

Jenny Y. Yang

Associate Professor
Department of Chemistry
University of California, Irvine
Irvine, CA 92697

Phone (W): 949-824-1533
Phone (H): 617-281-5844
Email: j.yang@uci.edu

EDUCATION AND TRAINING

- 2007-2009 **Postdoctoral Fellow**, Institute for Interfacial Catalysis, Pacific Northwest National Laboratory, Richland, WA. Advisor: Dr. Daniel L. DuBois
- 2007 **Ph.D.** Inorganic Chemistry, Massachusetts Institute of Technology, Cambridge, MA. Advisor: Professor Daniel G. Nocera
- 2001 **B.S.** Chemistry, University of California, Berkeley. Advisor: Professor Jeffrey Long

RESEARCH AND PROFESSIONAL

- 2019-current **Associate Professor, University of California, Irvine**
- 2013-2019 **Assistant Professor, University of California, Irvine**
- 2012-2013 **Senior Research Scientist, California Institute of Technology**
-Scientist Lead for Molecular Electrocatalysts for CO₂ Reduction at the Joint Center for Artificial Photosynthesis
- 2009-2012 **Research Scientist, Pacific Northwest National Laboratory**
-Group Lead for Nickel Electrocatalysts for Hydrogen Production and Oxidation in the Center for Molecular Electrocatalysis, an Energy Frontier Research Center
-Primary Investigator, Laboratory Directed Research and Development Project, Development of Inorganic Water Oxidation Electrocatalysts

AWARDS

- 2020 **Research Corporation Scialog Fellow for Negative Emissions Science**
- 2019 **UC Irvine Academic Senate Early Career Research Award**
- 2019 **Camille Dreyfus Teacher-Scholar Award**
- 2019 **Chancellor's Award for Excellence in Fostering Undergraduate Research**
- 2018 **CIFAR Azrieli Global Scholar**
- 2018 **Sloan Foundation Fellow**
- 2017 **Presidential Early Career Award in Science and Engineering (PECASE)**
- 2017 **Research Corporation Scialog Fellow for Advanced Energy Storage**
- 2017 **Kavli Frontiers of Science Fellow**
- 2016 **National Science Foundation CAREER Award**
- 2015 **Camille and Henry Dreyfus Environmental Postdoctoral Mentor**
- 2015 **ACS Catalysis Lectureship** (member of team award from work at PNNL)
- 2015 **Hellman Faculty Fellow**
- 2014 **Department of Energy Early Career Award**, Department of Energy
- 2001 **Presidential Fellowship**, Massachusetts Institute of Technology

PUBLICATIONS (*corresponding authorship, undergraduate authors are underlined)

1. Bullock, R. M.*; Chen, J. G.*; Gagliardi, L.*; Chirik, P. J.; Farha, O. K.; Hendon, C. H.; Jones, C. W.; Keith, J. A.; Klosin, J.; Minter, S. D.; Morris, R. H.; Radosevich, A. T.; Rauchfuss, T. B.; Strotman, N. A.; Vojvodic, A.; Ward, T. R.; Yang, J. Y.; Surendranath, Y.*, *Science*, **2020**, *accepted*
"Using Nature's Blueprint to Enable Catalysis with Earth-Abundant Metals"
2. Proppe, A. H.; Li, Y. C.; Aspuru-Guzik, A.; Berlinguette, C. P.; Chang, C. J.; Cogdell, R.; Doyle, A. G.; Flick, J.; Gabor, N. M.; van Grondelle, R.; Hammes-Schiffer, S.; Jaffer, S.; Kelley, S. O.; Leclerc, M.; Leo, K.; Mallouk, T. E.; Narang, N.; Schlau-Cohen, G.; Scholes, G. D.; Vojvodic, A.; Yam, V. W.; Yang, J. Y.; Sargent, E. H.*, *Nature Materials*, **2020**, *ASAP*.
"Bioinspiration in Light Harvesting and CO₂ Catalysis"

