Paleoseismologist

The purpose of this position is to conduct scientific research into paleoseismology focusing on subduction margin tectonic processes and their relation to seismic and tsunami hazard.

Reports to: Paleoseismology Team Leader
Department: Earth Structure and Processes
Group: Science
Tenure: Permanent
Location: Avalon
Direct reports: Nil
Budget: Nil
Date: September 2020

Position priorities and responsibilities

Scientific Research

- Undertaking research in paleoseismology contributing to seismic and tsunami hazard
- Using tectonic geomorphology to understand past earthquakes and fault behaviour
- Using Quaternary age dating techniques for the purposes of dating earthquakes and tsunamis
- Undertaking research into the geological evidence for subduction earthquakes in the Hikurangi Subduction Margin
- Developing research plans and proposals in consultation with senior staff
- Assisting with planning, execution and reporting of established projects
- May be involved in supervising technicians or other staff.

Commercial

- Contributing to providing advice to commercial clients in paleoseismology, subduction earthquakes, paleotsunamis, active faults, earthquake and tsunami hazard assessments.
- Contributing to fit-for-purpose projects on time and to budget.

Communication

- Communicating scientific research through authorship or co-authorship of scientific publications papers or reports
- Making presentations at conferences and seminars
- Representing GNS Science at conferences
Projects

- Undertake projects for your manager as and when required

Responsibilities of all staff

- Comply with all GNS Science policies and procedures
- Contribute to making GNS Science a healthy and safe place to work by complying with the responsibilities and accountabilities outlined in the Health and Safety Management System Framework

The responsibilities of this position will change over time to respond to changing needs. The incumbent will need the flexibility to adapt and develop as the company and its environment evolves.

Key working relationships

Internal:
- Paleoseismology Team, Tsunami Team
- Earth Structure and Processes Department
- Other GNS Science Departments

External:
- Universities
- Ministry of Business Innovation and Employment (MBIE)
- Earthquake Commission (EQC)
- Regional and Local government agencies
- Other clients

Person specification

Skills, knowledge and attributes

- Statistical analysis of radiocarbon age data
- Quantitative paleoenvironmental reconstruction
- GIS

Experience

Essential:
- At least 2 years’ experience in paleoseismology

Desirable:
- At least 2 years’ experience in subduction earthquake paleoseismology research including fieldwork

Qualifications

Essential:
- PhD in Geology specialising in paleoseismology

Desirable:
- PhD in Geology specialising in subduction earthquake geology
Other requirements

Essential:
- Drivers Licence
- Flexible, collaborative, team player
- Report writing

Desirable:
- First aid certificate
- When appropriate, a willingness to work with iwi/Māori groups and organisations to build relationships with the aim of facilitating Māori development

Competencies

The following competencies are expected of all staff:

- **Results Orientation:** The ability and commitment to achieve effective results, and work towards or exceed agreed goals.

- **Business Focus:** The ability and desire to apply appropriate principles and practices to maximise revenue, minimise cost, while meeting our obligations.

- **Relationship Management:** The ability and commitment to develop and maintain effective relationships with groups and individuals.

- **Communication:** The ability to express thoughts and ideas clearly and consistently (orally and in writing).

- **Innovation and Initiative:** The ability and commitment to seek and use better ways of doing things (to improve personal and GNS Science performance).

- **Teamwork:** The ability to establish and maintain effective and cooperative relationships.

- **Professional Integrity:** Act in a manner that conveys high personal and professional standards.

- **Technical Expertise:** The ability to maintain and develop technical expertise.

- **Leadership and Management Skills:** The ability to inspire others to achieve desired results and to develop and enable others to realise their full potential.