Engineering Laboratory R&D Intern Position at Start-up Company
PARSEC Solutions LLC
January 2022 – August 2022
Purdue Research Park, West Lafayette

A) Primary function of position:
Perform assay testing of products to assist development in state of the art pharmaceutical particle engineering systems conducted in a start-up company environment.

B) Job Activities:
Primary responsibilities
• Execute and troubleshoot laboratory assays; including Karl Fischer, laser diagnostic droplet and particle size measurement techniques.
• Develop laboratory Standard Operating Procedures (SOPs).
• Develop formulation chemistry and feedstock preparation processes.
• Maintain stock of assay consumables.
• Perform data analysis.
• Coordinate testing requirements as needed.
• Work effectively with the development team

Secondary
• Assist with prototype hardware setup, operation and cleaning.
• Assist with the hardware development of prototype components.
  ▪ Atomizers/mixers/inertial separators/control systems.
• Work with the team to identify and implement continuous improvements to prototype systems.

C) Education and skills required:
• Enrolled in any of the Purdue science, engineering or technology programs in the fields of chemistry/chemical, pharmacy/pharmaceutical, mechanical, aeronautical, or agricultural/biological.
• Ability to follow Standard Operating Procedures (SOPs)
• ‘Hands-on’ laboratory experience with the ability to operate in a flexible R&D laboratory environment.
• Ability to work unsupervised.
• Previous internship/Co-Op experience in pharmaceutical industry preferred.
• Experience working with analytical lab instrumentation preferred.
• Experience with data analysis programs a plus (Ex. jmp)
• Strong communication and writing skills in English.
• Prefer graduate level or well skilled Jr/Sr.

D) Time commitment:
  b. Majority of hours required between 8AM-5PM, at PARSEC facility in the Purdue Research Park, West Lafayette Indiana.