Laura Stoy, Ph.D.

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EDUCATION

Georgia Institute of Technology	Aug 2021
Atlanta, Georgia	
Ph.D. Environmental Engineering	
Vanderbilt University	May 2014
Nashville, Tennessee	
D.A. Chamistry	

B.A. Chemistry

ENTREPRENEURSHIP EXPERIENCE

Rivalia Chemical Co., a Techstars-backed Company

Jul 2022 - present

Founder / CEO

- Selected to participate in Cohort 2023 of the Argonne National Lab Chain Reactions Innovations Program hosted by the Department of Energy, which includes access to ANL's facilities and \$420k funding for research and development.
- Raised over \$1M in nondilutive funding through multiple grants, including the National Science Foundation SBIR Phase I and multiple Department of Energy EnergyWerx vouchers.
- Participated in Energy TechStars in Fall 2022, an energy-tech focused startup accelerator partnered with Alabama Power. Raised \$120k in pre-seed funding. Secured future pilot project with Alabama Power through participation.
- Negotiated and secured exclusive license to intellectual property from Georgia Tech to scale and commercialize technology.
- Participated in the Clean Tech Open and the Engine's Blueprint program in 2023.
- Completed NSF-I Corps Sites Program in Fall 2020 and in Fall 2023, completed NSF Bootcamp Summer 2023: investigated commercial viability of technology, including economic analyses and conducted stakeholder interviews (utility company executives, chemical R&D firms, and environmental officials).

RocketJudge.com

Co-founder / CEO

- Bootstrapped business to over 200 clients and to six figures in annual profit. Maintained high customer retention (67% 2+ years). Led business strategy and grew team to five.
- Led customer-driven technology roadmaps to prioritize new software features. •

RESEARCH EXPERIENCE

Georgia Institute of Technology

National Science Foundation Graduate Research Fellow

- Planned and executed experiments culminating in three first-author academic journal papers in high-ranking journals, three oral presentations, and a utility patent.
- Wrote and won grants to secure funding for proposed research (\$175k).

Aug 2014 - Aug 2021

Apr 2015 - present

Environmental Protection Agency

National Science Foundation INTERN Fellow

• Prepared technoeconomic assessments for a Programmatic Environmental Assessment (PEA) on extracting rare earth elements out of coal fly ash and other wastes.

PUBLICATIONS AND PATENTS

- Stoy, Laura, Jiale Xu, Yamini Kulkarni, Ching-Hua Huang. Ionic Liquid Recovery of Rare-Earth Elements from Coal fly Ash: Process Efficiency and Sustainability Evaluations. ACS Sustainable Chemistry & Engineering 2022, 10 (36), 11824-11834.
- Stoy, Laura, Yamini Kulkarni, & Ching-Hua Huang. Optimization of Iron Removal in Recovery of Rare Earth Elements from Coal Fly Ash Using a Recyclable Ionic Liquid. *Environmental Science and Technology* 2022, 56 (8), 5150–5160
- Stoy, Laura, Victoria, Diaz & Ching-Hua Huang. Preferential recovery of rare earth elements from coal fly ash using a recyclable ionic liquid. *Environmental Science and Technology* 2021, 55 (13), 9209-9220.
- Stoy, Laura, Huang, C-H. METHODS FOR SELECTIVE RECOVERY OF RARE EARTH ELEMENTS AND METALS FROM COAL ASH BY IONIC LIQUIDS. WIPO Patent Application WO/2021/127497. June 24, 2021.

SELECTED SCIENCE POLICY EXPERIENCES

Federation of American Scientists Early Career Science Policy Accelerator Jan - Mar 2022 *Policy Entrepreneur Participant*

- Policy Entrepreneur Participant
 - Researched domestic rare earth element supply chain issues and wrote an actionable policy memo for members of Congress and their legislative staff.

ComSciCon-Atlanta

Jun 2017 - Jun 2021

Founder & Advisory Chair

- Coordinated the first-ever ComSciCon-Atlanta in 2018, a two-day workshop for graduate students to explore science communication. Covered topics including interdisciplinary collaboration, creative outlets, and public engagement in academia, and developed skills in science writing, data visualization, mock interviews, storytelling, and more.
- Raised ~\$20,000 in funding from local universities and companies, invited and coordinated 30+ speakers and panelists, accepted 50 attendees (>125 applicants).
- Served as advisor for subsequent workshops (2019, 2020, and 2021).

AAAS Catalyzing Advocacy in Science and Engineering Workshop Mar 2019

Participant

- Selected to represent Georgia Tech at a three-day science policy workshop for graduate students hosted by the American Association for the Advancement of Science.
- Visited offices of Georgia representatives and communicated with staff about science policy priorities.