

Lorena S. Grundy

Philadelphia, PA 19104

Practice Assistant Professor, University of Pennsylvania
email: grundy.lorena@gmail.com | website: lorena-grundy.com

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EDUCATION	University of California, Berkeley	2017–2022
	<ul style="list-style-type: none"> • Ph.D. in Chemical and Biomolecular Engineering (CBE) • Dissertation: “Polymer Electrolytes and the Limiting Current” advised by Prof. Nitash P. Balsara 	
	Princeton University	2013–2017
	<ul style="list-style-type: none"> • B.S.E. <i>cum laude</i> in Chemical and Biological Engineering (CBE) • Certificates in Sustainable Energy, Applications of Computing • Thesis: “Formation of Novel Nanoparticle Morphologies Using Homopolymer / Block Copolymer Blends in Flash NanoPrecipitation (FNP)” advised by Prof. Rodney D. Priestley 	
PROFESSIONAL APPOINTMENTS	University of Pennsylvania	2024–present
	<ul style="list-style-type: none"> • Practice Assistant Professor, Chemical and Biomolecular Engineering (CBE) • Founder, Director, and Faculty Advisor, Master of Science in Engineering degree program in Energy and Sustainability Engineering • Co-Founder and Faculty Coordinator (pending program approval), new Graduate Certificate in STEM Teaching Practice for Ph.D. students • Director and Faculty Advisor, Energy and Sustainability Undergraduate Minor 	
RESEARCH EXPERIENCE	Koretsky Group , Tufts University: post-doctoral fellow	2022–2024
	<ul style="list-style-type: none"> • Joint appointment between Dept. of Chemical and Biological Engineering, Dept. of Education, and Institute for Research on Learning and Instruction (IRLI) • Engineering education research on epistemic metacognition, classroom and department-level activity systems, and organizational change using quantitative and qualitative methods, including ethnography • Fully supported by ASEE eFellows Postdoctoral Fellowship 	
	Balsara Lab , UC Berkeley: graduate student researcher	2017–2022
	<ul style="list-style-type: none"> • Characterization of ion transport through polymer electrolytes using NMR, electrochemical characterization, and concentrated solution theory • Analysis of morphology using NMR and small angle X-ray scattering (SAXS) • Block copolymer synthesis using anionic polymerization under high vacuum 	
	Balsara Lab , UC Berkeley: lab safety coordinator	2018–2021
	Berkeley Nuclear Magnetic Resonance (NMR) Facility : assistant manager	2019
	<ul style="list-style-type: none"> • Maintenance, repair, and training of all new users on NMR equipment 	
	Priestley Lab , Princeton University: undergraduate researcher	2016–2017
	<ul style="list-style-type: none"> • Morphology and formation mechanism of nanoparticles made from block copolymer blends, analyzed using electron microscopy (TEM, SEM) 	
	Avalos Lab , Princeton University: undergraduate researcher	2015
	<ul style="list-style-type: none"> • Research on yeast metabolic engineering for biofuel applications 	
AWARDS AND HONORS	Selected for Penn Leadership Education Fellowship program	2025
	Selected for Penn Integrating Sustainability Across the Curriculum program	2025, 2026
	Berkeley Energy & Resources Collaborative (BERC) 1 st Place Poster Prize Winner	2022
	Selected for ACS POLY Excellence in Graduate Research Symposium	2022
	Joe Wong Poster Award: Stanford Synchrotron Light Source User Meeting	2021
	U.C. Berkeley Outstanding Graduate Student Instructor (GSI) Award	2021
	U.C. Berkeley CBE GSI Excellence Award	2020
	U.C. Berkeley Outstanding GSI Award	2019
	Elected to the Society of Sigma Xi	2017

