

Michael S. Inkpen

Associate Professor of Chemistry, University of Southern California
+1 (213) 821-1910 / inkpen@usc.edu / www.inkpenlab.org

Academic Appointments

Associate Professor of Chemistry , Department of Chemistry, University of Southern California, USA	2026-Present
Assistant Professor of Chemistry , Department of Chemistry, University of Southern California, USA	2019-2026

Education and Training

Marie Skłodowska-Curie Fellow Columbia University, USA and University of Rennes 1, France (Advisors: Latha Venkataraman and Philippe Hapiot)	2015-2018
Research Associate Imperial College London, UK (Advisors: Nicholas J. Long , Tim Albrecht)	2013-2015
Ph.D. in Organometallic Chemistry Imperial College London, UK (Advisors: Nicholas J. Long , Tim Albrecht) <i>Thesis title:</i> "Branched organometallic complexes for molecular electronics"	2008-2013
M.Chem. w/ Industrial Project, 1st class Honours Durham University, UK	2004-2008

Honors, Fellowships and Awards

CAREER Award , National Science Foundation	2023
Doctoral New Investigator Grant , ACS Petroleum Research Fund	2021
Small Instrumentation Grant , Anton B. Burg Foundation, USC	2020, 2023, 2025
Marie Skłodowska-Curie Global Fellowship , European Commission	2015-2018
Travel Grant , Faraday Division, Royal Society of Chemistry	2014

Publications

Key: corresponding authors are underlined; † indicates co-first authors (equal contribution); ^{PD*}, ^{GR*}, and ^{UG*} indicate mentored postdoctoral scholar, graduate, and master's/undergraduate students, respectively. In my field, last authorship is for the senior author.

Peer-Reviewed Journal Articles at USC – Manuscripts Published/In Press

- 15) L. Zagami^{GR*}, M. Sharma^{GR*}, A. Fraire^{GR*}, C. Avedian^{GR*}, C. Olivar^{GR*}, T. M. Czystczon-Burton^{GR*}, J. Prana^{GR*}, S. Yergeshbayeva, M. Camarasa-Gómez, D. Hernangómez-Pérez, M. S. Inkpen, "Enhanced electronic coupling in tetraaryl molecular junctions with osmium(IV) centers," *Chem. Sci.*, 2026, DOI: 10.1039/D6SC03527B, *in press*.
- 14) J. Prana^{GR*}, L. Zagami^{GR*}, K. Yan^{UG*}, D. Hernangómez-Pérez, M. Camarasa-Gómez, M. S. Inkpen, "Formation of Chemisorbed Single-Molecule Junctions Through the Loss of Stable Carbocations," *Nano Lett.*, 2025, **25**, 10427-10434.
- 13) T. M. Czystczon-Burton^{GR*,†}, E. Montes[†], J. Prana^{GR*}, S. F. Chen^{UG*}, C. Pakhanyan^{GR*}, H. Vázquez, M. S. Inkpen, "Thioether-Linked Single-Molecule Junctions with Coinage Metal Contacts," *Nano Lett.*, 2025, **25**, 9125-9131.

