

ALLISON GREEN

allisongreen@utexas.edu • www.linkedin.com/in/allison--green

EDUCATION

University of Texas at Austin, Cockrell School of Engineering

Doctor of Philosophy, Chemical Engineering

(Expected 2024)

Advisors: Professors Delia J. Milliron and Thomas M. Truskett

University of California, Berkeley, College of Chemistry

Bachelor of Science (Cum Laude), Chemical Engineering

May 2019

GPA: 3.70

RESEARCH AND INDUSTRY EXPERIENCE

University of Texas at Austin, McKetta Department of Chemical Engineering

10/2019 – present

Graduate Student Researcher (Advisors: Prof. Delia J. Milliron and Thomas M. Truskett)

- Investigating the structural and conductive properties of nanocrystal assemblies towards single-ion conducting electrolytes for lithium-ion batteries

Edwards Lifesciences

6/2019 – 8/2019

Critical Care Discovery, Engineering Intern

- Developed experimental cardiac flow models to design and validate new medical device sensor technology

University of California, Berkeley, Department of Chemical Engineering

1/2018 – 12/2018

Undergraduate Student Researcher (Advisor: Prof. Wenjun Zhang)

- Researched genetic tools for *Clostridium roseum*, with the goal of discovering new bioactive molecules

Cuberg

5/2018 – 12/2018

Battery Research and Development Intern

- Researched the development of safer, high energy density lithium metal batteries
- Developed a protocol for pouch cell fabrication and investigated how different electrolyte components affect cycling performance at high voltages

Merck

5/2017 – 8/2017

Analytical Research and Development Intern

- Developed a rapid pH and high temperature flow chemistry treatment method which enabled an easy, high throughput optimization of peptide stability conditions using HPLC and fluorescent fibrillation curves
- Work presented at the 5th Annual Peptides Congress in London and the 2017 Eastern Analytical Symposium and Exhibition

Berkeley Advanced Manufacturing for Energy Lab

9/2016 – 5/2018

Undergraduate Student Researcher (Advisors: Prof. Paul Wright and James Evans)

- Researched rechargeable Zn-MnO₂ batteries using an ionic liquid gel polymer electrolyte and printed electrode inks
- Quantified the effect of drying parameters and electrolyte casting thickness and the effect of the active material to binder ratio on printed ink conductivity

Tel Aviv University Center for Nanoscience and Nanotechnology

6/2016 – 8/2016

Undergraduate Student Researcher (Advisor: Prof. Shachar Richter)

- Researched the binding of neutral red dye to bovine serum albumin using fluorescence and HPLC measurements to assess the efficiency of the dye for use in organic light emitting diodes, specifically in the production of white light

PUBLICATIONS

- Sherman, Z.M., **Green, A.M.**, Howard, M.P., Anslyn, E.V., Truskett, T.M., and Milliron, D.J. Colloidal Nanocrystal Gels from Thermodynamic Principles. *Acc. Chem. Res.*, 2021, 54, 798-807.
- Saez Cabezas, C.A., Sherman, Z.M., Howard, M.P., Dominguez, M.N., Cho, S.H., Ong, G.K., **Green, A.M.**, Truskett, T.M., and Milliron, D.J. Universal Gelation of Metal Oxide Nanocrystals via Depletion Attractions. *Nano Lett.*, 2020, 20, 5, 4007-4013.

- Li, J.S., Du, Y., Gu, D., Cai, W., **Green, A.**, Ng, S., Leung, A., Del Rio Flores, A. and Zhang, W. Discovery and biosynthesis of clostyrylpyrones from the obligate anaerobe *Clostridium roseum*. *Org. Lett.*, 2020, 22, 21, 8204-8209.
- Graham, A.J.* , Gibbs, S.L.* , Saez Cabezas, C.A.* , Wang, Y., **Green, A.M.**, Milliron, D.J., and Keitz, B.K. In Situ Optical Quantification of Extracellular Electron Transfer using Plasmonic Metal Oxide Nanocrystals. *Submitted*.

MENTORSHIP AND INVOLVEMENT

MRSEC Student Leadership Council 8/2020 – present

- *President*: Acting as a liaison between the MRSEC students and faculty as well as coordinating plans for career development, outreach, and other events. Specifically focusing on increasing diversity equity and inclusion (DEI) events.
- *Social Chair*: Planned events to connect students across different materials research areas and create a more tight-knit research center. Increased social media presence for the center.

Chemical Engineering Graduate Recruitment Committee 9/2020 – 4/2021

- Planned the PhD program spring visit weekend for accepted students, transitioning the events to a new online format

First ChEnnections Mentor 7/2020 – present

- Mentored and built a relationship with three first year PhD students to help answer their questions and aid in their transition to graduate school during a particularly difficult year due to COVID

Engineering Student Council 8/2016 – 5/2019

- *Internal Vice President* (2017-18): Provided support and resources to all engineering clubs and planned events within the College of Engineering such as the Blue and Gold Engineering Leadership Dinner

American Institute of Chemical Engineers 8/2016 – 5/2019

- *Social Chair* (2017-18): Coordinated events to create a closer community within Chemical Engineering at Cal

TEACHING

Energy, Technology, and Policy Teaching Assistant (ChE 359) Fall 2020

- Held weekly office hours as well as provided additional assistance to students via email

Chemical Engineering Materials Teaching Assistant (ChE 350) Spring 2020

- Held weekly recitation sections for ~ 50 students to go over difficult concepts and key practice problems
- Designed weekly problems sets as well as practice exams throughout the semester, in addition to holding weekly office hours