FUNDING	Penn Engineering 2030 funding (\$15,000, 1 yr) to create and pilot Experiential Education Program to integrate hands-on modules into existing courses	2026
	Penn University Research Foundation grant (\$5,000, 1 yr) to create and lead a Workshop on Reimagining STEM Graduate Energy and Sustainability Education Beyond the Benchtop at Penn in May 2026	2026
	Bentley Systems grant (\$43,000, 1 yr) to support international experiential service-based sustainability projects for Penn students	2025
	NSF Research in the Formation of Engineers (RFE) grant (\$350,000, 3 yrs): “Whole Student Mapping – A framework for the professional formation of sustainability-minded engineers,” supported by Lemelson Foundation	2025
	Engineering for One Planet (EOP) grant (\$10,000, 1 yr) to lead multi-institution study of institutionalization of sustainability principles in higher education	2025
	Penn SEAS Academic Innovation Fund (\$5,000, 1 yr) for new energy lab course	2025
	Penn Sustainability Green Fund award (\$10,000, 1 yr) for experiential education	2025
	Engineering for One Planet (EOP) travel grant (\$1,000)	2025
	American Society for Engineering Education (ASEE) Postdoctoral Fellowship (approx. \$250,000, 2 yrs, including indirect and fringe)	2022–2024
TEACHING	Lead Instructor	
	<i>University of Pennsylvania</i>	
	<ul style="list-style-type: none"> Renewable Energy Technologies Lab (ENGR 5300) <ul style="list-style-type: none"> New lab course in development, planned for fall 2026 	fall 2026
	<ul style="list-style-type: none"> Energy and Sustainability: Science, Engineering and Technology (CBE/ENGR 4215/5215) <ul style="list-style-type: none"> New technical elective developed as part of the core of a planned Master’s degree in Energy and Sustainability Engineering in fall 2024 Fall 2024: 17 students, overall instructor rating of 3.50 (0 – 4 scale) Spring 2025: 30 students, overall instructor rating of 3.71 Fall 2025: 40 students, overall instructor rating of 3.74 Spring 2026: 46 students enrolled 	fall 2024–present
	<ul style="list-style-type: none"> Engineering Sustainability at Penn (ENGR 5020) <ul style="list-style-type: none"> New project-based course developed in spring 2025 in collaboration with the Penn Sustainability Office, using Campus as Lab principles to engage students in authentic campus sustainability projects Spring 2025: 9 students, overall instructor rating of 4.00 (0 – 4 scale) Spring 2026: 13 students enrolled 	spr. 2025–present
	<ul style="list-style-type: none"> Material and Energy Balances of Chemical Processes (CBE 2300) <ul style="list-style-type: none"> Core undergraduate course equivalent to Thermodynamics I, 33 students Student evaluations: overall instructor rating of 3.57 (0 – 4 scale) compared with department average of 2.94 for core courses 	fall 2024
	<i>Tufts University</i>	
	<ul style="list-style-type: none"> Electrochemical Engineering (ChBE 193) <ul style="list-style-type: none"> Developed technical elective course for solo lead delivery Student evaluations: overall instructor rating of 4.83 (1 – 5 scale) compared with department average of 3.90 	fall 2023
	<ul style="list-style-type: none"> Learning and Teaching in STEM: A Seminar for Learning Assistants (ED 20) <ul style="list-style-type: none"> Co-instructed pedagogy course for undergraduate learning assistants 	spr. 2023
	Tufts Academic Support System for Engr. Learning (TASSEL) Instructor	fall 2022
	<ul style="list-style-type: none"> Developed and led twice weekly workshops to support first-year engineering students in calculus and introductory physics 	
	Graduate Student Instructor (GSI), University of California, Berkeley	
	<ul style="list-style-type: none"> Graduate Thermodynamics and Statistical Mechanics (CBE 240; remote) <ul style="list-style-type: none"> Received Outstanding GSI Award (4-5 recipients/semester) 	fall 2020
	<ul style="list-style-type: none"> Introduction to Chemical Engineering Design (CBE 40) <ul style="list-style-type: none"> Received Departmental GSI Excellence Award (2-3 recipients/year) 	spr. 2020