- 12) C. Avedian^{GR*}, C. D. M. Trang^{GR*}, **M. S. Inkpen**, "Template-Stripped Substrates with Solvent-Impermeable Metal Thin Films," *ACS Nanoscience Au*, 2025, **5**, 269-275.
- 11) C. Otey^{UG*,†}, M. Sharma^{GR*,†}, J. Prana^{GR*}, T. M. Czyszczonek-Burton^{GR*}, A. Hernandez^{UG*}, M. Camarasa-Gómez, D. Hernangómez-Pérez, **M. S. Inkpen**, "Conductance Measurements of Polar Molecules in a Non-Conducting Solvent," *ACS Phys. Chem. Au*, 2025, **5**, 249-253.
- 10) T. M. Czyszczonek-Burton^{GR*,†}, S. Lazar^{UG*,†}, Z. Miao^{UG*}, **M. S. Inkpen**, "Single-Molecule Junctions Formed Using Different Electrode Metals Under an Inert Atmosphere," *Small*, 2025, **21**, 2502972.
- 9) C. Olivar^{GR*}, J. M. Parr^{GR*}, C. Avedian^{GR*}, T. Saal, L. Zagami^{GR*}, R. Haiges, M. Sharma^{GR*}, **M. S. Inkpen**, "Osmium(IV) Tetraaryl Complexes Formed from Pre-Functionalized Ligands," *Inorg. Chem.*, 2025, **64**, 6192-6204.
- 8) L. Zagami^{GR*}, T. Saal, C. Avedian^{GR*}, **M. S. Inkpen**, "Intramolecular Charge Transfer in an Osmium(IV) Tetra(ferrocenylaryl) Complex," *Inorg. Chem.*, 2025, **64**, 2312–2320.
- 7) J. Prana^{GR*}, L. Kim^{UG*}, T. M. Czyszczonek-Burton^{GR*}, G. Homann^{UG*}, S. F. Chen^{UG*}, Z. Miao^{UG*}, M. Camarasa-Gómez, **M. S. Inkpen**, "Lewis-Acid Mediated Reactivity in Single-Molecule Junctions," *J. Am. Chem. Soc.*, 2024, **146**, 33265-33275.
- 6) T. M. Czyszczonek-Burton^{GR*,†}, E. Montes[†], J. Prana^{GR*}, S. Lazar^{UG*}, N. Rotthowe^{PD*}, S. F. Chen^{UG*}, H. Vázquez, **M. S. Inkpen**, "α,ω-Alkanedibromides Form Low Conductance Chemisorbed Junctions with Silver Electrodes," *J. Am. Chem. Soc.*, 2024, **146**, 28516-28526.
- 5) C. D. M. Trang^{GR*}, C. Mora-Perez, J. Ran, O. V. Prezhdo, **M. S. Inkpen**, "Counterion Loss from Charged Surface-Bound Complexes Drives the Formation of Loosely Packed Monolayers," *J. Am. Chem. Soc.*, 2024, **146**, 25625–25639.
- 4) L. Kim^{UG*,†}, T. M. Czyszczonek-Burton^{GR*,†}, K. M. Nguyen^{UG*}, S. Stuke^{UG*}, S. Lazar^{UG*}, J. Prana^{GR*}, Z. Miao^{UG*}, S. Park^{UG*}, S. F. Chen^{UG*}, **M. S. Inkpen**, "Low Vapor Pressure Solvents for Single-Molecule Junction Measurements," *Nano Lett.*, 2024, **24**, 9998–10005.
- 3) C. D. M. Trang^{GR*}, T. Saal, **M. S. Inkpen**, "Methyldisulfide Groups Enable the Direct Connection of Air-Stable Metal Bis(terpyridine) Complexes to Gold Surfaces," *Dalton Trans.*, 2023, **52**, 7836-7842.
- From the Spotlight Collection: "[Inorganic Molecular Electronics](#)"
- 2) Z. Miao^{UG*}, T. Quainoo, T. M. Czyszczonek-Burton^{GR*}, N. Rotthowe^{PD*}, J. M. Parr^{GR*}, Z.-F. Liu, **M. S. Inkpen**, "Charge Transport Across Dynamic Covalent Chemical Bridges," *Nano Lett.*, 2022, **22**, 8331-8338.
- 1) J. M. Parr^{GR*,†}, C. Olivar^{GR*,†}, T. Saal, R. Haiges, **M. S. Inkpen**, "Pushing Steric Limits in Osmium(IV) Tetraaryl Complexes," *Dalton Trans.*, 2022, **51**, 10558-10570.

Other Journal Articles at USC

- 1) T. Su, **M. S. Inkpen**, H. Li, "Themed Collection on Molecular Scale Electronics," *J. Mater. Chem. C*, 2024, **12**, 7830.

Peer-Reviewed Journal Articles Based on Work Prior to Joining USC

- 21) L. E. Wilson, T. T. C. Yue, **M. S. Inkpen**, I. Grace, A. J. P. White, C. Lambert, T. Albrecht, N. J. Long, "Controlling Quantum Interference Patterns in Redox-Active Rings," *J. Organomet. Chem.*, 2024, **1022**, 123368.

