

# Allison Green

allisongreen@utexas.edu • [www.linkedin.com/in/alli-green](http://www.linkedin.com/in/alli-green) • [Google Scholar](https://scholar.google.com/citations?user=...)

## EDUCATION

---

**University of Texas at Austin**, Cockrell School of Engineering

*Doctor of Philosophy, Chemical Engineering*

(Expected 2024)

Thesis: Designing the Structure and Properties of Nanocrystal Assemblies

**University of California, Berkeley**, College of Chemistry

*Bachelor of Science (Cum Laude), Chemical Engineering*

May 2019

## 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)*

- Designing structure and properties of nanocrystal assemblies towards smart materials for optoelectronics and energy storage
- Developed a new strategy and model system for efficient materials discovery using simulation-experiment feedback loops
- Mentored students and led collaborations with 7 research groups (biology, physics, engineering) and 2 national labs
- Gave invited talks at 3M, National Institute of Standards and Technology (NIST), and Johns Hopkins

**Edwards Lifesciences** *Critical Care Discovery, Engineering Intern*

6/2019 – 8/2019

- Led collaboration with Northwestern to validate an implantable heart monitoring medical device for commercialization

**Cuberg** *Battery Research and Development Intern*

5/2018 – 12/2018

- Designed a new fabrication format for lithium metal batteries, enabling more accurate and efficient testing (5x faster evaluation)
- Worked in fast-paced startup environment (~10 employees), internship extended by CEO to carry on positive research results

**Merck** *Analytical Research and Development Intern*

5/2017 – 8/2017

- Developed a peptide stability treatment method which enabled easy, high throughput optimization of conditions to improve pharmaceutical shelf life (4x longer than the benchmark)

**Berkeley Advanced Manufacturing for Energy Lab** *Undergraduate Student Researcher*

9/2016 – 5/2018

- Optimized material parameters in thin, flexible batteries to extend lifetime for wearable electronics and medical sensors

**Tel Aviv University Center for Nanoscience and Nanotechnology** *Undergraduate Student Researcher*

6/2016 – 8/2016

- Investigated a mechanism for incorporating color into organic light emitting diodes (LEDs)

## SELECTED PEER-REVIEWED PUBLICATIONS

---

- Green, A.M., et. al. **Depletion-Driven Assembly of Polymer-Coated Nanocrystals.** *J. Phys. Chem. C.*, 2022.
- Green, A.M., et. al. **Assembling Inorganic Nanocrystal Gels.** *Nano Lett.*, 2022. *ACS Editor's Choice.*
- Sherman, Z.M., Green, A.M., et. al. **Colloidal Nanocrystal Gels from Thermodynamic Principles.** *Acc. Chem. Res.*, 2021.

## LEADERSHIP

---

**Undergraduate Student:** *Juliusz Michalski* (2021-22)

- Mentored a foreign exchange student to conduct an independent project in collaboration with Lockheed Martin

**MRSEC Student Leadership Council:** *President* (2021-22), *Social Chair* (2020-21)

8/2020 – 8/2022

- Acted as the liaison between 100 students, 20 faculty, and the research center's external advisory board
- Led Diversity Equity and Inclusion (DEI) efforts (created MRSEC Peer Mentor Program, seminars, and newsletters)

**Department Outreach and Service**

1/2020 – present

- *Graduate Recruitment Chair:* Worked with a team to plan the recruitment visit week for 70 students
- *First ChEnnections Mentor:* Mentored 3 first year PhD students to aid their transition to graduate school
- *Girl Day, World Engineering Day, K-12 Outreach:* Led hands-on science activities to increase student engagement in engineering

**Teaching Assistant:** *Chemical Engineering Materials* (Spring), *Energy, Technology, and Policy* (Fall)

1/2020 – 12/2020

- Taught weekly recitation sections, held office hours, created homework/quizzes/practice exams for 50 students

## SELECTED AWARDS

---

- The University of Texas at Austin Graduate Continuing Fellowship, 2023-2024.
- Graduate and Industry Networking (GAIN) Department Poster Award, 2023.
- Rising Star in Soft and Biological Matter, UChicago and UCSD MRSEC, 2022.
- University of Texas at Austin, Graduate School Professional Development Award, Spring and Fall 2022.
- The University of Texas at Austin Engineering Doctoral Fellowship, 2019-2023.

## SKILLS

---

Matlab, Python, Git workflow, LaTeX, Overleaf, optical properties simulations, molecular dynamics simulations (HOOMD Blue), electron microscopy, small angle X-ray scattering, dynamic/static light scattering, battery assembly and cycling, UV/Vis spectroscopy, IR spectroscopy, colloidal nanocrystal synthesis and characterization, glovebox use, colloid stability and aggregation methods