

Senior Environmental Geochemist



To lead and conduct scientific research, operations and commercial work in environmental geochemistry focusing on enhancing the team's capabilities and increasing GNS Science's revenue in this sector. Lead the Organic Geochemistry Laboratory at GNS Science.

Reports to:	Environmental Chemistry Team Leader
Department:	Surface Geoscience
Group:	Science and Commercial Operations
Employment Type:	Permanent
Location:	Gracefield
Direct reports:	Nil
Budget:	Nil
Career Path:	Research
Job Family:	Research
Career Step:	Senior Scientist 1 / Senior Scientist 2 (Step 8 - Step 9)
Date:	September 2024

Position priorities and responsibilities

Scientific Research

- Lead research in the field of Environmental Geochemistry focusing on its applications to the understanding of environmental processes and improved resource management.
- Plan research directions and develop proposals for new research and commercial activities in the environmental chemistry area.
- Establish new projects to enhance capabilities in areas such as climate change, land use change, contaminant pathways, and associated environmental impacts.
- Provide significant input to business strategy development.
- Identify societal and sector needs and attract external funding to support staff.
- Advance analytical methods within the Organic Geochemistry Laboratory (OGL) ensuring high standards in analytical techniques and data quality.
- Foster and manage relationship with external partners who have a vested interest in the OGL.
- Implement effective project management and identify and manage risks within the environmental geochemistry work programme.

Commercial

- Identify commercial opportunities and develop project proposals to secure funding and contracts.

- Provide expert advice to clients and undertake consulting projects, delivering reports that meet scope, timeframe, and budget requirements.
- Collaborate with the Environmental Chemistry Team Leader, Environment and Climate Theme Leader and other GNS Science staff to manage and expand commercial opportunities.
- Generate innovative ideas and identify and pursue new initiatives of major importance.

Communication

- Scientific adviser to internal teams at GNS Science and key liaison to external entities such as stakeholders, clients, and the sector at large to generate research outcomes that lead to environmental impacts both within New Zealand and internationally.
- Publish research results in peer-reviewed journals and present findings at conferences and to stakeholders.

Leadership

- Oversee Organic Geochemistry laboratory operations, including meeting compliance, analytical technique development and data quality management in collaboration with the Laboratories Manager (Mantle to Atmosphere team).
- Lead funding applications and oversee the development and leadership of new research projects focused on environmental geochemistry.
- Act as a mentor for other staff and provide guidance on scientific and professional development.
- Act as quality peer reviewer.

Programme/project management

- Lead projects or coordinate with the Programme Leader regarding workload, capabilities, and team development to ensure successful project execution and delivery on time.
- Manage the financial and administrative aspects of research programmes/projects, including project management plan, budgeting and resource allocation.
- Undertake projects for your team leader and department 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:

- Environmental Chemistry Team Leader
- Surface Geosciences Department Manager and teams
- Laboratories and Workshops Department Manager and teams
- Environment and Climate Theme Leader
- GNS programme and project leaders

External:

- Government agencies (e.g., Ministry for the Environment)

- Local government agencies and regional councils
- Other Crown Research Institutes (CRIs), national and international research organisations

Person specification

Skills, knowledge and attributes

- Excellent written and verbal communication skills with experience in report and publication writing.
- Advanced IT skills, including coding packages.
- Strong problem-solving abilities and adaptability.
- Effective time management and organizational skills.

Experience

Essential:

- Experience with organic geochemistry, including analytical techniques to study organic compounds found in environmental samples.
- Familiarity working in a laboratory with analytical equipment to include gas/pyrolysis gas/high performance liquid chromatography-mass spectrometers.
- Proven experience in leading major research projects, writing successful research proposals, and working closely with stakeholders to develop and refine business strategies.

Qualifications

Essential:

- Ph.D. in Environmental Geochemistry, Organic Geochemistry, or a related field.

Other requirements

Essential:

- Full driving licence

Desirable:

- First aid certificate

Performance dimensions

At a high level, GNS Science recognises six **performance dimensions**: three relate to technical capability, one relates to leadership (if applicable) and two relate to the *way* we work. Below are the general expectations that are the minimum standards expected of all staff. There are also expectations that specifically relate to the career step associated with the role; you can find these on GNS Online.

Technical capabilities

Scope, complexity and innovation

- Enduring commitment to maintaining and developing skills and knowledge in area of expertise.
- Both the ability and desire to apply appropriate rigour, principles and practices to deliver quality work in a cost-effective manner.
- Acts in a manner that conveys high personal and professional standards.
- Open to coaching and feedback – incorporates suggestions to find better ways of doing things (to improve own and GNS Science performance).

Contribution to GNS Science / profession

- Establishes and maintains effective and collaborative working relationships – with colleagues and external individuals and groups.
- Both the ability and commitment to work in a culturally responsive and inclusive manner; respecting and valuing the diverse perspectives of individuals and groups.
- Takes an interest in early career colleagues, graduates and students – provides coaching and/or mentoring as appropriate. Supports initiatives to promote science careers.
- Prevents harm to self and others by carrying out duties safely and responsibly.

Delivery of work

- The ability and commitment to deliver pieces of work and projects on time to required quality, cost and benefit parameters.
- The application of appropriate project management rigour, principles and practices to delivering quality projects in a cost-effective manner

Leadership

Leads from the front to foster a strong culture of collaboration and innovation and works effectively with other teams to achieve objectives.

Develops and manages the performance and capability of the team through effective coaching and development initiatives.

Sustains the capability and capacity of the team through effective planning and talent management.

Creates an inclusive working environment that values diversity and wellbeing.

Behavioural expectations

Manaakitanga – we do the right thing

Champions a positive working culture. Works and interacts with colleagues, external partners, stakeholders and customers in a way that is consistent with our values:

- We are **CONNECTED** in our purpose; with each other, with partners and stakeholders and with our communities.
- We are **INSPIRED** by our work to explore, challenge, innovate and aim higher.
- We are **EMPOWERED** to be our best – valued for our differences, encouraged to contribute and enabled to grow and develop.

Bicultural commitment

- As a Crown Research Institute, GNS Science is committed to partnering with iwi/hapū and Māori communities and agencies to achieve their science aspirations.
- We do this in a way that is culturally appropriate (**tikanga**) and honours Māori and non-Māori worldviews (**te ao**).

These expectations are intended to support and guide the development of individual staff.