

Opportunity Title: Mechanical Engineer in Additive Manufacturing Post Bachelor's

Position

Opportunity Reference Code: ORNL15-43-MSTD

Organization Oak Ridge National Laboratory (ORNL)

Reference Code ORNL15-43-MSTD

Description The Post Bachelor Associate will focus on the area of polymer additive manufacturing and injection molding with a specific focus on preparation, processing and analysis of discontinuous fiber composites.

> MAJOR DUTIES/RESPONSIBILITIES: The position will require implementation and application of thermo-mechanical models to practical problems.

- · Injection Molding
- · Processing and analysis of discontinuous fiber composites
- · Experience with Solidworks
- · Preparation and fused filament fabrication of carbon fiber reinforced polymeric materials
- Polishing and etching of polymeric samples
- · Responsible for presenting and reporting research results
- · Ensure compliance with environment, safety, health and quality program requirements
- · Maintain strong commitment to the implementation and perpetuation of values and ethics

Qualifications QUALIFICATIONS REQUIRED:

- A BS degree in Mechanical Engineering completed within the last 3 years (REQUIRED)
- · Experience with rheology measurements and analysis of fiber reinforced injection molded samples
- · Excellent written and oral communication skills and the ability to communicate in English to an international scientific audience
- Motivated and safety conscious
- Working knowledge of Microsoft Office (which includes Word, PowerPoint and Excel)
- · Ability to set priorities, multi-task and adapt to ever changing needs with the proven ability to function well in a fast-paced environment
- · Ability to work with a measure of autonomy and a willingness to participate creatively in a collaborative team environment
- Ability to work on multiple tasks in a limited amount of time and to independently set priorities to accomplish multiple tasks to meet deadlines

QUALIFICATIONS DESIRED: The successful candidate will conduct research in the area of additive manufacturing related to advancement of current technologies, implementation of new processes, and development of unique material systems. They will be expected to conduct research in the above areas and interface with other researchers and technical staff in the modeling, production, and characterization of these materials. All applicants should exhibit excellent oral and written technical communication skills.

Applicants cannot have received the most recent degree more than three



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years prior to the date of application and must complete all degree requirements before starting their appointment.

This ORNL Postgraduate Research Associates Program is administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education (ORISE).

Eligibility

Eligibility • Citizenship: LPR or U.S. Citizen

Requirements

• Degree: Bachelor's Degree received within the last 36 month(s).

• Discipline(s):

∘ Engineering (1_●)

Affirmation I certify that I have completed coursework towards a degree in science, technology, engineering, mathematics, or a related field.

ORAU is an Equal Opportunity Employer (**EOE AA M/F/Vet/Disability)**; visit the <u>ORAU website</u> for required employment notices.

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