The Department of Physics at Colorado School of Mines invites applications for a Ph.D. candidate or Postdoctoral Research Associate to begin October 1, 2015. The position is a three year appointment (based upon satisfactory performance). Mines is a public research university devoted to engineering and the applied sciences and has the highest admission standards of any university in Colorado. Mines is located in Golden, Colorado in the foothills of the Rocky Mountains, 15 miles west of downtown Denver and 20 miles south of Boulder.

**Responsibilities:** The Ph.D. candidate or Postdoctoral Research Associate will conduct research using ultrasound techniques for detection of chloride atmospheric SCC initiation and propagation at stainless steel canister in a dry storage system for used nuclear fuel. Duties include state-of-art literature survey, writing scientific papers, preparing reports, establishing a procedure for ASTM standardization of the proposed ultrasound techniques, and training other team members in the development of a new portable design system.

**Qualifications:**
Requirements include:
- M.Sc. degree in Physics or Materials Science and Engineering, Metallurgical Engineering, Mechanical Engineering.
- 2-3 years’ experience using ultrasound techniques
- Background in NDE
- Familiarity with ultrasound theory and simulation
- Strong laboratory skills
- Good communication skills to coordinate with team collaborators including national laboratories and universities

Preferred qualifications:
- Experience with NDE for stress corrosion cracking applications
- Familiarity with Nonlinear Resonant Ultrasound Spectroscopy (NRUS) and the Time Reversed Elastic Nonlinearity Diagnostic (TREND)

**How to Apply:**
Required documents:
1. Cover Letter
2. Curriculum Vitae
3. Contact Information for References
4. Research Statement

Interested candidates should send their application materials to Prof. Shayer (zshayer@mines.edu).