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| Position Title | Research Fellow, Soil Scientist - Phosphorus |
| Group/Portfolio | Sciences/ School of Environment and Science/ARI |
| Classification | Research Fellow Grade 1 |
| Position Number | 00063779 |
| Reports To | Dr Chris Pratt |
| Employment Type | Fixed term |

1.0 Position Purpose

Phosphorus is a critical element fuelling all life at the cellular level. It is a crucial commodity in food production. However, there are enormous risks around 1) its ongoing supply – relating to supply bottlenecks – and 2) its environmental footprint. Recently, experts have pointed to the prospects of utilising existing soil phosphorus reserves as a way forward to minimise these risks.

This position will explore novel approaches to maximise soil legacy phosphorus in agricultural production. The experiment-based role will focus on four main research themes:

- Developing sensors to track and understand phosphorus and plant signalling compounds in the soil environment.
- Evaluating the effectiveness of stable soil amendments (e.g., biochar, zeolites, clays, gypsum) in regulating plant phosphorus availability.
- Assessing the efficacy of soil microbial enrichment in supporting phosphorus use efficiency in soil.
- Elucidating the key soil geochemical controls on phosphorus mobility and bioavailability with a particular focus on soil pH and redox potential.

2.0 Eligibility Requirements

- The occupant of this position will hold a PhD or equivalent qualifications/work experience in a relevant field.

3.0 Key Responsibilities

- Conduct laboratory work in collaboration with other project participants as required on the project.
- Manage and contribute towards the preparation and formulation of publications, figures, presentations and research reports arising from the research.
- Coordinate activities with other program participants to ensure effective team communication and collaboration throughout the lifetime of the project.
- Develop and maintain a good publication record in high impact, international, esteemed peer-reviewed journals,.
- Assist with the development of research proposals.
- Assist in the mentoring and co-supervision of PhD students.

- Promote compliance with relevant legislation and University policies and procedures, including research ethics, equity 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/Others section of our [Capability Development Framework](#).