- Transitioned course to remote instruction at the onset of COVID-19
- Introduction to Chemical Process Analysis (CBE 140) fall 2018
 - Received Outstanding GSI Award (4-5 recipients/semester)
- Introduction to Chemical Engineering Design (CBE 40) fall 2017
- Berkeley Pre-Engineering Program (PREP) Instructor** 2020–2021
 - Designed and taught a fully-remote, three-week chemistry course to incoming Berkeley undergraduate engineering students who are Pell eligible, first-generation college students, or from under-served schools
 - Student confidence increased 49% in chemistry overall
 - Led workshops on student success strategies

MENTEES

- Leungo Norman – Penn Wharton undergraduate '26 2025–present
- Faculty mentor for President's Engagement Prize proposal on drinking water purification project in Botswana
- James Hadley, Makenna Damhorst, and Noah Milad – Penn undergraduates '27 2025–present
- in CBE, Earth and Environmental Science, and Political Science
- Faculty mentor for Projects for Progress proposal on sustainable re-use
- Ngaatendwe Manyika – Penn Mechanical Engineering undergraduate '27 2025–present
- Proposal for student-faculty course co-development of ENGR 5XXX Renewable Energy Technologies Lab selected by the Environmental Innovations Initiative (EII) Integrating Sustainability Across the Curriculum (ISAC) program
- Olga Belyanina and Sebastian Startz – Wharton MBA '25 2025
- Co-advising (with Prof. Jennifer Wilcox) independent study: "Navigating Barriers to Climate Tech Commercialization"
- Caroline Bureau – Tufts University ChBE undergraduate '25 2024
- Advised undergraduate research on faculty teaching practices
- Déjà Preusser – Oregon State University CBEE undergraduate '23 2022–2023
- Supervised senior honors thesis research on the impacts of COVID on undergraduate instruction
 - Current role: Pharm.D. candidate '27, University of Southern California
- Emily Abdo – UC Berkeley CBE Ph.D. candidate '26 2021–2022
- Designed Ph.D. research project on *in situ* SAXS characterization of polymer electrolytes and supervised training and research development
- Sean Fu – UC Berkeley CBE undergraduate '23 2021–2022
- Supervised undergraduate research on electrochemical characterization of polymer electrolytes, resulting in 3 peer-reviewed publications and admission to several top Ph.D. programs
 - Current role: Cell Data Engineer, Tesla
- Karim Karouta – UC Berkeley CBE Ph.D. candidate 2020–2022
- Designed Ph.D. research project on NMR characterization of polymer electrolytes and supervised training and research development
- Rohan Chakraborty – UC Berkeley CBE undergraduate student '19 2018–2019
- Supervised senior undergraduate research on PFG-NMR characterization of polymer electrolytes, including training, data analysis, presentation
 - Current role: Ph.D. candidate, University of Minnesota

SERVICE

- Penn University-wide, School of Engineering, and CBE Department Service**
- Founding Director and Faculty Advisor, Master of Science in Engineering degree program in Energy and Sustainability Engineering, for fall 2026 launch. 2024–present
 - Led curriculum development and approval process, including consultation with over 150 faculty, student, and staff stakeholders
 - Led program implementation and rollout, including marketing and admissions
 - Pending approval: Co-founder and Faculty Coordinator, Graduate Certificate in STEM Teaching Practice, planned for fall 2026 launch. 2025–present

