



Location: Raleigh, NC
Description: Principal Scientist/Engineer
Job Type: Full-Time, Immediate Opening

Voxel is seeking a Principal Scientist to lead our R&D efforts in electrochemical machining. Voxel is a thought leader in Pulsed Electrochemical Machining (PECM), an advanced manufacturing process unrivaled in its ability to quickly and accurately machine specialty metal alloys. Our mission is to use PECM and related manufacturing technologies to supply critical, high-value parts to aerospace, energy, and medical customers.

As a company, Voxel is inspired by three core concepts. First, Voxel is focused on creating manufacturing solutions to important problems including transportation, energy production, and healthcare. It is important that Voxel employees feel proud of their accomplishments and impact. Second, Voxel is devoted to producing tangible real-world products. Voxel employees will be able to feel the sense of satisfaction that comes from offering meaningful products and services. Third, Voxel maintains a culture of innovation found at the intersection of different disciplines. Successful implementation of PECM requires knowledge of material science, electrochemistry, and electrical, chemical, and mechanical engineering. Voxel is seeking employees with a range of expertise across these fields who are willing to work in a team environment to develop innovative manufacturing solutions.

As a principal scientist at Voxel, your focus will be on eliminating the technical barriers standing in front of broad adoption and use of electrochemical machining and assisting in the efforts to protect the resulting intellectual property. The position will come with significant freedom in determination of your day-to-day duties as you work to conceptualize and test new techniques that make our process faster, cheaper, or higher quality.

Job Description

Job responsibilities **will** include:

- Writing government grant/contract proposals, and acting as the principal investigator on awarded grants, taking on all ensuing responsibilities.
- Executing industry sponsored R&D.
- Staying abreast of state-of-the-art in industrial ECM technology.

Job responsibilities **may** include, depending on skill set and current company dynamics:

- Managing our industrial waste treatment system.
- Electrical design, and wiring of custom equipment.
- Troubleshooting of our custom equipment.
- Writing instrument control software, and/or motion control scripts (as well as other analysis software).
- Designing tooling and fixtures for ECM applications.
- Multi-physics simulations (Start-CCM+, Ansys, Openfoam or the like) to aid in the ECM tool design process.
- Fabrication of tooling/workpieces for experimentation.
- Electrochemical or surface analysis of materials.
- In process and final part inspections.

Requirements

- US Citizenship or Green Card
- PhD in a scientific/engineering discipline (experience with electrochemistry a significant plus)
- Curiosity, grit, determination, integrity
- Able to take a task from conception to completion
- Ability to learn new skills quickly and high initiative

As a key employee you will have the opportunity to help shape the future of Voxel and your role therein. If you are excited about our mission and meet our requirements, we want to hear from you!

Submit your resume and a cover letter by email to:

Daniel Herrington

careers@voxelinnovations.com

Voxel Innovations Inc. is an equal opportunity employer. The above job description does not constitute a promise or guarantee of employment.