3. Buonsanti, Raffaella; Buriak, Jillian*; Cabana, Laura; Cossairt, Brandi; Dasog, Mita; Dehnen, Stefanie; Dempsey, Jillian; Koziej, Dorota; Grace, Andrews Nirmala; McElwee-White, Lisa; Thomas, Christine; Yang, Jenny, *Chem. Mater.* **2020**, *32*(12), 4859–4862.
"Checking in with Women Materials Scientists During a Global Pandemic: May 2020"
4. Hanna, C. M.; Pekarek, R. T; Miller, E. M.; Yang, J. Y.*; Neale, N. R.*, *ACS Energy Lett.*, **2020**, *5*, 1848-1855.
"Decoupling Kinetics and Thermodynamics of Interfacial Catalysis at a Chemically Modified Black Silicon Semiconductor Photoelectrode"
5. Bhowmick, I.; Shaffer, D. W.; Yang, J. Y.; Shores, M. P.*, *Chem. Commun.* **2020**, in press.
"Single molecule magnet behaviour in a square planar $S = 1/2$ Co(II) complex and spin-state assignment of multiple relaxation modes"
6. Cunningham, D. W.; Barlow, J. M.; Velasquez, R. S.; Yang, J. Y.*, *Angew. Chemie. Int. Ed.*, **2020**, *59*(11), 4443-4447.
(selected as a VIP paper)
"Reversible CO_2 to HCO_2^- Electrocatalysis near the Thermodynamic Potential"
7. Thammavongsy, Z.; Yang, J. Y.; *Tet. Lett.*, **2020**, in press.
"Modular Synthesis of Symmetric Proazaphosphatranes Bearing Heteroatom Groups"
8. Cunningham, D.; Yang, J. Y.*; *Trends in Chemistry*, **2020**, *2*(4), 401-402
(invited Mechanism of the Month feature for the Special Issue "First Anniversary – Laying the Groundwork for the Future")
"Selective Electrocatalytic Reduction of CO_2 to HCO_2^- "
9. Ceballos, B. M.; Yang, J. Y.* *Organometallics*, **2020**, *39*(9), 1491-1496.
(Invited to "Organometallic Chemistry for Enabling Carbon Dioxide Utilization")
"Highly Selective Electrocatalytic CO_2 Reduction by $[\text{Pt}(\text{dmpe})_2]^{2+}$ through Kinetic and Thermodynamic Control"
10. Kang, K.; Fuller III, J.; Reath, A. H. Ziller, J. W.; Alexandrova, A. N.*; Yang, J. Y.*, *Chem. Sci.* **2019**, *10*, 10135-10142.
"Installation of Oriented Electric Fields by Non-Redox Active Cations in Transition Metal Complexes"
11. Lydon, B. R.; Lee, C. C.; Tanifuji, K.; Sickerman, N. S.; Newcomb, M. P.; Hu, Y.*; Ribbe, M. W.*; Yang, J. Y.*, *ChemBioChem*, **2019**, ASAP.
(Invited to "Nitrogenase and homologues systems" special issue)
"Electrochemical characterization of isolated nitrogenase cofactors from *Azotobacter vinelandii*"
12. Thoi, S. V.*; Yang, J. Y.* *ACS Energy Lett.* **2019**, *4*, 2201-2204. (Invited Energy Focus)
"Molecular Insights into Heterogeneous Processes in Energy Storage and Conversion"
13. Thammavongsy, Z.; Mercer, I. P.; Yang, J. Y.* *Chem. Commun.* **2019**, *55*, 10342 - 10358.
(Invited Feature Article for "Frontiers in Proton Coupled Electron Transfer" special issue)
"Promoting Proton Coupled Electron Transfer in Redox Catalysts Through Molecular Design"
14. Barlow, J. M.; Yang, J. Y.* *ACS Cent. Sci.*, **2019**, *5*(4), 580-588 (invited outlook)
"Thermodynamic Considerations for Optimizing Selective CO_2 Reduction by Molecular Catalysts"
15. Sutthirat, N.; Ziller, J. W.; Yang, J. Y.; Thammavongsy, Z.* *Acta Cryst.* **2019**, *E75*, 438-442.
"Crystal structure of $\text{NiFe}(\text{CO})_5[\text{tris}(\text{pyridylmethyl})\text{-azaphosphatranes}]$: a synthetic mimic of the NiFe hydrogenase active site incorporating a pendant pyridine base"
16. Hanna, C. M.; Luu, A.; Yang, J. Y.*, *ACS Appl. Energy Mat.*, **2019**, *2*(1), 59-65.
(Invited to "New Chemistry to Advance the Quest for Sustainable Solar Fuels Forum")
"Proton-Coupled Electron Transfer in Anthraquinone upon Noncovalent Attachment to Indium Tin Oxide Electrodes"
17. Ceballos, B. M.; Yang, J. Y.* *Proc. Natl. Acad. Sci.*, **2018**, *115*(50), 12686 – 12691.
"Directing the Reactivity of Metal Hydrides for Selective CO_2 Reduction"
18. Chantarojsiri, T.; Reath, A. H.; Yang, J. Y.* *Angew. Chem., Int. Ed.*, **2018**, *57*, 14037-14042
"Cationic Charges Lead to an Inverse Free Energy Relationship for N_2 Bond Formation by Mn(VI) Nitriles"
19. Tsay, C.; Ceballos, B. M.; Yang, J. Y.* *Organometallics*, **2018**, *38*(6), 1286-1291
(invited to "Organometallic Electrochemistry — Redox-Catalysis Going the Smart Way" special issue)