- 20) W. Lee, L. Li, M. Camarasa-Gómez, D. Hernangómez-Pérez, X. Roy, F. Evers, **M. S. Inkpen**, L. Venkataraman, "Photooxidation Driven Formation of Fe-Au Linked Ferrocene-Based Single-Molecule Junctions," *Nature Commun.*, 2024, **15**, 1439.
- 19) M. Camarasa-Gómez[†], D. Hernangómez-Pérez[†], **M. S. Inkpen**, G. Lovat, E.-D. Fung, X. Roy, L. Venkataraman, and F. Evers, "Mechanically Tunable Quantum Interference in Ferrocene-Based Single-Molecule Junctions," *Nano Lett.*, 2020, **20**, 6381-6386.
- 18) Y. Zang[†], I. Stone[†], **M. S. Inkpen**, F. Ng, T. H. Lambert, C. Nuckolls, M. L. Steigerwald, X. Roy, L. Venkataraman, "In Situ Coupling of Single Molecules Driven by Au-Catalyzed Electrooxidation," *Angew. Chem. Int. Ed.*, 2019, **58**, 16008-16012.
- 17) **M. S. Inkpen**, Z.-F. Liu, H. Li, L. M. Campos, J. B. Neaton, L. Venkataraman, "Non-Chemisorbed Gold-Sulfur Binding Prevails in Self-Assembled Monolayers," *Nature Chem.*, 2019, **11**, 351-358.
 - "A not-so-strong bond" (G. Pacchioni, *Nature Rev. Mater.*, 2019, **4**, 226)
- 16) G. Lovat, E. A. Doud, D. Lu, G. Kladnik, **M. S. Inkpen**, M. L. Steigerwald, D. Cvetko, M. S. Hybertsen, A. Morgante, X. Roy, L. Venkataraman, "Determination of the Structure and Geometry of N-Heterocyclic Carbenes on Au(111) Using High-Resolution Spectroscopy," *Chem. Sci.*, 2019, **10**, 930-935.
- 15) E. A. Doud[†], **M. S. Inkpen**[†], G. Lovat, E. Montes, D. W. Paley, M. L. Steigerwald, H. Vázquez, L. Venkataraman, X. Roy, "In Situ Formation of N-Heterocyclic Carbene-Bound Single-Molecule Junctions," *J. Am. Chem. Soc.*, 2018, **140**, 8944-8949.
- 14) H. Li, T. A. Su, M. Camarasa-Gómez, D. Hernangómez-Pérez, S. E. Henn, V. Pokorný, C. D. Caniglia, **M. S. Inkpen**, R. Korytár, M. L. Steigerwald, C. Nuckolls, F. Evers, L. Venkataraman, "Silver Makes Better Electrical Contacts to Thiol Terminated Silanes than Gold," *Angew. Chem. Int. Ed.*, 2017, **56**, 14145-14148.
- 13) R. Leber, L. E. Wilson, P. Robaschik, **M. S. Inkpen**, D. Payne, N. J. Long, T. Albrecht, C. F. Hirjibehedin, S. Heutz, "High Vacuum Deposition of Biferrocene Thin Films on Room Temperature Substrates," *Chem. Mater.*, 2017, **29**, 8663-8669.
- 12) H. Li, M. H. Garner, T. A. Su, A. Jensen, **M. S. Inkpen**, M. L. Steigerwald, L. Venkataraman, G. C. Solomon, C. Nuckolls, "Extreme Conductance Suppression in Molecular Siloxanes," *J. Am. Chem. Soc.*, 2017, **139**, 10212-10215.
 - "1D nanowire is world's worst conductor", *Chemistry World* (print issue: 07/2017)
 - "Siloxane nanowires are world's worst conductor", *Compound Interest*
- 11) O. A. Al-Owaedi, S. Bock, D. Costa-Milan, M. Oerthel, **M. S. Inkpen**, D. S. Yufit, A. N. Sobolev, N. J. Long, T. Albrecht, S. Higgins, M. R. Bryce, R. J. Nichols, C. Lambert, P. Low, "Insulated Molecular Wires: Inhibiting Orthogonal Contacts in Metal Complex Based Molecular Junctions," *Nanoscale*, 2017, **9**, 9902-9912.
- 10) **M. S. Inkpen**, Y. R. Leroux, P. Hapiot, L. M. Campos, L. Venkataraman, "Reversible On-Surface Wiring of Resistive Circuits," *Chem. Sci.*, 2017, **8**, 4340-4346.
- 9) M. Lemmer, **M. S. Inkpen**, K. Kornysheva, N. J. Long and T. Albrecht, "Unsupervised Vector-Based Classification of Single-Molecule Charge Transport Data," *Nature Commun.*, 2016, **7**, 12922.
- 8) **M. S. Inkpen**, S. Scheerer, M. Linseis, A. J. P. White, R. F. Winter, T. Albrecht, N. J. Long, "Oligomeric Ferrocene Rings," *Nature Chem.*, 2016, **8**, 825-830.
 - "Molecule of the Year", the cyclic hexamer was one of seven molecules nominated by C&EN, coming third in their online poll (print issue: 2016-12-19)
 - Journal front cover (*Nature Chem.*, 2016, **8**(9))