- Led faculty team in developing new certificate program to prepare STEM Ph.D. students for faculty positions, including pedagogy course, intensive teaching experience, peer observation, and reflection
- Director of school-wide Energy and Sustainability (ENSU) minor 2024–present
 - Implemented reforms to curriculum and advising process based on student and faculty feedback
- Co-director of university-wide, inter-school Sustainability and Environmental Management minor 2025–present
 - With School of Arts and Sciences and Wharton School (business) co-directors, manage curriculum and program changes
 - Minor academic advisor for all Engineering students pursuing the minor
- CBE Department
 - ABET Accreditation Faculty Coordinator 2025–present
 - Undergraduate Education committee creator and member 2025–present
 - Energy and Sustainability committee chair 2024–present
 - Designed and implemented standardized department-wide mid-semester course feedback process 2025
- Faculty Advisor and Trip Leader, Engineers Without Borders 2025–present
 - Led students in establishing a new project designing an irrigation system for FAIR Farms Gambia, including planning and leading 7-day assessment trip to the Gambia in January 2026; implementation trip is planned for summer 2026
- Faculty Advisor, Sustainable Engineering for Environmental Design Club 2025–present
 - Advised undergraduate students on establishing a new club centering hands-on design projects for environmental sustainability, including project selection, budgeting, and funding applications
 - Advising first team of students from Penn participating in national WERC Environmental Design Contest in New Mexico in April 2026
- Faculty Advisor, Women in Renewable Industries and Sustainable Energy 2025–present
 - Advising undergraduate and graduate students on establishing the first university WRISE chapter in the United States
- Strategic Planning Committee on Educating and Empowering Engineers 2025
 - Committee to draft education section of SEAS 2026-2030 Strategic Plan
- Education Committee on Implementation of SEAS 2030 Strategic Plan 2025–present
- Engineering Teaching-Track Faculty Group 2025–present
 - Organize monthly lunches for all NTT faculty, including discussion facilitation
- American Association of University Professors (AAUP) Penn Chapter 2025–present
 - Vice President 2025–present
 - Led successful opposition to Trump administration’s Compact for Excellence in Higher Education, including drafting chapter statement and petition, organizing teach-in, press interviews including *New York Times*, and speaking at rallies
 - Working on academic freedom initiatives, including protecting faculty extramural speech on political issues
 - Leading intervention in *EEOC v. Penn*, opposing EEOC’s demands that Penn turn over confidential personal information of Jewish employees; organized coalition of Jewish faculty and student groups, including American Academy for Jewish Research (AAJR).
 - Non-Tenure Track (NTT) Task Force: co-organizer
- Steering Committee: Penn Energy Week 2025–present
- Steering Committee: Water Policy Forum 2025–present
- Fellow, Penn Leadership Education Institute 2025
- Faculty Affiliate, Ethnography in Education Research Forum (Penn GSE) 2025–present
- Member, campus-wide Climate and Health Education Working Group 2025–present
- Member, Faculty Senate Committee on the Institutional Response to the Climate Crisis 2025–present