- "pH-Dependent Reactivity of a Water-Soluble Nickel Complex: Hydrogen Evolution vs Selective Electrochemical Hydride Generation"*
20. Thammavongsy, Z.; Sutthirat, N.; Cunningham, D. C.; Eisenhart, R. J.; Ziller, J. W.; Yang, J. Y.* *Dalton Trans.*, **2018**, 47, 14101-14110.
"Adaptable Ligand Donor Strength: Tracking Transannular Bond Interactions in Tris(2-pyridylmethyl)-azaphosphatrane (TPAP)"
 21. Hanna, C. M.; Sanborn, C. D.; Ardo, S.; Yang, J. Y.* *ACS Appl. Mater. Interfaces*, **2018**, 10(15), 13211-13217
"Interfacial Electron Transfer of Ferrocene Immobilized onto Indium Tin Oxide through Covalent and Noncovalent Interactions"
 22. Chabolla, S.; Yang, J. Y.* *ACS Cent. Sci.*, **2018**, 4(3), 315-317.
"For CO₂ Reduction, Hydrogen-Bond Donors Do the Trick" (invited perspective)
 23. Khosrowabadi, J. F. K.; Ziller, J. W.; Combs, R. L.; Yang, J. Y.* *Chem. Sci.*, **2018**, 9, 2750 - 2755.
"Intramolecular Hydrogen-Bonding in a Cobalt Aquo Complex Enables Electrochemical Water Oxidation Activity"
 24. Chantarojsiri, T.; Ziller, J. W.; Yang, J. Y.* *Chem. Sci.*, **2018**, 9, 2567 - 2574.
"Incorporation of Redox-Inactive Cations Promotes Iron Catalyzed Aerobic C-H Oxidation at Mild Potentials"
 25. Ceballos, B. M.; Tsay, C.; Yang, J. Y.* *Chem. Commun.* **2017**, 53, 7405-7408.
(invited to "2017 Emerging Investigators Issue" special issue)
"CO₂ Reduction or HCO₂- Oxidation? Solvent Dependent Thermochemistry of a Nickel Hydride Complex"
 26. Reath, A.; Ziller, J.; Tsay, C.; Ryan, A. J.; Yang, J. Y.* *Inorg. Chem.* **2017**, 56(6), 3713-3718.
(Selected for ACS Virtual Issue "Synthetic Chemistry Addressing Challenges in Energy and the Environment")
"Redox Potential and Electronic Structure Effects of Proximate Non-Redox Active Cations in Cobalt Schiff Base Complexes"
 27. Shaffer, D. W.; Bhowmick, I.; Rheingold, A. L.; Tsay, C.; Livesay, B.; Shores, M. P.*; Yang, J. Y.* *Dalton Trans.*, **2016**, 45, 17910-17917.
"Spin State Diversity in a Series of Co(II) PNP Pincer Bromide Complexes"
 28. Tsay, C.; Yang, J. Y.* *J. Am. Chem. Soc.*, **2016**, 138(43), 14174-14177.
(Selected for JACS Spotlight & Cover)
"Electrocatalytic Hydrogen Evolution Under Acidic Aqueous Conditions and Mechanistic Studies of a Highly Stable Molecular Catalyst"
 29. Thammavongsy, Z.; Kha, I. M.; Ziller, J. W.; Yang, J. Y.* *Dalton Trans.*, **2016**, 45, 9853-9859.
(invited to "New Talent: Americas" special issue)
"Electronic and Steric Tolman Parameters for Proazaphosphatranes, the Superbase Core of the Tri(pyridylmethyl)azaphosphatrane (TPAP) Ligand"
 30. Lydon, Brian R.; Germann, A.; Yang, J. Y.* *Inorg. Chem. Front.*, **2016**, 3, 836-841.
(invited to "Emerging Investigator" special issue)
"Chemical Modification of Gold Electrodes via Non-Covalent Interactions"
 31. Kotyk, J. F. K.; Ziller, J. W.; Yang, J. Y.* *J. Coord. Chem.*, **2016**, 69(11-13), 1990-2002.
(invited to "Emerging Leaders in Coordination Chemistry Issue")
"Copper Tetradentate N₂Py₂ Complexes with Pendant Bases in the Secondary Coordination Sphere: Improved Ligand Synthesis and Protonation Studies"
 32. Thammavongsy, Z.; Kotyk, J. F. K.; Tsay, C.; Yang, J. Y.* *Inorg. Chem.*, **2015**, 54(23), 11505-11510.
"Flexibility is Key: Synthesis of a Tripyridylamine (TPA) Congener with a Phosphorus Apical Donor and Coordination to Cobalt(II)"
 33. Tsay, C.; Livesay, B.; Ruelas, S.; Yang, J. Y.* *J. Am. Chem. Soc.* **2015**, 137(44), 14114-14121.
(Selected for JACS virtual issue on Electrocatalysis)
"Solvation Effects on Transition Metal Hydricity"
 34. Shaffer, D. W.; Johnson, S. I.; Rheingold, A.; Ziller, J.; Goddard III, W.; Nielsen, R. J.; Yang, J. Y.* *Inorg. Chem.* **2014**, 53(24), 13031-13041.
"Reactivity of a Series of Isostructural Cobalt Pincer Complexes with CO₂, CO, and H⁺"

