Job Summary
The Research Physicist reports to the Director of Engineering. This person is responsible for conducting independent research leading to the development of scientific instruments, systems and sensors. We are looking for a creative and energetic individual with a MS or Ph.D. in Applied Physics to develop advanced techniques and instrumentation for the non-destructive testing of geophysical properties. They provide scientific and technical support for current product lines, lend scientific and technical expertise for the evaluation of new technologies and potential strategic partnerships. Work with teams to solve problems quickly, develop new methods, and design experiments to address opportunities in collaboration with other analytical specialists. Act as internal and external advocate for the advancement of non-destructive testing technology. Interacts with others in the company in the development of new products. The research physicist must be familiar with high vacuum technology, and capable of solving difficult problems of the mathematical sciences.

Duties and Responsibilities
- Evaluate current product needs with applied physics solutions.
- Plan, design and execute experiments to determine the viability of applied physics projects.
- Develop and characterize instrumentation for current and future experiments.
- Develop new approaches and applications in search of applied physics solutions.
- Lead / advise research teams in research prototype development.
- Experimental design and data collection and analysis.
- Lead / advise new product development in the design and testing of new products.
- Design and manage prototype, alpha and beta testing and experimental activities.
- Participate in technical and industry meetings, conferences and committees.
- Write and submit proposals to relevant government agencies for project funding.
- Provide scientific, technical and supervisory oversight of High vacuum equipment.
- Support production when necessary.
- Interact with customers when appropriate.
- Author reports and provide oral presentations for internal and external review.
- Write technical reports and invention disclosures to document work.

Prerequisite Skills and Education
- PH. D. in Physics or M.S. in Physics with equivalent knowledge and experience.
- Analytical and experimental physics experience.
- Advanced problem solving and decision making skills.
- Experience in physics instrumentation and instrumentation development.
- Experience in designing, executing, and analyzing experiments in the field of non-destructive testing.
- Advanced numerical modeling and statistical analysis knowledge and skills.
- Experience with instrumentation software design and application.
- Presentation of research to scientific, technical and peer-review audiences.

The above description covers the most significant duties performed but does not exclude other work assignments.