<ul style="list-style-type: none"> • Dissertation committee service: <ul style="list-style-type: none"> ◦ Shelvey Swett, CBE (advisor: Jennifer Wilcox) • Individual academic and career advising: 40+ students • Recommendation letters: 15+ students 	2025–present 2024–present 2024–present
Panels and Events	
• Graduate Energy and Sustainability STEM Ed Workshop: organizer	May 2026
• Behind the CV: Perspectives from Faculty: Penn CURF invited speaker	Feb. 2026
• Perspectives on Teaching Panel for UC Berkeley GSIs: panelist	Nov. 2025
• Penn Ignition Engineering Pitch Competition: judge	Nov. 2025
• Transform Penn – Sustainability Pitch Event: organizer , judge	Oct. 2025
• National Research Conference at Penn: judge	Oct. 2025
• Chemical Engineering Education and Career Paths: organizer , speaker and student panel leader at local Philadelphia high school	Sep. 2025
• Making the Most of Your First Year – Career Pathways Panel: organizer	Sep. 2025
• Faculty Panel for URM Incoming Graduate Students: panelist	Aug. 2025
• Penn Engineering Innovation Forum: judge	Apr. 2025
• Kleinman Center for Energy Policy Energy Week Lightning Talks: judge	Feb. 2025
• Advancing Women in Engineering Master’s Student Panel: panelist	Jan. 2025
• Society of Women Engineers Career Pathways Panel: panelist	Nov. 2024
• Perspectives on Teaching Panel for UC Berkeley GSIs: panelist	Nov. 2024
• Underrepresented Student Advisory Board in Engineering Fireside Chat	Oct. 2024
• UC Berkeley CBE Alumni Panel: panelist	Nov. 2023
• UC Berkeley GWExSWE Graduate Career Pathways Panel: panelist	Apr. 2022
ASEE Chemical Engineering Division (ChED): Communications Chair	2023–present
<ul style="list-style-type: none"> • Collect community announcements, create and distribute monthly newsletter • Designed and produced promotional stickers and enamel pins 	
AIChE Education Division	
• Membership Committee	2024–present
• Nominating Committee	2025
ABET: Program Evaluator (PEV), Engineering Accreditation Commission (EAC)	2025–present
Engineering for One Planet (EOP): Network Member	2025–present
<ul style="list-style-type: none"> • Selective national initiative for sustainability-focused engineering education • Institutionalization and Organizational Change committee: founding chair 	2025–present
Conference Session Chair / Moderator	
ASEE Annual Conference (ChED and ERM Divisions)	2023–present
Electrochemical Society Meeting	2024
American Association of University Professors (AAUP) National Organization	
• Committee on Contingency: member	2025–present
Princeton Alumni Schools Committee: Undergraduate Admissions Interviewer	2025–present
Tufts University Postdoctoral Association: Executive Committee Member	2023–2024
ColorMePhD: Co-developed coloring page “A-Maze-ing Polymers” featuring Ph.D. research by women in STEM for ColorMePhD Vol. 2, led by Julie Rorrer	2020
Berkeley CBE Graduate Student Advisory Committee (GSAC) President	2019–2020
<ul style="list-style-type: none"> • Elected to lead and represent graduate students to the faculty; administered, analyzed, and reported on annual departmental climate surveys • Achieved stipend increase, increased inclusivity in faculty hiring and graduate admissions, and implemented anti-racism seminars and training 	
Berkeley CBE GSAC Vice President, Treasurer, and Social Chair	2018–2019
• Managed organization budget and coordinated all departmental social events	
Respect is a Part of Research (RPR): facilitator	2019–2021
• Facilitated peer-led sexual violence / sexual harassment (SVSH) training following Title IX requirements	
Coordinated Community Review Team for Sexual Violence and Misconduct	2021–2022

- Part of the chancellor's committee, largely composed of administrators and staff, working to unify campus-wide SVSH prevention and response

Berkeley CBE Orientation Co-Chair 2021

- Rebuilt graduate student orientation program with a focus on inclusion

Affinity Groups Fellow 2021

- Coordinated a summer program to connect trainees with a shared identity

Berkeley CBE Remote Instruction Committee 2020–2022

- Coordinated department transition to online learning during COVID-19, including technology and workshops for faculty and students

Princeton Charter Club President 2015–2017

- Elected to lead an undergraduate eating club, managed a \$60,000 budget
- Appointed and led a team of 13 undergraduate officers
- Led an effort to increase financial aid for dining options

Undergraduate Council, Princeton CBE department 2016–2017

Princeton Outdoor Action: pre-orientation backpacking trip leader 2014–2017

- Led groups incoming undergraduate students on week-long backcountry trips

REVIEWING

Journal Reviewer 2019–present

- *Journal of Engineering Education*
- *International Journal of STEM Education*
- *Chemical Engineering Education*
- *ACS Macromolecules*
- *Journal of the Electrochemical Society*
- *Cell Biology Education – Life Sciences Education*

Conference Paper Reviewer:

- American Society for Engineering Education 2023–present
- Judge, Best DEI Paper Award, ASEE Chemical Engineering Division 2024–present

Book Review: Koretsky, M. D.; Grundy, L. S. Having a Teaching Mentor on Your Bookshelf: A Review of *Teaching and Learning STEM: A Practical Guide*. *International Journal of Engineering Education* 2024, 40 (4), 993–995.

JOURNAL PUBLICATIONS

Grundy, L. S.; Koretsky, M. D. Transactional Schooling and Transformative Learning: The Dual Object Model of Engineering Department Culture. Invited for *Journal of Engineering Education* special issue, *Surrounding Systems' Influences on Engineering Education*. In revisions.

Grundy, L. S.; Koretsky, M. D. "More Conceptual Than Actual": Epistemic Metacognition in response to a Non-Numerical Statics Question. *Journal of Engineering Education* **2025**, 114(4), e70035.

