

Hamza Irshad

hamza.irshad@uconn.edu | 860.938.8233 | www.linkedin.com/in/hamza-irshad-944aa9228/

EDUCATION

University of Connecticut, Storrs, CT

Bachelor of Science in Engineering, May 2023

Major: Chemical Engineering; Minor in Chemistry; GPA: 3.65/4.0

Clubs: Alpha Lambda Delta Honors Society & UConn PCUC

SKILLS

Application Programming: MATLAB, Python, Aspen Plus, VBA

Computer: Microsoft Office

Languages: Urdu, Hindi, Punjabi

ENGINEERING PROJECT EXPERIENCE

Keney Park, Hartford and Storrs, CT

Senior Capstone Design Project: Production of Biochar from wood waste, August 2022 – Present

- Design a small-scale process to convert wood waste to biochar, heat, and syngas which can be used as soil amendment in the community garden throughout the area.
- Propose the optimum reactor type, reactor dimensions, operating conditions, and the heating sources based on the quantity of available biomass feedstock and the desired biochar rates.
- Determine the overall environmental impacts of the process through research and experimentation.

EMPLOYMENT EXPERIENCE

Solution Spray Technologies LLC, Storrs, CT

Research Intern, September 2022 – Present

- Assist the R&D team with evaluating plasma spray coating solutions for specific applications based on client specifications.
- Analyze the data collected from current ceramic coatings to draw high level conclusions to provide recommendations to R&D team.

Dymax, Torrington, CT

Process Engineer Intern, May 2022 – August 2022

- Enhanced operations to reduce product quality risk by implementing the use of a barcode scanner within production batch sheets through VBA.
- Optimized current processes to maximize time efficiency and batch production.
- Collaborated with the production manager and plant manager to access malfunctions in a reactor to provide affordable solutions to get the reactor to function as needed.
- Edited and assessed P&IDs to add vacuum redundancy for reactors.

CVS Pharmacy, Glastonbury, CT

Pharmacy Technician, September 2021 – May 2022

- Counted, measured, and compounded prescriptions, applied labels, and verified accuracy with the Pharmacist prior to dispensing medication.
- Maintained pharmacy inventory through documenting and disposing of expired products.

Jackson Hewitt, Hartford, CT

Tax Preparer, December 2018 – February 2022

- Prepared individual and federal tax returns for clients while maintaining client loyalty.