- [News and Views](#) (R. A. Musgrave and I. Manners, *Nature Chem.*, 2016, **8**, 819)
 - [“Presenting a ferrocene Ferris wheel”](#), *C&EN* (print issue: 2016-07-04)
 - [“Bringing ferrocene full circle”](#), *Chemistry World* (print issue: 2016-08)
- 7) **M. S. Inkpen**, A. J. P. White, [T. Albrecht](#), [N. J. Long](#), “Complexes Comprising ‘Dangling’ Phosphorous Arms and Tri(hetero)metallic Butenynyl Moieties,” *J. Organomet. Chem.*, 2016, **812**, 145-150.
 - 6) **M. S. Inkpen**[†], S. Du[†], M. Hildebrand, A. J. P. White, N. M. Harrison, [T. Albrecht](#), [N. J. Long](#), “The Unusual Redox Properties of Fluoroferrocenes Revealed Through a Comprehensive Study of the Haloferrocenes,” *Organometallics*, 2015, **34**, 5461-5469.
 - 5) **M. S. Inkpen**, M. Lemmer, N. Fitzpatrick, D. Costa-Milan, R. J. Nichols, [N. J. Long](#), [T. Albrecht](#), “New Insights into Single-Molecule Junctions Using a Robust, Unsupervised Approach to Data Collection and Analysis,” *J. Am. Chem. Soc.*, 2015, **137**, 9971-9981.
 - 4) **M. S. Inkpen**, A. J. P. White, [T. Albrecht](#), [N. J. Long](#), “Avoiding Problem Reactions at the Ferrocenyl-Alkyne Motif: a Convenient Synthesis of Model, Redox-Active Complexes for Molecular Electronics,” *Dalton Trans.*, 2014, **43**, 15287-15290.
 - 3) **M. S. Inkpen**, [T. Albrecht](#), [N. J. Long](#), “Branched Redox-Active Complexes for the Study of Novel Charge Transport Processes,” *Organometallics*, 2013, **32**, 6053-6060.
 - 2) **M. S. Inkpen**, A. J. P. White, [T. Albrecht](#), [N. J. Long](#), “Rapid Sonogashira Cross-Coupling of Iodoferrocenes and the Unexpected Cyclo-Oligomerization of 4-Ethynylphenylthioacetate,” *Chem. Commun.*, 2013, **49**, 5663-5665.
 - 1) **M. S. Inkpen**, S. Du, M. Driver, [T. Albrecht](#), [N. J. Long](#), “Oxidative Purification of Halogenated Ferrocenes,” *Dalton Trans.*, 2013, **42**, 2813-2816.

Other Journal Articles and Book Chapters Prior to USC

- 2) **M. S. Inkpen** and [N. J. Long](#), “Metal σ -Alkynyl Complexes as Molecular Wires: a Comparative Study of Electron Density and Delocalisation” in *Molecular Design and Applications of Photofunctional Polymers and Materials*, eds. W. -Y. Wong and A. S. Abd-El-Aziz, Royal Society of Chemistry, 2012, 4, 85-129 (book chapter).
- 1) **M. S. Inkpen** and [T. Albrecht](#), “Probing Electron Transport in Proteins at Room Temperature with Single-Molecule Precision,” *ACS Nano*, 2012, **6**, 13-16 (perspective article).

Patents and Patent Applications

- 1) C. Avedian and **M. S. Inkpen**, “Template-Stripped Substrates with Solvent-Impermeable Metal Thin Films,” U.S. Provisional Patent Application No. 63/990,846, filed February 25, 2026.