Auby, H. A.; **Grundy, L. S.;** Huffman, S.; Cantilina, K.; Gavitte, S. B.; Kaczynski, S. E.; Penyai, M.; Koretsky, M. D. Reflections on a mentored group peer review process. *Journal of Engineering Education* **2024**, 113, 1110–1114.

Koretsky, M. D.; Nolen, S. B.; Galisky, J.; Auby, H.; **Grundy, L. S.** Progression from the Mean: Cultivating Instructors' Unique Trajectories of Practice Using Educational Technology. *Journal of Engineering Education* **2024**, 113 (2), 330–359.

Galluzzo, M. D.; Steinrück, H.-G.; Takacs, C. J.; Mistry, A.; **Grundy, L. S.;** Cao, C.; Narayanan, S.; Dufresne, E. M.; Zhang, Q.; Srinivasan, V.; Toney, M. F.; Balsara, N. P. Probing transference and field-induced polymer velocity in block copolymer electrolytes. *Cell Reports Physical Science* **2024**, 5, 101766.

Abdo, E. A.; **Grundy, L. S.;** Galluzzo, M. D.; Loo, W. S.; Fong, A. Y.; Takacs, C. J.; Balsara, N. P. Cylinder-Gyroid Phase Transition in a Block Copolymer Electrolyte Induced by Ionic Current. *Macromolecules* **2024**, 57 (2), 503–513.

Quill, T. J.; LeCroy, G.; Halat, D. M.; Sheelamanthula, R.; Marks, A.; **Grundy, L. S.;** McCulloch, I.; Reimer, J. A.; Balsara, N. P.; Giovannitti, A.; Salleo, A.; Takacs, C. J. An Ordered, Self-Assembled Nanocomposite with Efficient Electronic and Ionic Transport. *Nature Materials* **2023**, 22, 362–368.

