



Particle Engineering Laboratory R&D Paid Internship at Start-up Company - PARSEC Solutions LLC

Feb 2026 – April 2027

Purdue Research Park, West Lafayette, Indiana

Send resume to: Dr. Herman Snyder, hsnyder@parsecsolns.com

A) Primary function of position:

Support custom pharmaceutical processing hardware creation and process development in the field of particle engineering conducted by industry supported start-up company environment.

B) Job Activities:

Primary responsibilities

- Use fundamental engineering principles to assist with custom hardware design, test setup and operation.
- Assist with design/commercialization of prototype components.
 - Atomizers/mixers/inertial separators/control systems.
 - Knowledge of computational fluids modeling a plus.
- Assist with precision 3D printing of micro-fluidic devices.
- Work with the team to identify and implement continuous improvements to equipment prototypes.
- Develop and execute laboratory Standard Operating Procedures (SOPs).
- Perform data analysis.
- Write test plans and reports.

Secondary

- Execute operation of laboratory assays; including Karl Fischer, laser diagnostic droplet and particle size measurement techniques.
- Assist with formulation chemistry and feedstock preparation processes.

C) Requirements:

- Enrollment in the Purdue science, engineering or technology programs in the fields of chemistry/chemical, pharmacy/pharmaceutical, mechanical, aeronautical, or agricultural/biological.
- 'Hands-on' laboratory experience with the ability to operate in an R&D laboratory.
- Work effectively unsupervised and in a team environment, including industry partners.
- Ability to follow Standard Operating Procedures (SOPs).
- CAD design, control system and data acquisition skills a plus.
- Experience with statistical data analysis and thermodynamics programs a plus (Ex. JMP/MatLab/EES)
- Previous internship/Co-Op experience in pharmaceutical/process industry a plus.
- Strong communication and writing skills in English.
- Prefer Graduate/Senior/Junior level students.
- US citizen or appropriate VISA status for private company employment.

D) Time commitment:

- Part Time 10-20/wk during spring/fall semesters, 40 hrs/wk during summer period in 2026.
- Flexible works periods around class schedule.
- Majority of hours required onsite during normal working hours at PARSEC facility in the Purdue Research Park, West Lafayette Indiana.