35. Hoffert, W. A.; Mock, M. T.; Appel, A. M.; Yang, J. Y.* *Eur. J. Inorg. Chem.* **2013**, 22-23, 3846-3857.
(invited to special issue "Small-Molecule Activation by Reactive Metal Complexes")
"Incorporation of Hydrogen-Bonding Functionalities into the Second Coordination Sphere of Iron-Based Water-Oxidation Catalysts"
36. Yang, J. Y.*; Smith, S. E.; Liu, T.; Dougherty, W. G.; Hoffert, W. A.; Kassel, W. S.; DuBois, M. R.; DuBois, D. L.; Bullock, R. M. *J. Am. Chem. Soc.* **2013**, 135, 9700-9712.
"Two Pathways for Electrocatalytic Oxidation of Hydrogen by a Nickel Bis(diphosphine) Complex with Pendant Amines in the Second Coordination Sphere"
37. O'Hagan, M.; Ho, M.-H.; Yang, J. Y.; Appel, A. M.; DuBois, M. R.; Raugei, S.; Shaw, W. J.; DuBois, D. L.; Bullock, R. M. *J. Am. Chem. Soc.* **2012**, 134, 19409-19424.
"Proton Delivery and Removal in [Ni(PR₂NR'₂)₂]²⁺ Hydrogen Production and Oxidation Catalysts"
38. Matson, B. D.; Carver, C. T.; Von Ruden, A.; Yang, J. Y.; Raugei, S.; Mayer, J. M. *Chem. Commun.* **2012**, 48, 11100-11102.
"Distant Protonated Pyridine Groups in Water-Soluble Iron Porphyrin Electrocatalyst Promote Selective Oxygen Reduction to Water"
39. Smith, S. E.; Yang, J. Y.*; Bullock, R. M.; DuBois, D. L. *Angew. Chemie Int. Ed.* **2012**, 51, 3152-3155.
"Reversible Electrocatalytic Production and Oxidation of Hydrogen at Low Overpotentials by a Functional Hydrogenase Mimic"
40. Wiedner, E. S.; Yang, J. Y.; Chen, S.; Raugei, S.; Dougherty, W. G.; Kassel, W. S.; Helm, M. L.; Bullock, R. M.; DuBois, M. R.; DuBois, D. L. *Organometallics* **2012**, 31, 144-156.
"Stabilization of Nickel Complexes with NiO...H-N Bonding Interactions Using Sterically Demanding Cyclic Diphosphine Ligands"
41. Galan, B. R.; Schöffel, J.; Linehan, J. C.; Seu, C.; Appel, A. M.; Roberts, J. A. S.; Helm, M. L.; Kilgore, U. J.; Yang, J. Y.; DuBois, D. L.; Kubiak, C. P. *J. Am. Chem. Soc.* **2011**, 133, 12767-12779.
"Electrocatalytic Oxidation of Formate by [Ni(PR₂NR'₂)₂(CH₃CN)]²⁺ Complexes"
42. O'Hagan, M.; Shaw, W. J.; Raugei, S.; Chen, S.; Yang, J. Y.; Kilgore, U. J.; DuBois, D. L.; Bullock, R. M. *J. Am. Chem. Soc.* **2011**, 133, 14301-14312.
"Moving Protons with Pendant Amines: Proton Mobility in a Nickel Catalyst for Oxidation of Hydrogen"
43. Appel, A. M.; Pool, D. H.; O'Hagan, M.; Shaw, W. J.; Yang, J. Y.; DuBois, M. R.; DuBois, D. L.; Bullock, R. M. *ACS Catalysis* **2011**, 1, 777-785.
"[Ni(PPh₂NBn)₂(CH₃CN)]²⁺ as an Electrocatalyst for H₂ Production: Dependence on Acid Strength and Isomer Distribution"
44. Yang, J. Y.; Bullock, R. M.; DuBois, M. R.; DuBois, D. L. *MRS Bulletin* **2011**, 36, 39-47.
"Fast and Efficient Molecular Electrocatalysts for H₂ Production: Using Hydrogenase Enzymes as Guides" (invited)
45. Yang, J. Y.*; Chen, S.; Dougherty, W. G.; Kassel, W. S.; Bullock, R. M.; DuBois, D. L.; Raugei, S.; Rousseau, R.; Dupuis, M.; DuBois, M. R. *Chem. Commun.* **2010**, 46, 8618-8620.
"Hydrogen Oxidation Catalysis by a Nickel Diphosphine Complex with Pendant tert-Butyl Amines" (invited)
46. Wiedner, E. S.; Yang, J. Y.; Dougherty, W. G.; Kassel, W. S.; Bullock, R. M.; DuBois, M. R.; DuBois, D. L. *Organometallics* **2010**, 29, 5390-5401.
"Comparison of Cobalt and Nickel Complexes with Sterically Demanding Cyclic Diphosphine Ligands: Electrocatalytic H₂ Production by [Co(PtBu₂NPh₂)(CH₃CN)₃](BF₄)₂" (invited)
47. Yang, J. Y.; Bullock, R. M.; Dougherty, W. G.; Kassel, W. S.; Twamley, B.; DuBois, D. L.; DuBois, M. R. *Dalton Trans.* **2010**, 39, 3001-3010.
"Reduction of Oxygen Catalyzed by Nickel Diphosphine Complexes with Positioned Pendant Amines" (invited)
48. Yang, J. Y.; Bullock, R. M.; Shaw, W. J.; Twamley, B.; Frazee, K.; DuBois, M. R.; DuBois, D. L. *J. Am. Chem. Soc.* **2009**, 131, 5935-5945.
"Mechanistic Insights into Catalytic H₂ Oxidation by Ni Complexes Containing a Diphosphine Ligand with a Positioned Amine Base"
49. Yang, J. Y.; Liu, S.-Y.; Korendovych, I. V.; Rybak-Akimova, E. V.; Nocera, D. G. *ChemSusChem* **2008**, 1, 941-949.