- Grundy, L. S.;** Fu, S.; Galluzzo, M. D.; Balsara, N.P. The Effect of Annealing on Ionic Conductivity of Block Copolymer Electrolytes. *Macromolecules* **2022**, 55 (23), 10294-10301.
- Grundy, L. S.;** Fu, S.; Hoffman, Z. J. Electrochemical Characterization of PEO/LiTFSI Electrolytes at the Solubility Limits. *Macromolecules* **2022**, 55 (20), 9030-9038.
- Grundy, L. S.;** Galluzzo, M. D.; Loo, W. S.; Fong, A.; Balsara, N. P.; Takacs, C. P. Inaccessible Polarization-Induced Phase Transitions in a Block Copolymer Electrolyte: An Unconventional Mechanism for the Limiting Current. *Macromolecules* **2022**, 55 (17), 7637-7649.
- Mistry, A.; **Grundy, L. S.;** Halat, D. M.; Newman, J.; Balsara, N. P.; Srinivasan, V. Effect of Solvent Motion on Ion Transport in Electrolytes. *J. Electrochem. Soc.* **2022**, 169 (4), 040524.
- Galluzzo, M. D.; **Grundy, L. S.;** Takacs, C. J.; Cao, C.; Steinrück, H.-G.; Fu, S.; Rivas Valdez, M. A.; Toney, M. F.; Balsara, N. P. Orientation-Dependent Distortion of Lamellae in a Block Copolymer Electrolyte under DC Polarization. *Macromolecules* **2021**, 54 (17), 7808-7821.
- Halat, D. M.; Snyder, R. L.; Sundararaman, S.; Choo, Y.; Gao, K. W.; Hoffman, Z. J.; Abel, B. A.; **Grundy, L. S.;** Galluzzo, M. D.; Gordon, M. P.; Celik, H.; Urban, J. J.; Prendergast, D.; Coates, G. W.; Balsara, N. P.; Reimer, J. A. Modifying Li⁺ and Anion Diffusivities in Polyacetal Electrolytes: A Pulsed-Field-Gradient NMR Study of Ion Self-Diffusion. *Chemistry of Materials* **2021**, 33 (13), 4915-4926.
- Grundy, L. S.;** Shah, D. B.; Nguyen, H. Q.; Diederichsen, K. M.; Celik, H.; DeSimone, J. M.; McCloskey, B. D.; Balsara, N. P. Impact of Frictional Interactions on Conductivity, Diffusion, and Transference Number in Ether and Perfluoroether-Based Electrolytes. *J. Electrochem. Soc.* **2020**, 167 (12), 120540.
- Loo, W. S.; Faraone, A.; **Grundy, L. S.;** Gao, K. W.; Balsara, N. P. Polymer Dynamics in Block Copolymer Electrolytes Detected by Neutron Spin Echo. *ACS Macro. Lett.* **2020**, 9 (5), 639-645.
- Shah, D. B.; Nguyen, H. Q.; **Grundy, L. S.;** Olson, K. R.; Mecham, S. J.; DeSimone, J. M.; Balsara, N. P. Difference Between Approximate and Rigorously Measured Transference Numbers in Fluorinated Electrolytes. *Physical Chemistry Chemical Physics* **2019**, 21 (15), 7857-7866.
- Grundy, L. S.;** Sethi, G. K.; Galluzzo, M. D.; Loo, W. S.; Maslyn, J. A.; Teran, A. A.; Thelen, J. L.; Timachova, K.; Reimer, J. A.; Madsen, L. A.; Balsara, N. P. Detection of the Order-to-Disorder Transition in Block Copolymer Electrolytes Using Quadrupolar ⁷Li NMR Splitting. *ACS Macro Letters* **2019**, 8 (2), 107-112.
- Grundy, L. S.;** Lee, V. E.; Li, N.; Sosa, C.; Mulhearn, W. D.; Liu, R.; Register, R. A.; Nikoubashman, A.; Prud'homme, R. K.; Panagiotopoulos, A. Z.; Priestley, R. D. Rapid Production of Internally Structured Colloids by Flash Nanoprecipitation of Block Copolymer Blends. *ACS Nano* **2018**, 12 (5), 4660-4668.
- Highlighted in *Science* **2018**, 360 (6392), 977.
- Sosa, C.; Lee, V. E.; **Grundy, L. S.;** Burroughs, M.; Lui, R.; Prud'homme, R. K.; Priestley, R. D. Combining Precipitation and Vitrification to Control the Number of Surface Patches on Polymer Nanocolloids. *Langmuir* **2017**, 33 (23), 5835-5842.

CONFERENCE PAPERS

- Grundy, L. S.;** Creating a Graduate Program in Energy and Sustainability Engineering: Lessons Learned. *Proceedings of the American Society for Engineering Education Annual Conference* **2026**. Accepted.
- Grundy, L. S.;** Minerva, V.; Dalal, M.; Martinez-Duarte, R.; Worthy, R. W.; Mueller, J.; Roberts, D. Institutionalizing Sustainability: A Multi-Institutional Study of Engineering for One Planet Integration Strategies. *Proceedings of the American Society for Engineering Education Annual Conference* **2026**. Accepted.
- Bashir, Z.; Granite, J.; Thatcher, R.; Intriago, D.; Holleran, S.; **Grundy, L. S.** A New STEM Teaching Practice Program: Training the Engineering Faculty of Tomorrow.

Proceedings of the American Society for Engineering Education Annual Conference 2026. Accepted.

Welsh, K. E.; **Grundy, L. S.**; Self, B. P. Unpacking Student Reasoning in Rigid Body Equilibrium: Insights from Think Aloud Protocols. *Proceedings of the American Society for Engineering Education Annual Conference 2025*.

Grundy, L. S.; Koretsky, M. D. Contradicting Objects: An Activity Systems Perspective Towards Transformative Learning. *Proceedings of the American Society for Engineering Education Annual Conference 2024*.

Grundy, L. S. Reflections on a “Math Disaster”: the Role of Instructor Confusion in the Classroom. *Proceedings of the American Society for Engineering Education Annual Conference 2024*.

Welsh, K. E.; **Grundy, L. S.**; Self, B. P. Thinking Outside the Box: Understanding Student Thinking on Statics in Mechanics. *Proceedings of the American Society for Engineering Education Annual Conference 2024*.

