Griffith UNIVERSITY
Queensland, Australia

Position Description

Position Title	Research Fellow in Soil Microplastics
Group/Portfolio	School of Environment and Science
Classification	Research Fellow Grade 2
Position Number	00063666
Reports To	Distinguished Professor Chengrong Chen
Employment Type	Fixed Term

1.0 Position Purpose

The Research Fellow will undertake research on developing standard methodologies / protocols for measuring microplastics in soil, water, compost and waste samples. This position is funded by the Solving Plastic Waste CRC.

The Research Fellow is expected to have excellent analytical chemistry or environmental chemistry skills and to be able to work both independently and in a team environment within the Soil Environmental Biogeochemistry Research Group at Griffith University. This Research Fellow will also be required to work and communicate effectively with external research and industry partners. This role offers an excellent opportunity to interact with other researchers within the Solving Plastic Waste CRC and to develop diverse research expertise and to pursue broader personal and professional development through industry interaction, publications and student supervision.

2.0 Eligibility Requirements

- PhD in Analytical Chemistry, Environmental Chemistry, Soil Science, or a related field.
- Experience with sample collection and processing, pretreatment, identification and quantification of microplastics in soil, compost, water and waste samples.
- Analytical skills in using FTIR Microscope, or pyrolysis GC MS or Laser Direct Infrared (LDIR) imaging, or Optical Photothermal IR

3.0 Key Responsibilities

- Develop standard protocols for collection, processing and pretreatment of soil, water, compost and waste samples for extraction, identification and quantification of microplastics.
- Compare different procedures and techniques for analysis microplastics such as FTIR Microscope, pyrolysis GC MS, Laser Direct Infrared (LDIR) imaging, Optical Photothermal IR or Raman spectroscopy.
- Development a practical framework for assessing environmental risk of microplastics using available protocols/ techniques.
- Deliver the SPW CRC milestones in a timely manner and prepare and submit the CRC quarterly and final reports.

- Coordinate the regular CRC project and steering committee meetings.
- Engage and communicate effectively with the industry and research partners.
- Prepare and publish high quality research outputs in peer-reviewed journals and present at national and international conferences.
- Assist in training and supervising PhD students or research assistants.
- Be able to work collaboratively and effectively in a team environment as well as independently.
- Ensure 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 Others section of our Capability Development Framework.