- "Hangman Salen Platforms Containing Dibenzofuran Scaffolds"* (invited)
50. Jacobsen, G. M.; Yang, J. Y.; Twamley, B.; Wilson, A. D.; Bullock, R. M.; DuBois, M. R.; DuBois, D. L. *Energy Environ. Sci.* **2008**, *1*, 167-174.
"Hydrogen Production Using Cobalt-Based Molecular Catalysts Containing a Proton Relay in the Second Coordination Sphere" (invited)
51. Yang, J. Y. and Nocera, D. G. *Tetrahedron Lett.* **2008**, *49*, 4796-4798.
"Manganese Amido-Imine Bisphenol Hangman Complexes"
52. Yang, J. Y. and Nocera, D. G. *J. Am. Chem. Soc.* **2007**, *129*, 8192-8198.
"Catalase and Epoxidation Activity of Manganese Salen Complexes Bearing Two Xanthene Scaffolds"
53. Yang, J. Y.; Bachmann, J.; Nocera, D. G. *J. Org. Chem.* **2006**, *71*, 8706-8714.
"Hangman Salen Platforms Containing Two Xanthene Scaffolds"
54. Liu, S.-Y.; Soper, J. D.; Yang, J. Y.; Rybak-Akimova, E. V.; Nocera, D. G. *Inorg. Chem.* **2006**, *45*, 7572-7574.
"Mechanistic Studies of Hangman Salophen-Mediated Activation of O-O Bonds"
55. Yang, J. Y.; Shores, M. P.; Sokol, J. J.; Long, J. R. *Inorg. Chem.* **2003**, *42*, 1403-1419.
"High-Nuclearity Metal-Cyanide Clusters: Synthesis, Magnetic Properties, and Inclusion Behavior of Open-Cage Species Incorporating [(tach)M(CN)₃] (M = Cr, Fe, Co) Complexes" (cover article)

