

## Acoustical Engineer / Testing and Validation

### Job Summary

- Create test models, processes and methods for measuring vibration and pressure events in pressurized fluid pipes.
- Carry out lab and field tests on pressurized fluid pipes to create temporal and spectral patterns for different events.
- Plan and coordinate all technical aspects of assigned projects
- Document all work performed in engineering note-books, measurement reports, and project reports and presentations.
- Assist in creation and testing of algorithms under MatLab® or similar platform for detection of acoustic events.
- Create tests and benchmark algorithm performance under lab and field conditions for detecting transient and steady state events.
- Keep up-to-date on topics relevant to Echologics R&D and product development

### Educational Requirements

Masters or Postgraduate education with Electrical or Mechanical Engineering background with at least 3-5 years of experience in experimental and/or consulting work in applied acoustics, signal processing, vibration measurement and analysis.

### Other Requirements

- 1) Demonstrated experience in multi-channel data acquisition and analysis.
- 2) Knowledge of numerical modeling related to acoustics, noise and vibration studies (e.g. SAP200, MATLAB, Comsol).
- 3) Experience in design and implement test fixtures for simulation, measurements and analysis of transient and steady state events.
- 4) Proven ability to work in teams for coordinating the research work and helping in transferring and implementing the research into existing and new products and services.
- 5) Ability to successfully meet deadlines, work collaboratively in teams and on multiple tasks in a fast paced work environment.
- 6) Ability to work on several projects simultaneously similar to a dynamic consulting environment.
- 7) Demonstrated initiative, independent and creative holistic problem solving methods and capabilities.
- 8) Willingness to travel both nationally and internationally to client or project sites.