

Position Description

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Position Title	Research Fellow
Group/Portfolio	Griffith Sciences / Centre for Planetary Health and Food Security
Classification	Research Fellow, Grade 1 (RF1)
Position Number	00061746
Reports To	Associate Professor Susan Bengtson-Nash
Employment Type	Fixed Term

1.0 Position Purpose

The Research Fellow position will sit within the Chemical Pollution theme of The Centre of Planetary Health and Food Security. The Research Fellow will be responsible for developing and optimising non-target and suspect screening methodologies for the detection of novel chemicals in Antarctic media via both GC- and LC-HRAM-MS instrumentation.

The research is associated with the project "Uncovering Antarctica's Secret Chemical Voyagers for Expedited Regulation", which is funded by an Australian Research Council Discovery grant. Specifically, this research will apply state-of-the-art chemical forensic approaches to expand knowledge regarding mobile and persistent Chemicals of Emerging Arctic/Antarctic Concern (CEACs). The research is part of an international collaboration between Griffith University (A. Prof Susan Bengtson Nash), the University of Queensland (Dr. Xianyu Wang), NILU - Norwegian Institute for Air Research (Dr. Pernilla Bohlin-Nizzetto, Dr. Pawel Rostkowski and Dr. Martin Schlabach), and Environment Canada (Dr. Derek Muir). The successful applicant will play a leading role in laboratory analyses and schedules, will mentor PhD students, and will prepare presentations for conferences and manuscripts for publication.

2.0 Eligibility Requirements

 The occupant of this position will hold a PhD in analytical (and/or environmental) chemistry, specialising in non-target and suspect screening with high or ultra-high resolution mass spectrometry (GC- and/or LC- approaches).

3.0 Key Responsibilities

- Optimisation of environmental sampling approaches (air and water) for deployment in Antarctica.
- Management of Antarctic shipments and consignments including international permitting requirements.
- Optimisation of non-exclusive extraction procedures for broad spectrum analysis of airborne and waterborne chemical contaminants.
- Performance of LC- and GC-based separation techniques, coupled with high or ultrahigh-resolution accurate mass - mass spectrometry (HRAM-MS).

- Identification of chemicals using a portfolio of existing (or own-developed) structure elucidation tools and methodologies
- Develop a good publication record in high impact, international, esteemed peerreviewed journals and to seek competitive funding.
- Manage the preparation and formulation of publications, presentations and research reports arising from the research.
- Assist in mentoring and supervision of higher degree research candidates.
- Support compliance with relevant legislation and University policies and procedures, including research ethics, equity, quarantine and health & safety, laboratory standards and exhibit good practice in relation to same.
- Be a leading example of the principles and values embodied in the University's Code of Conduct, and behave, act and communicate at all times to reflect fairness, ethics and professionalism.

4.0 Key Capabilities

Griffith University identifies the attributes of resilience, flexibility, creativity, digital literacy and entrepreneurship as critical to our graduates' success, in the rapidly changing future world of work. We have established a Griffith University Capability Development Framework to provide a common language of some of the non-technical organisation skills that will support our staff to thrive now and into the future. The Capability Development Framework will assist you to understand the current skill level of this position in the non-technical but critical skill domains that are increasingly important in a changing workplace context.

To read about some of the non-technical organisation skills for this position, please see the Leads Self section of our <u>Capability Development Framework</u>.