INVITED PRESENTATIONS & SYMPOSIA (*international)

2020 (postponed)

Renewable Energy: Solar Fuels Gordon Research Conference, Lucca, Italy

University of North Carolina (student invited seminar), Chapel Hill, NC

Stanford University Distinguished Women in Chemistry Seminar series, Palo Alto, Ca

Organometallic Gordon Research Conference, Newport, RI

Donor-Acceptor Gordon Research Conference, Newport, RI

Frontiers in Catalysis: PNNL's Institute for Integrated Catalysis celebrates 15 years, 260th ACS National Meeting (CATL division), San Francisco, CA

2020 (virtual)

Electrochemistry-enabled catalysis for energy, chemicals and materials (ENFL division), 260th ACS National Meeting

Advancing Frontiers in Heterometallic Chemistry (Inorg division), 260th ACS National Meeting

Spectroscopy for Understanding Catalysis (Phys division), 260th ACS National Meeting

UPenn Virtual Symposium

Telluride Science Research Workshop

Global Inorganic Discussion Weekly (GIDW)

2020

Electrochemistry Gordon Research Conference, Ventura, Ca

Catalysts for Energy Storage: Inspired by Nature, Built by Scientists Symposium, 2020 AAAS Annual Meeting, Seattle, WA

2019

Identification & Design of Catalytic Sites in Electrochemical Reactions Symposium, 258th ACS National Meeting (CATL division), San Diego, CA

ACS Pure Chemistry Award Winner: Symposium in Honor of Danna Freedman 258th ACS National Meeting (Inorg division), San Diego, CA

TSRC Workshop on Biological and Bioinspired Redox Catalysts, Telluride, Co

Catalytic Reactivity in Complex Environments Workshop, PNNL, Richland, WA

University of Washington, Seattle, WA

University of Tennessee, TN

Through the Lens of Inorganic Chemistry: Understanding Heterogeneous Processes in Energy Conversion and Storage Symposium, 257th ACS National Meeting (Inorg division), Orlando, FL

