, CA (June 2023)
- 34) CSC 2023, Adventures in Molecular Catalysis, Vancouver, Canada (June 2023)
- 33) CSC 2023, Green Chemistry, Vancouver, Canada (June 2023)
- 32) 2023 iPRIME Annual Meeting, Microstructured Polymers Program Workshop: Use Inspired Polymer Synthesis, University of Minnesota, Twin Cities (May 2023)
- 31) Departmental Seminar at the University of Glasgow, UK (May 2023)
- 30) Departmental Seminar at the University of Edinburgh, UK (May 2023)
- 29) Departmental Seminar at the University of Manchester (Materials), UK (May 2023)
- 28) Departmental Seminar at the University of Manchester (Inorganic), UK (May 2023)
- 27) Departmental Seminar at the University of Leicester, UK (May 2023)
- 26) Departmental Seminar at the University of Oxford, UK (May 2023)
- 25) Departmental Seminar at the University of Bath, UK (May 2023)
- 24) Departmental Seminar at the University of California, San Diego (May 2023)
- 23) iCOUP DOE Center Monthly Meeting Seminar (virtual) (April 2023)
- 22) Departmental Seminar at the University of California, Santa Barbara (March 2023)
- 21) (poster talk) Inorganic Reaction Mechanisms Gordon Research Conference, Galveston, TX (March 2023)
- 20) Departmental Seminar at the University of California, Los Angeles, CA (November 2022)
- 19) Departmental Seminar at the University of California, Riverside, CA (October 2022)
- 18) Departmental Seminar at Washington University in St. Louis, MO (September 2022)
- 17) Departmental Seminar at the University of Iowa (virtual) (April 2022)
- 16) First Inaugural World Plastics Summit, Monaco, (March 2022)
- 15) USC Stauffer Symposium in Honor of Geoffrey Coates, Los Angeles, CA (March 2022)
- 14) Departmental Seminar at the University of California, Santa Cruz, CA (virtual) (November 2021)
- 13) Angular Momentum Online Talk Series (October 2021)
- 12) Departmental Seminar at Chico State University (virtual) (October 2021)
- 11) IUPAC CCCE 2021, New Frontiers in Biodegradable and Bioderived Polymers (virtual) (August 2021)
- 10) Departmental Seminar at St. Edward's University (virtual) (April 2021)
- 9) 261st ACS Meeting, Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium Honoring Smaranda Marinescu (virtual) (April 2021)
- 8) USC Environment & Sustainability Series, Los Angeles, CA (October 2020)
- 7) Departmental Seminar at California State University, Los Angeles, CA (virtual) (October 2020)
- 6) USC Wrigley Institute for Environmental Studies Meet the Wrigley Faculty Webinar Series, Los Angeles (virtual) (July 2020)
- 5) 260th ACS Meeting Polymer Upcycling Symposium, San Francisco, CA, Pulled abstract due to pandemic.
- 4) Orange County ACS College Awards Dinner (April 2020), Cancelled due to pandemic
- 3) Departmental Seminar Claremont Colleges, Claremont (December 2019)
- 2) 23rd Annual Green Chemistry & Engineering Conference and 9th International Conference on Green and Sustainable Chemistry, Reston, VA (June 2019).
- 1) WiSE Research Horizons Symposium, Los Angeles (March 2019).

TEACHING AND MENTORSHIP EXPERIENCE

Teaching Experience

Fall '18, '19	Co-Instructor for Chem 515 "Structure and Bonding in Inorganic and Organometallic Chemistry"
Fall '18	Instructor for Chem 580 "Current Topics in Inorganic Chemistry and Nano Science"
Spring '19, Fall '20, '21, '22	Instructor for Chem 516 "Synthesis Reactivity and Mechanism in Inorganic and Organometallic Chemistry"
Spring '20	Co-Instructor for Chem 453 "Advanced Inorganic Chemistry"
Spring '21, '22, '23	Instructor for Chem 453 "Advanced Inorganic Chemistry"

