

# Patrick Duffy

## WORK EXPERIENCE

**Undergraduate Research** — Portland, ME Sep 2022 - Present  
Conducted research through the USM Undergraduate Research Opportunities Program (UROP).

Synthesized organometallic compounds displaying aggregation-induced emission (AIE) and characterized luminescent properties with fluorescence spectrophotometry.

**Sole Proprietor** — Portland, ME Mar 2021 - Present  
Operated a small mail-order plant seed business, primarily selling on Etsy. Fulfilled over 30,000 orders to date from all sales channels.

Designed automation equipment to scale operation, including a seed packeting machine and a Python-based order fulfillment suite.

**Subject-Based Tutor** — Portland, ME Sep 2022 - May 2024  
Provided support for courses in chemistry, physics, and mathematics through the USM Learning Commons.

Assisted students in test preparation, laboratory conduct, and development of core academic skills.

## SKILLS

**Instrumentation:** UV-Vis, IR, Fluorescence, NMR, GC-MS

**Programming:** Python, Julia, C++

**Software Literacy:** Spartan, Delta, Office 365 Suite, FreeCAD

**OS Literacy:** Linux (Debian, Ubuntu), MacOS, Windows

## RELEVANT COURSES

Organic Chemistry I, II and Lab  
Inorganic Chemistry  
Analytical Chemistry and Lab

Physical Chemistry and Lab  
Computational Physics  
Physics I, II

## EDUCATION

**UNIVERSITY OF SOUTHERN MAINE** — Portland, ME Jan 2022 - Present  
Bachelor of Science in Chemistry  
Overall GPA: 4.00 / 4.00

**PORTLAND HIGH SCHOOL** — Portland, ME Sep 2017 - May 2021  
Overall GPA: 4.00 / 4.00

## REFERENCES

Available upon request.