Molecular Catalysis of Carbon Dioxide Reduction from Renewable Energy Symposium, Pittcon 2019,
Pittsburg, PA
Virginia Tech University, VA
Metals in Biology Gordon Research Conference, Ventura, CA
University of California, Berkeley, CA

2018

University of California, Santa Barbara, CA
Massachusetts Institute of Technology, Cambridge, MA
University of Rochester, NY
Gordon Research Conference: Metallocofactors, South Hadley, MA
University of California, San Diego, CA
University of Southern California, Los Angeles, CA
Michigan State University, East Lansing, MI
Yale University, New Haven, CT
Texas A&M, College Station, TX
University of Colorado, Boulder, CO
Colorado State University, Fort Collins, CO
University of California, Los Angeles, CA
***Bio-inspired Solar Energy Meeting, Canadian Institute for Advance Research (CIFAR), Toronto**
Synthetic Chemistry Addressing Challenges in Energy & the Environment Symposium, 255th ACS National Meeting (Inorg division), New Orleans, LA
ACS Award in Organometallic Chemistry: Symposium in honor of Clifford P. Kubiak, 255th ACS National Meeting (Inorg division), New Orleans, LA
F. Albert Cotton Award in Synthetic Inorganic Chemistry: Symposium in honor of Andrew S. Borovik, 255th ACS National Meeting (Inorg division), New Orleans, LA
PCET PhotoCatalysis with Inorganic Molecules & Materials Symposium (Inorg division), 255th ACS National Meeting, New Orleans, LA
University of Illinois, Urbana-Champaign, IL
Purdue University, West Lafayette, IN
Harvey Mudd College, Claremont, CA
Renewable Energy: Solar Fuels Gordon Research Seminar (keynote), Ventura, CA

2017

John Hopkins University, Baltimore, MD
University of South Dakota, Vermillion, SD
New Ligand Frameworks for Catalysis Inspired by the Active Site of Enzymes, 254th ACS National Meeting (Inorg division), Washington, D. C.
Personal & Global Energy Conversion in Chemistry & Biology (Inorg division), 254th ACS National Meeting, Washington, D. C.
Control of Proton and Electron Transfers in Redox Catalysis, Telluride, CO
2nd International Solar Fuels Meeting – Young, San Diego, CA
Korean-American Kavli Frontiers of Science Symposium (poster), Irvine, CA
Department of Energy Solar Photochemistry P.I. Meeting, Washington, D. C.
Celebrating 60 Years of the Division of Inorganic Chemistry, 253rd ACS National Meeting (Inorg division), San Francisco, CA
Sustainability in Electrocatalytic Fuel and Chemical Production Symposium (Inorg division), 253rd ACS National Meeting, San Francisco, CA
***Korea Advanced Institute of Science and Technology (KAIST), Daejeong, S. Korea**
Northwestern University (Student Invited Seminar), Evanston, IL

2016

Texas Christian University, Fort Worth, TX
California State University Long Beach, CA

Secondary Coordination Sphere Influences Symposium (Inorg division), 252nd ACS National Meeting,
Philadelphia, PA

ANSER Solar Energy Symposium, Northwestern University, Evanston, IL

California State University, Chico, CA

University of Memphis, TN

***Renewable Energy: Solar Fuels Gordon Research Conference (Poster Talk),** Barga, Italy

2015

Inorganic Complexes for Solar Energy Harvesting Symposium, Pacifichem 2015, Honolulu, HI

Orange County ACS Meeting, Costa Mesa, CA

ACS Catalysis Lectureship (CATL division), 250th ACS National Meeting, Boston, MA

Solar Solutions to Energy and Environmental Problems, Telluride, CO

***First International Solar Fuels Symposium,** Uppsala, Sweden

Inorganic Reaction Mechanisms Gordon Research Conference, Galveston, TX

**Theoretical and Experimental Synergies at the Frontiers of Renewable Energy Catalysis Symposium
(CATL division), 249th ACS National Meeting,** Denver, CO