Invited Seminars and Conference Talks (since 2019)

- 32) *Telluride Science Research Center*, Telluride, CO, USA; June 7-11, 2027 (The Future of Porous Frameworks Workshop) (*title to be determined*).
- 31) “Single-Molecule Conductance as a Probe of Interfacial Reactivity,” *National Meeting of the American Chemical Society*, Atlanta, GA, USA; March 22-26, 2026.
- 30) “Chemisorbed Single-Molecule Junctions Formed from Reactive Precursors,” *2025 Materials Research Society (MRS) Fall Meeting*, Boston, MA, USA; Nov 30-Dec 5, 2025.
- 29) “Probing Interfacial Reactivity Using Single-Molecule Conductance,” *University of Montana*, Missoula, MT, USA; October 6, 2025 (Department of Chemistry and Biochemistry).

- 28) "Probing Interfacial Reactivity Using Single-Molecule Conductance," *California Institute of Technology*, Pasadena, CA, USA; May 19, 2025 (Division of Chemistry and Chemical Engineering).
- 27) "Probing Interfacial Reactivity Using Single-Molecule Conductance," *University of California, Irvine*, Irvine, CA, USA; May 15, 2025 (Department of Chemistry).
- 26) "Probing Interfacial Reactivity Using Single-Molecule Conductance," *University of California, Berkeley*, Berkeley, CA, USA; April 29, 2025 (Department of Chemistry).
- 25) "Probing Charge Transfer/Transport Through Os(aryl)₄ Complexes: A New Class of 3D Nodes for Conductive Porous Materials," *45th International Conference on Coordination Chemistry (ICCC)*, Fort Collins, CO, USA; July 28-Aug 3, 2024.
- 24) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *University of California, San Diego*, San Diego, CA, USA; May 28, 2024 (Department of Chemistry and Biochemistry).
- 23) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *University of California, Los Angeles*, Los Angeles, CA, USA; May 22, 2024 (Department of Chemistry and Biochemistry).
- 22) "Probing Charge Transfer/Transport Through Os(aryl)₄ Complexes: A New Class of 3D Nodes for Conductive Porous Materials," *North America-Greece-Cyprus Conference on Paramagnetic Materials*, Protaras, Cyprus; April 22-26, 2024.
- 21) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *New York University*, New York, NY, USA; March 26, 2024 (Department of Chemistry).
- 20) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *Indiana University Bloomington*, Bloomington, IN, USA; February 21, 2023 (Department of Chemistry).
- 19) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *Purdue University*, West Lafayette, IN, USA; February 20, 2024 (Department of Chemistry).
- 18) "Forming Junctions with Non-Au Metal Electrodes Under an Inert Atmosphere," *13th International Conference on Advanced Materials and Devices*, Jeju, Korea; December 4-8, 2023.
- 17) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *North Carolina State University*, Raleigh, NC, USA; October 26, 2023 (Department of Chemistry).
- 16) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *University of North Carolina at Chapel Hill*, Chapel Hill, NC, USA; October 25, 2023 (Department of Chemistry).
- 15) "Molecular-Scale Electronics and Moore: From Interfacial Reactivity to Band Structure Design," *Duke University*, Durham, NC, USA; October 24, 2023 (Department of Chemistry).
- 14) "Probing Charge Transfer/Transport Through Os(aryl)₄ Complexes: A New Class of 3D Nodes for Conductive Porous Materials?" *Nanoporous Materials and Their Applications Gordon Research Conference*, Andover, NH, USA; August 6-11, 2023 (Short Presentation).
- 13) "Forming Junctions with Non-Au Metal Electrodes Under an Inert Atmosphere," *Telluride Science Research Center*, Telluride, CO, USA; July 24-28, 2023 (Quantum Transport in Nanoscale Molecular Systems Workshop).

