



## **Research Physicist/Geophysicist**

**Job ID: 1706**

**Location: Lebanon, New Hampshire**

**Job Type: Full-Time, Exempt**

White River Technologies, Inc. is a small, high-tech company focused on research & development, testing, evaluation, and commercial support services for geophysical sensor and software technologies. Located in Lebanon, New Hampshire and Newton, Massachusetts, our scientists and engineers are developing new technologies that utilize magnetic, electromagnetic, radar, acoustic and electro-optical sensing for defense, environmental, and energy applications. We are recognized as a national leader in explosive hazards detection and classification technology development and have a reputation for building innovative solutions to complex problems.

We are seeking a Physicist / Geophysicist to join our growing R&D team in geophysical sensing and signal processing. The candidate will be responsible for supporting or leading research and development of the next generation geophysical technology for detecting, mapping, characterizing, and interpreting natural and man-made surface and subsurface media. The applicant will have a strong academic background in physics and preferably geophysical methodologies and technologies. This position involves analysis, prototyping, test, and evaluation of geophysical data processing methods and related software. Duties include developing, optimizing, testing, and applying algorithms that enhance geophysical capabilities. Candidates should have a strong understanding of electromagnetic detection processes and specialized experience in executing scientific research and development projects. Technology applications include magnetic sensing, nuclear magnetic resonance, time- and frequency-domain electromagnetic induction, radar, and physical acoustics.

### **Essential Duties and Responsibilities**

- Development of algorithms for detecting and classifying buried or concealed hazards such as pipes, cables, unexploded ordnance, search and rescue targets, lost salvage, and tunnels
- Invent and apply data processing, inversion, detection, classification, and data fusion algorithms including numerical modeling and simulation
- Provide test and evaluation support for research and systems projects involving improved sensing methodologies, human- and robotic-based sensor processing approaches to enhance system functionality through simulation, analysis, and experimentation
- Support field team in set up and calibration of sensor systems and field equipment
- Work as a member of a team and explore ways to improve our quality, better serve our clients, and innovate new solutions

### **Education, Experience, and Skills**

- Bachelor's, Master's, or PhD degree in Physics, Geophysics, Electrical or Civil Engineering, Geomatics, Earth Science or other technical field.
- 1-10 years of experience working with sensor systems, robotics, custom/commercial data processing software including experience with laboratory and field instrumentation
- Strong background in computational methods to include data processing and modeling
- Experience with sensor-related research and/or military sensing applications for DOD, DOE or other related agencies; especially with electromagnetic or electro-optical systems
- Experience developing/applying algorithms in MATLAB, Geosoft Oasis Montaj, ArcGIS
- Demonstrated aptitude to learn quickly, work in a team or independently
- Excellent oral and written communication, publication, and client interfacing skills required

*Please submit all resumes and correspondences to [jobs@whiterivertech.com](mailto:jobs@whiterivertech.com) and reference the Job ID in the subject line.*