

Matthew Chagnot | PhD. Candidate

Raleigh NC, 27607 | 817.962.9633 | mschagno@ncsu.edu | github.com/mchagnot

Skills & Techniques

Electrochemical Characterization (CV, Chronoamperometry, EIS, PITT), Raman Spectroscopy, Confocal Laser Scanning Profilometry, X-ray Diffraction, Transmission Electron Microscopy, Materials Chemistry, MATLAB-based diffusion modeling

Research Experience

Augustyn Group — NC State University

August 2019 —
August 2024

Graduate research on cation insertion in transition metal oxides. TMO synthesis and electrochemical characterization. Built a diffusion-based computational model for cyclic voltammetry. **Three publications.**

3DAFSN Lab — University of Pennsylvania

Summer 2018

Undergraduate research. Manual processing of nanoporous tin and alumina for slurry electrodes and coin-cell assembly. Galvanostatic charge-discharge and cyclic voltammetry analysis of Na-ion cells.

Ringe Group — Rice University

September 2016 —
January 2018

Undergraduate research. Synthesis, characterization, and galvanic replacement of plasmonic nanoparticles. **One publication.**

Education

North Carolina State University — Materials Science Engineering | PhD.
Candidate

August 2019 —
August 2024

Raleigh, NC

Rice University — BS, Materials Science Engineering | Business Minor

May 2019

Houston, TX

Professional Organizations

Society of Hispanic Professional Engineers- NC State University Chapter
Leadership role: Graduate Ambassador Chair 2021-2022

April 2021 — Present

Awards

3 Poster Awards

2020 — 2022

Louis Stokes Alliance for Minority Participation Bridge to the Doctorate Fellowship

August 2019