

Opportunity Title: ORNL Laboratory Technology Associate in Additive Manufacturing **Opportunity Reference Code:** ORNL19-LabTech-EESD

Organization

Oak Ridge National Laboratory (ORNL)

Reference Code ORNL19-LabTech-EESD

Description

Oak Ridge National Laboratory (ORNL) is the largest US Department of Energy (DOE) science and energy laboratory, conducting basic and applied research to deliver transformative solutions to compelling problems in energy, environment, and security.

The Manufacturing Demonstration Facility within the Energy & Environmental Sciences Directorate (EESD) at Oak Ridge National Laboratory is seeking a Laboratory Technology Associate to research and aid in process development of new materials fabricated through various Additive Manufacturing (AM) systems. Specifically, the Associate will focus on understanding the correlation between processing and mechanical attributes of the fabricated material and provide recommendations to research staff for improving material performance. The Associate is expected to have a knowledge of heat-transfer and the ability to apply heat-transfer fundamentals to AM problems. In addition to developing the necessary processing science, the Associate will interact with corporate partners to educate them on the material results. Further, the Associate will be required to adapt CAD models for printability for ongoing projects. Standardized metallographic analysis and mechanical property characterization techniques will be a component of the Associate's research. Lastly, some aspects of the research will involve basic software script programming for data interpretation and analytical simulations of the AM process.

Qualifications

Candidates should be pursuing or have earned a bachelor's degree in engineering (general, mechanical, metallurgical, or polymer) or polymer chemistry.

Preferred

- Excellent research and development skills
- Experience in manufacturing
- Experience with CAD software, SolidWorks, or Fusion360
- · Experience with mechanical design and drafting
- Strong interpersonal skills
- Capable of independent motivation
- · Experience working in teams on projects
- Knowledge of metallurgical and mechanical characterization
- Understanding of basic metallurgy.

Living in East Tennessee: While the opportunity to work at ORNL is an amazing experience in itself, it's easy to overlook everything else East Tennessee has to offer if you haven't had the opportunity to spend time here. From spending your weekends downtown at Knoxville's farmers market, the Rhythm n' Blooms Music Festival, or the Dogwood Arts Festival, to some of the best hiking, kayaking, and camping in the U.S, East Tennessee has something to offer everyone.

The ORNL Laboratory Technology Associate Program is administered by Oak Ridge Associated Universities through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education (ORISE).

Eligibility Requirements

• Citizenship: U.S. Citizen Only



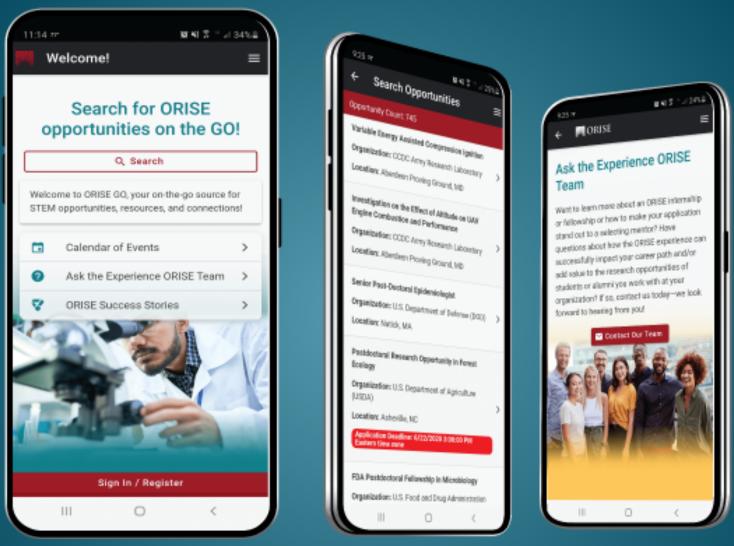
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- Degree: Bachelor's Degree received within the last 1023333 months or currently pursuing.
- Discipline(s):
 - Chemistry and Materials Sciences (2.)
 - Engineering $(4 \odot)$

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