Mentorship Experience

- **Postdoctoral Associates Advised:**
Dr. Mikiyas Assefa, 2020-2022 (Dow Chemical)
- **Graduate Students Advised:**
Dr. Sophia Kosloski-Oh, 2018-2023 (Postdoc at Boston College)
Dr. Yvonne Manjarrez, 2018-2023 (Sherwin Williams)
Zachary Wood, 2019-present
Kai Knight, 2020-present
Nancy Bush, 2020-present
Dana Cheng, 2020-present
Nicholas Roubineau, 2022-present
Eunice Castro, 2022-present
Juan Pablo de los Rios, 2018-2020
- **Undergraduate Interns (current institution, if known):**
Emma Lu, USC, 2023-present
Harrison Min, USC, 2023- present
Angelyn Nguyen, USC, 2022-present
Shelby Heiman, USC, 2021-present
Allison Clark, USC, 2019-2023 (graduated 2023, PhD program UCLA)
Aren Ohanyan, USC, 2021-2022 (graduated winter 2022, PhD program UCLA)
Caitlin Dinh, USC, 2021-2022 (graduated 2022, med school applications pending)
Collette Gordon, USC, 2018-2022 (graduated 2022, PhD program MIT)
Taleen Boghossian, USC, 2020-2022 (graduated 2022, Gilead Sciences)
Adrian Guerrero, USC, 2021-2022 (graduated 2022, PhD program UWashingon)
Galit Ashkenazi, USC, 2019-2021 (graduated 2021, Masters program NYU)
Boyang Zhang, USC, 2020-2021 (graduated 2021, PhD program UPenn)
Alexei Nosov, Santa Monica College, 2019-2020
- **REU Undergraduate Summer Researchers**
Jessica Bowen, 2023 REU student
Savannah Masters, 2022-Zinsmeyer Environmental Studies Summer student
Casandra Catteron, 2022 REU student
Kelsey Boyes, 2019 REU student (graduated 2020, PhD program UNC Chapel Hill)
- **Wrigley Institute Environmental Communications Summer Interns**
Gwenan Walker (2023), Alex Palakian (2022), Rika Mizoguchi (2021), Julia Lin (2021)

Selected Student Awards

• Graduate Student Awards

Zach Wood: 2020 NSF GRFP Honorable Mention, 2020 Norma and Jerol Sonosky Environmental Sustainability Graduate Summer Fellowship, 2023 Robert Bau Prize (Departmental Award In recognition of excellence in research and teaching in tradition of Professor Robert Bau)

Sophia Kosloski-Oh: 2022 Norma and Jerol Sonosky Environmental Sustainability Graduate Summer Fellowship, 2023 Research Impact Award (Departmental Award For students or postdocs who are first authors on a scholarly review article published in the last 3 years)

Nancy Bush: 2022 Anton Burg 2nd Year Prize for Outstanding Research Presentation, USC Wrigley Institute 2023 Wrigley Institute Graduate Fellow

Eunice Castro: 2022 Gilead Fellowship

• Undergraduate Awards:

Collette Gordon, UNCF STEM Scholar, 2019 P&G STEM Scholarship, 2020 Garold Alfred Leach Memorial Scholarship, 2020 Coupa Cares Scholarship, 2020 WiSE Scholar, 2022 Stauffer Poster Award, 2022 NSF GRFP Honorable Mention, 2022 USC Undergraduate Symposium for Scholarly & Creative Work, 2022 ACS Division of Organic Chemistry Award for USC, 2022 Madam CJ Walker Scholarship

Allison Clark: 2022 Morrisroe Family Chemistry Fellowship, 2022 Globalink Research Internship, 2023 ACS Division of Organic Chemistry: Outstanding Senior Organic Chemistry Student Award

• Team Awards:

Yvonne Manjarrez, Collette Gordon and Yuhao Chen (Williams Group, USC): First Place in the Wrigley Sustainability Prize Finals Showcase (2020)

Nancy Bush and Caitlin Dinh: First Place in the Wrigley Sustainability Prize Finals Showcase (2021)