- 12) "Lewis-Acid Mediated Reactivity in Single-Molecule Junctions," *Weizmann Institute*, Rehovot, Israel; June 26-29, 2023 (Quantum Transport in Atomic and Molecular Junctions Meeting).
- 11) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *University of California, Riverside*, Riverside, CA, USA; May 11, 2023 (Department of Chemistry).
- 10) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *Boston University*, Boston, MA, USA; May 1, 2023 (Department of Chemistry).
- 9) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *Columbia University*, New York, NY, USA; April 28, 2023 (Department of Chemistry).
- 8) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *City University of New York*, New York, NY, USA; April 24, 2023 (Department of Chemistry and Biochemistry).
- 7) "Charge Transport Through Oligo-Triarylamine Single-Molecule Junctions," *Electrochemistry Gordon Research Conference*, Ventura, CA, USA; September 11-16, 2022 (Late Breaking Topic).
- 6) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *Imperial College London*, London, UK; December 9, 2021 (Department of Chemistry).
- 5) "Charge Transport and Self-Assembly at the Single-Molecule Limit," *University of Southern California*, Los Angeles, CA, USA; April 21, 2021 (Department of Physics).
- 4) "Metal(IV) Tetraaryl Complexes," *National Meeting of the American Chemical Society*, Virtual Meeting; April 5-16, 2021.
- 3) "Metal-Appended Wires and Framework Fragments," *(Bio)Molecular Electronics Colloquia*, Virtual Meeting; December 10, 2020 (University of Liverpool, UK).
- 2) "Building Materials with Chargeable Molecular Legos," *California State University, Los Angeles*, Los Angeles, CA, USA; September 17, 2019 (Department of Chemistry and Biochemistry).
- 1) "Extended Molecular Materials Constructed from Redox-Active Building Blocks," *National Meeting of the American Chemical Society*, San Diego, CA, USA; August 25-29, 2019.

Mentorship Experience (since 2019)

Current Graduate Students

- 5) Andrew Fraire (B.S. 2024, California State University, Northridge).
- 4) Advait Harith (B.S. 2024, Santa Clara University).
- 3) Mukund Sharma (M.Sc. 2023, Indian Institute of Technology, Bombay) – 2nd Prize in the Inorganic Section Screening Symposium, 2025; Excellence in Graduate Research Award, USC Stauffer Symposium, 2026.
- 2) Cynthia Avedian (B.S. 2022, California State University, Northridge) – 2nd Prize in the Inorganic Section Screening Symposium, 2024.
- 1) Jazmine Prana (B.S. 2021, Montclair State University) – 2nd Prize in the Inorganic Section Screening Symposium, 2023; Excellence in Graduate Research Award, USC Stauffer Symposium, 2025.

Current Undergraduate and Master's Students

- 4) Abim Ferdous (Cerritos College) – Cerritos Research Intern, 2026.
- 3) Lizette Miranda (B.S. class of 2027, USC Dornsife).
- 2) Yuanhao Chen (B.S. class of 2028, USC Dornsife).
- 1) Clark Otey (B.S. class of 2027, USC Dornsife).

Former Postdoctoral Researchers

- 1) Dr. Nils Rotthowe (Ph.D. 2021, M.Sc. 2016, University of Konstanz, Germany. Ph.D. Advisor: Prof. Rainer Winter; B.Sc. 2013, University of Konstanz, Germany) – Marie Skłodowska-Curie Fellow. *Current position:* Sales Engineer, CleanControlling, Baden-Württemberg, Germany.

Former Graduate Students

- 5) Luana Zagami (Ph.D. 2024, USC; B.S. 2016, University of Eastern Piedmont Amedeo Avogadro, Italy). *Graduation:* December 2024. *Current position:* Waste Treatment Manager, Tiodize Advanced Coatings and Composites, CA.
- 4) Thomas Czyszczon-Burton (Ph.D. 2024, USC; M.Chem. 2019, Durham University, UK) – Excellence in Graduate Research Award, USC Stauffer Symposium, 2024. *Graduation:* December 2024. *Current position:* Product Engineer 3, Lam Research, CA.
- 3) Christina Trang (Ph.D. 2024, USC; B.S. 2018, University of Oregon). *Graduation:* August 2024. *Current position:* Product Engineer 3, Lam Research, CA.
- 2) Clarissa Olivar (Ph.D. 2024, USC; B.A. 2018, University of California, Santa Barbara) – Norma and Jerol Sonosky Environmental Sustainability Graduate Summer Fellowship 2020. (Joined Williams Group, Department of Chemistry in Summer 2023.)
- 1) Joseph Parr (Ph.D. 2024, Imperial College London, UK; M.S. 2020, USC; M.Chem. 2018, University of Leeds, UK) – Norma and Jerol Sonosky Environmental Sustainability Graduate Summer Fellowship 2019. *Current position:* Postdoctoral Researcher, Monash University (C. Jones).

