



Position: Co-Op Intern, Mechanical Engineering
Company: Paradigm of New York; Rochester, NY

Position Summary

We seek an energetic Mechanical Engineering Co-Op student to work with Paradigm's engineers to design, build and test novel electrical non-thermal plasma emissions control systems requiring electrical, thermal and mechanical engineering. The system utilizes a high voltage power source and a plasma reactor to convert carbon soot emissions through ionization and oxidation processes. The goal is to provide a reliable flow of power to the plasma reactor with the capability to process the emissions at a wide range of temperatures and volumes resulting in a high conversion rate of the carbon soot. The easily scalable system design comprises a high voltage power supply, system controller, high voltage cabling, a cylindrical reactor with a high voltage pass-thru and high dielectric insulators. The Co-Op student may be involved in all aspects of systems development, including requirements analysis, design, coding, manufacturing, installation, testing, maintenance, and documentation. The successful candidate will work with a team of engineers and technicians both in-house and contracted as well as Paradigm suppliers and automotive industry customers.

Essential Functions

- Working with a lead Engineer, develop mechanical components, test plans, and lab procedures.
- Assist in the setup/configuration of equipment and test platform.
- Assist in manufacturing, installation, and support of equipment.
- Conduct testing, maintain test documentation, gather and analyze data, and prepare lab reports.

Minimum Qualifications

- College Junior level or above; studying mechanical engineering at an accredited 4-year college or university.
- Must have a minimum cumulative GPA of 3.0.

Technical Skills

- Strong mechanical aptitude.
- 3D CAD model generation and detailed mechanical drawing.
- Generation of work instructions and procedures.
- Project management via MS Project or similar.
- Working knowledge of combustion engines.
- Demonstrated experience designing and building systems.
- Knowledge and experience with data acquisition systems.
- Demonstrated organizational, planning, and prioritization skills.
- Ability to work well in a team environment. Work within design parameters.
- Comfortable exploring work tasks, seeking out answers, and working independently when necessary.
- Track record of strong interpersonal, oral, and written communication/briefing skills.

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