

Lorena S. Grundy

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EDUCATION	University of California, Berkeley <ul style="list-style-type: none">• Ph.D. in Chemical and Biomolecular Engineering Princeton University <ul style="list-style-type: none">• B.S.E. <i>cum laude</i> in Chemical and Biological Engineering• Certificates in Sustainable Energy and Applications of Computing	2017–2022 2013–2017
PROFESSIONAL APPOINTMENTS	University of Pennsylvania <ul style="list-style-type: none">• Practice Assistant Professor, Chemical and Biomolecular Engineering• Director, Energy and Sustainability (ENSU) minor	2024–present
RESEARCH EXPERIENCE	Koretsky Group , Tufts University: post-doctoral scholar <ul style="list-style-type: none">• Depts. of CBE and Education, Institute for Research on Learning and Instruction (IRLI)• Supported by ASEE Engineering Postdoctoral Fellowship Balsara Lab , UC Berkeley: graduate researcher <ul style="list-style-type: none">• Characterization of morphology and ion transport through polymer electrolytes using NMR, electrochemical methods, and small angle X-ray scattering (SAXS)• Block copolymer synthesis using anionic polymerization under high vacuum Balsara Lab , UC Berkeley: lab safety coordinator, including COVID-19 response Berkeley Nuclear Magnetic Resonance (NMR) Facility : assistant manager Priestley Lab , Princeton University: undergraduate researcher <ul style="list-style-type: none">• Senior thesis: nanoparticles made from block copolymer blends• Experience with polymers, electron microscopy, nanoparticle fabrication Avalos Lab , Princeton University: undergraduate researcher <ul style="list-style-type: none">• Research on yeast metabolic engineering for biofuel applications	2022–2024 2017–2022 2018–2021 2019 2016–2017 2015
PUBLICATIONS	Seven first author, three second, three third; see lorena-grundy.com for complete list.	
INVITED TALKS	<ul style="list-style-type: none">• Framework and Initial Steps Towards Industry-Relevant Undergraduate Electrochemical Engineering Education. Electrochemical Society Spring Meeting, May 2024.• Limitations to our Understanding of the Limiting Current. Battery Modeling Webinar Series, 2023.• Inaccessible Current-Induced Phase Transitions in Block Copolymer Electrolytes. APS March, 2022.• ACS POLY Excellence in Graduate Research Symposium. ACS Spring, 2022.• Distortion of Lamellae in an Electrolyte Under Polarization. ALS User Meeting, 2021.• Using ^7Li NMR to Detect Order-to-Disorder Transitions. ACS Fall, 2020.	
TEACHING AND SERVICE	Lead Instructor <ul style="list-style-type: none">• Engineering Sustainability at Penn Campus-as-Lab course• Energy and Sustainability: Science, Engineering and Technology• Material and Energy Balances of Chemical Processes• Electrochemical Engineering• Learning and Teaching in STEM: A Seminar for Learning Assistants Graduate Student Instructor (GSI) <ul style="list-style-type: none">• Three-time outstanding GSI award winner (2018-2020)• Graduate Thermodynamics and Statistical Mechanics (CBE 240; online)• Introduction to Chemical Engineering Design (CBE 40)• Introduction to Chemical Process Analysis (CBE 140) ASEE Chemical Engineering Division (ChED): Communications Chair Berkeley Pre-Engineering Program (PREP) Instructor <ul style="list-style-type: none">• Designed and taught a fully-remote, three-week chemistry course to incoming Berkeley undergraduate engineering students from under-served high schools Coordinated Community Review Team for Sexual Violence and Misconduct Respect is a Part of Research (RPR): SVSH training facilitator Berkeley CBE Remote Instruction Committee Berkeley CBE Graduate Student Advisory Committee (GSAC) President <ul style="list-style-type: none">• Elected to lead and represent graduate students to the faculty Berkeley CBE GSAC Vice President, Treasurer, and Social Chair Scientific Journal Reviewer: <i>ACS Macromolecules</i> , <i>J. Electrochem. Soc.</i> , <i>JEE</i> Princeton Charter Club President Undergraduate Council , Princeton CBE department Princeton Outdoor Action: week-long pre-orientation backpacking trip leader	annually spring 2025–present annually fall 2024–present fall 2024 fall 2023 spring 2023 2020 2020 and 2017 2018 2023–present 2020–2021 2021–2022 2019–2021 2020–2022 2019–2020 2018–2019 2019–present 2015–2017 2016–2017 2014–2017