Grundy, L. S.; Koretsky, M. D. Student Metacognitive Reflection on a Conceptual Statics Question. *Proceedings of the American Society for Engineering Education Annual Conference 2023*.

- PRESENTATIONS **Grundy, L. S.**; Creating a Graduate Program in Energy and Sustainability Engineering: Lessons Learned (talk, planned), ASEE Annual Conference, June 2026.
- Grundy, L. S.**; Institutionalizing Sustainability: A Multi-Institutional Study of Engineering for One Planet Integration (talk, planned), ASEE Annual Conference, June 2026.
- Grundy, L. S.** Project-Based Sustainability Education (**invited talk**), Empowering Future Leaders: A Workshop to Share Best Practices in Interdisciplinary Graduate Training to Ensure a Fair Energy Transition, May 2025.
- Grundy, L. S.** Contradicting Objects: An Activity Systems Perspective Towards Transformative Learning (talk), ASEE Annual Conference, June 2024.
- Grundy, L. S.** Reflections on a “Math Disaster”: the Role of Instructor Confusion in the Classroom (talk). ASEE Annual Conference, June 2024.
- Grundy, L. S.** Framework and Initial Steps Towards Industry-Relevant Undergraduate Electrochemical Engineering Education (**invited talk**). Electrochemical Society Spring Meeting, May 2024.
- Grundy, L. S.** Student Metacognitive Reflection on a Conceptual Statics Question. ASEE Annual Conference (talk), June 2023.
- Grundy, L. S.** Limitations to our Understanding of the Limiting Current (**invited talk**). Battery Modeling Webinar Series, 2023.
- Grundy, L. S.** Limitations on Charging Rates in Lithium Metal Batteries with Block Copolymer Electrolytes (**invited talk**). Tufts University Chemical Engineering Department Colloquium, 2022.
- Grundy, L. S.** Inaccessible Current-Induced Phase Transitions in Block Copolymer Electrolytes (talk). ACS Spring Meeting, 2022.
- Selected for ACS POLY **Excellence in Graduate Research** Symposium
- Grundy, L. S.** Inaccessible Phase Transitions in Block Copolymer Electrolytes (talk). APS March Meeting, 2022
- Presented in the APS DPOLY Dillon Medal Symposium
- Grundy, L. S.** Distortion of Lamellae in a Block Copolymer Electrolyte Under Polarization (**invited focus session talk**). APS March Meeting, 2022.
- Grundy, L. S.** Distortion of Lamellae in a Block Copolymer Electrolyte Under Polarization (poster). Stanford National Accelerator Laboratory User Meeting, 2021.
- Received Joe Wong **Outstanding Poster Award**
- Grundy, L. S.** Distortion of Lamellae in a Block Copolymer Electrolyte Under Polarization (**invited talk**). ALS User Meeting, 2021.
- Grundy, L. S.** Impact of Frictional Interactions on Conductivity and Transference Number in Ether-Based Electrolytes (talk). APS March Meeting, 2021.

Grundy, L. S. Using ^7Li NMR to Detect Order-to-Disorder Transitions in Block Copolymer Electrolytes (**invited talk**). ACS Fall Meeting, 2020.

Grundy, L. S. Locating Phase Transitions in Block Copolymer Electrolytes (talk). APS March Meeting, 2019.

Grundy, L. S.; Mongcopa, K. I. Correlation Between Monomeric Friction Coefficient and Ionic Diffusivity in Polymer Electrolytes (poster). Polymer Physics Gordon Research Conference, 2018.

Grundy, L. S.; Mason, L. et al. Flash Nano-Precipitation of Polymer Blends: A Role for Fluid Flow? (talk) Annual Meeting of the APS Division of Fluid Dynamics, 2017.

ADDITIONAL SKILLS

Python, Java, C, HTML, Adobe Illustrator
CPR and First Aid certification, Leave No Trace Master Educator certification
Leadership, Team-Building, and Conflict Resolution Training