At Brookhaven National Laboratory, we all play a part in tackling the most important questions that face our nation and world today. With world–class facilities and experts in a variety of fields, we've created a legacy of seven Nobel Prize winning discoveries and countless breakthrough innovations. And we keep this legacy going every day by hiring those who are excited by innovation and pursue curiosity with passion.

Molten Salts in Extreme Environments
Postdoctoral Research Associate Position in Chemistry

The Energy Frontier Research Center on Molten Salts in Extreme Environments (MSEE) at Brookhaven National Laboratory (BNL) is hiring Postdoctoral Research Associates. The scientific mission of MSEE is to provide fundamental, atomic-level understanding of bulk and interfacial molten salts, the effects of molten salt exposure on metallic interfaces, and the effects of radiation on the associated chemistry and corrosion phenomena. This position will be part of a collaborative, multi-institution team performing kinetics, electrochemical, structural (x-ray and neutron), spectroscopic (optical and x-ray), and computational studies of molten salt and solute structure, speciation and reactivity in the bulk and at interfaces.

The MSEE Postdoctoral Research Associate in Chemistry will be responsible for pulse radiolysis investigations of reaction kinetics in molten salts, in pure form and in mixtures containing other salts and metal ions. The purpose is to understand the speciation and reactivity of metal ions and radical species in molten salts under radiation environments in order to predict their behavior in a molten salt reactor.

This position requires a Ph.D. degree in chemistry or a related field. Experience with experimental, time-resolved studies of reaction kinetics and mechanisms is required. Experience with pulse radiolysis or laser flash photolysis is preferred. Work will primarily be performed in the BNL Chemistry Division's Accelerator Center for Energy Research (ACER), which features the Laser-Electron Accelerator Facility (LEAF) for picosecond pulse radiolysis, and a 2 MeV electron Van de Graaff for longer-timescale experiments.

To apply online, go to https://jobs.bnl.gov, search for keyword "molten salts" and select Job ID 1564.

Brookhaven National Laboratory offers a collaborative culture, a continuous learning environment, and an excellent benefits package (e.g. health plans, vacation, etc.).

To learn more about these and other BNL opportunities, visit https://jobs.bnl.gov/