



Postdoctoral Position Available at North Carolina State University Department of Nuclear Engineering

The field of nuclear energy is experiencing a surge of interest and investment into molten salt reactor (MSR) technology. MSRs offer many potential benefits including higher operating temperature, passive safety features, lower cost, and high fuel utilization. MSR companies are forging ahead on test reactors in the pursuit of full-scale nuclear power plants. In parallel, sensors and characterization tools are being developed to inform these new designs and aid in the commercialization of MSRs. Are you eager to contribute to groundbreaking research that will shape the future of MSR technology and bring low-carbon energy to the grid? Look no further – North Carolina State University's Department of Nuclear Engineering invites you to apply for our exciting postdoctoral position!

About Us: North Carolina State University is a prestigious institution known for its commitment to innovation and excellence in research. The Bataller research group specializes in using spectroscopy and laser techniques to study matter and materials in extreme environments, with a special focus on **molten salts** for advanced reactor development. We're seeking a passionate postdoctoral researcher to join our team and help change the world through advanced nuclear energy! Candidates with an interest in sensor commercialization are strongly encouraged to apply.

Position Details: Title: Postdoctoral Researcher

Department: Nuclear Engineering

Location: North Carolina State University

Research Focus: Spectroscopic characterization and sensor development of molten salts for **molten salt reactors** and other advanced nuclear applications.

Qualifications:

- PhD in nuclear engineering, physics, materials science, or a related field.
- Strong experimental foundation and practical experience in spectroscopic techniques.
- Proficiency in sensor development, experimental design, and data analysis.
- Background or keen interest in nuclear engineering and advanced nuclear technologies featuring molten salts.
- Excellent communication and collaboration skills.

Responsibilities:

- Conduct cutting-edge research in spectroscopic characterization of molten salts
- Develop innovative sensors for real-time monitoring and control of molten salt systems.
- Collaborate with a multidisciplinary team of researchers
- Analyze and interpret experimental data and publish research findings in peer-reviewed journals.
- Participate in academic and research activities, including seminars, workshops, and conferences.

Application Process: To apply, please submit the following documents to awbatall@ncsu.edu:

- Curriculum vitae (CV)
- Cover letter detailing your research background, interests, and how you meet the qualifications
- Contact information for three professional references

Don't miss this exceptional opportunity to make your mark in the field of MSRs and advanced nuclear applications! Join us at North Carolina State University and be part of a team that's shaping the future of nuclear technology. North Carolina State University is an equal opportunity employer. We encourage applications from individuals of all backgrounds and experiences.