Former Undergraduate Students

- 16) Shangjun Jin (B.S. class of 2028, USC Dornsife) – transferred to University of Chicago after his sophomore year.
- 15) Temin Sohn (B.S. class of 2026, USC Dornsife).
- 14) Saraswoti Subedi (Cerritos College) – Cerritos Research Intern, 2025.
- 13) Kelly Yan (B.S. class of 2026, USC Dornsife).
- 12) Alejandro Hernandez (Cerritos College) – Cerritos Research Intern, 2024.
- 11) Sawyer Lazar (B.S. 2024, USC Dornsife) – Beckman Scholar, 2021; Provost's Research Fellowship for Fall 2022, Spring 2023, Fall 2023; ACS Undergraduate Award in Analytical Chemistry, 2024. *Current position:* Graduate Student, University of North Carolina at Chapel Hill.
- 10) Leopold Kim (B.S. 2024, USC Dornsife).
- 9) Seongje Park (B.S. 2023, USC Dornsife).
- 8) Samantha Stuckey (Cerritos College) – Cerritos Research Intern, 2023.
- 7) Grace Homann (B.S. class of 2025, USC Dornsife).
- 6) Kenneth Nguyen (Cerritos College) – Cerritos Research Intern, 2022.
- 5) Tejpal Randhawa (B.S. 2022, USC Dornsife) – Provost's Research Fellowship for Spring 2021.
- 4) Daniel Cardenas (B.S. 2021, USC Dornsife).
- 3) Jeremy Nunez (Cerritos College) – Cerritos Research Intern, 2021.
- 2) Zelin Miao (M.S. 2020, USC Viterbi; B.S. Central South University, China). *Current position:* Graduate Student, Boston University.
- 1) Sully Chen (B.S. 2021, USC Dornsife) – Provost's Research Fellowship for Fall 2019, Spring 2021. *Current position:* MD-Ph.D. student, Duke University.

External Service/Professional Activities

Professional Affiliations: Member of the American Chemical Society (2016-present), Royal Society of Chemistry (2013-present), International Society of Electrochemistry (2014-present).

Journal Reviewer: *Nature Chemistry*, *Nature Communications*, *JACS*, *Angewandte Chemie*, *Nano Letters*, *ACS Nano*, *Chemical Science*, and other journals (>40 reviews since 2019; <https://publons.com/a/1475443>).

Funding Agency Panel Reviewer: (23 PI proposals since 2019): DOD NDSEG Fellowships (2018-2019); NSF MPS/CHE Virtual Panels (2020, 2023, 2025, 2026), NSF MPS/CHE Ad Hoc Reviews (2020), ACS PRF Ad Hoc Review (2026).

Organized Symposia: COLL Symposium on “The Chemistry of Molecular Electronics” for ACS *National Meeting* (Spring 2018); PHYS Symposium on “The Chemistry of Molecular Electronics” for ACS *National Meeting* (Spring 2021); PHYS Symposium on “Physical Chemistry of Molecular Electronics” for ACS *National Meeting* (Spring 2024).

Database Curation: Development of a free, web-based, publicly accessible database containing information about every molecule that has ever been studied in a molecular junction. The “Molecular Junction Database” (MJD) will be searchable by simple string-based queries (author, title, year of publication), in addition to sub-structure and exact molecular structure searching using 3rd party cheminformatics web tools (<https://www.inkpenlab.org/outreach>; <http://www.molecularjunctions.org>).

Conference Abstract Reviewer: Poster Abstract Reviewer for NOBCChE Conference (2020-present).

Outreach

USC-Cerritos College Research Internship: Hosting 1 undergraduate student per year since 2021 for an 8-week paid summer internship, to expose them to the research process and provide insights into life as a graduate student.

Ad Hoc Film Script Reviewer: Verifying the scientific accuracy of a science-relevant film script submitted to the Alfred P. Sloan Foundation through the USC School of Cinematic Arts (2020).