Molecular Catalysts for Solar Fuels Symposium (Inorg division), 249th ACS National Meeting, Denver, CO

**ACS Award in Organometallic Chemistry: Symposium in Honor of William J. Evans, 249th ACS National
Meeting (Inorg division),** Denver, CO

2014

***Second International Conference of Young Researchers on Advanced Materials,** Haikou, China

***1st International Electrochemistry Workshop and Forum,** Rio de Janeiro, Brazil

Organometallic Gordon Research Conference (Poster Talk) Newport, RI

New Horizons in Science Symposium, Mexico City, Mexico

Catalysis Science: The Next Generation Symposium (CATL division), 247th ACS National Meeting, Dallas,
TX

Western Photosynthesis Conference, Monterey Bay, CA

2013

Enabling Sustainability and Innovation through Catalysis CENTC Summer School, University of
Washington

WORKSHOPS

2019 Department of Energy Basic Energy Sciences Roundtable on Liquid Solar Fuels, Washington, D. C.

2019 Department of Energy Earth Abundant Catalysis Workshop, Washington, D. C.

2017 Department of Energy Bioenergy Technologies Office, San Diego, CA

2017 Department of Energy Basic Research Needs in Catalysis, Washington, D. C.

2016 Addressing the Mars ISRU Challenge: Production of Oxygen and Fuel from CO₂ Using Sunlight –
Part II, Caltech/JPL

2015 ARPA-E: Bridging Renewable Electricity with Transportation Fuels Workshop – Denver, CO

2013 Low Temperature Electrochemical Oxidation of Hydrocarbon Fuels DARPA Meeting – Pasadena,
CA

PROFESSIONAL ACTIVITIES

Meeting Organizer

2017 Southern California Bioinorganic Meeting (Inaugural Meeting)

2016 Southern California Organometallics Meeting

Symposium Chair/Co-Chair

2019 Emerging Research in Molecular Synthesis and Catalysis, 258th ACS National Meeting, San Diego,
CA

2019 Through the Lens of Inorganic Chemistry: Understanding Heterogeneous Processes in Energy
Conversion and Storage Symposium, 257th ACS National Meeting, Orlando, FL

- 2018 Symposium in Honor of Andy Borovik (E. Albert Cotton Award for Synthetic Inorganic Chemistry), 255th ACS National Meeting, New Orleans, LA
2015 Molecular Catalysts for Solar Fuels, 249th ACS National Meeting, Denver, CO
2013 Division of Inorganic Chemistry Award: Symposium in Honor of Daniel L. DuBois, 245th ACS National Meeting, New Orleans, LA

Discussion Leader

- 2019 Organometallics Gordon Research Conference
2016 Renewable Energy: Solar Fuels Gordon Research Seminar

Session Presider

- 2016 251st ACS National Meeting: Energy and Environmental Chemistry

Organizer/Co-organizer Power Hour (to address issues of diversity in STEM)

- 2018 Metallocofactors GRC
2019 Organometallics GRC

PROFESSIONAL AFFILIATIONS

- 2020 – present **Executive Board**, Solutions that Scale (UCI)
2019 – present **Editorial Advisory Board**, *Inorganic Chemistry* journal
2019 – present **Advisory Board**, University of California Chemical Symposium (UCCS)
2018 – present **Early Career Editorial Advisory Board**, *ACS Sustainable Chemistry and Engineering* journal

2001 – present **American Chemical Society**, division of Inorganic Chemistry
2012 – 2013 **Joint Center for Artificial Photosynthesis**, Integration Team
2001 – 2007 **Women In Chemistry**, Massachusetts Institute of Technology (Chair, 2002-2003)
2002 – 2004 **Chemistry Graduate Student Council**, Massachusetts Institutes of Technology

COMMUNITY SERVICE

- 2014 – present **Chemistry Women Mentorship Network**
2013 – current **UCI Laboratory Experiments and Activities Program (LEAPS)**
2017 – current **Project Scientist, Women in STEM**
2016 **SACNAS National Meeting Poster Judge**
2016 **UCI Math CEO Program**
2016 **Sally Ride Science Center Interview**
2013 **Women in STEM UCI interview**