

Position Description – Lecturer in Hydrogeology

Updated 18 May 2023

POSITION DETAILS	
College	College of Science and Engineering
Organisational Unit	National Centre for Groundwater Research and Training (NCGRT)
Supervisor	Director, NCGRT
Classification	Academic Teaching & Research (Balanced) Level B
Employment Type	Fixed-term, full-time (3 years with the possibility of extension)

POSITION SUMMARY
<p>The Lecturer will, under routine to general supervision, contribute to quality research, and the planning and delivery of undergraduate and/or postgraduate teaching and short course training to external industry delegates in the hydrogeology discipline.</p> <p>The teaching component includes the development of innovative teaching materials, multi-mode teaching delivery, including face to face and online, and other innovative and contemporary teaching and learning strategies, appropriate for the discipline.</p> <p>The research component is externally grant funded and will initially involve numerical modelling of mining environments and the development of pit lakes following mine closure. This may involve flow, transport and/or reactive transport simulations. The incumbent will make independent high-quality contributions to research in this and other fields, through quality publications, contributing to external grant submissions and research student supervision.</p> <p>The incumbent will also contribute to strengthening existing partnerships or exploring new partnerships with external stakeholders that have potential for providing improved teaching, learning and/or research outcomes for the University.</p>

UNIVERSITY EXPECTATIONS AND VALUES
<p>All staff at Flinders are responsible for understanding their obligations and responsibilities as set out in the University's code of conduct and are expected to:</p> <ul style="list-style-type: none"> demonstrate commitment to the University's values of Integrity, Courage, Innovation, Excellence and the underlying ethos of being Student Centred; contribute to the efficient and effective functioning of the team or work unit in order to meet the University's objectives. This includes demonstrating appropriate and professional workplace behaviours, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisor; promote and support an inclusive workplace culture which values diversity and embraces the principles of equal opportunity; perform their responsibilities in a manner which reflects and responds to continuous improvement; and familiarise themselves and comply with the University's Work Health and Safety, Injury Management and Equal Opportunity policies. <p><i>A National Police Certificate which is satisfactory to the University will be required by Flinders University before the successful applicant can commence in this position.</i></p> <p><i>An up to date COVID-19 vaccination may be required as a condition of employment, in accordance with the Flinders University COVID-19 Vaccination Policy (2022). If required, any offer of employment will be subject to</i></p>

the successful candidate presenting their COVID-19 Digital Certificate as evidence of vaccination or showing evidence of a valid medical exemption, where relevant.

KEY POSITION RESPONSIBILITIES

The Lecturer in Hydrogeology is accountable for:

- Contributing to the planning and delivery of ethical, high quality and innovative research through activities such as quality publication and contributing to external grant submissions. Initially, this research will contribute to existing projects in areas of groundwater modelling and mining hydrogeology, funded through the Australian Research Council and the CRC for Transition in Mining Economies.
- Designing, developing and delivering external professional development courses for the National Centre for Groundwater Research and Training (NCGRT) industry training program in consultation with the Centre Director.
- Contributing to the organisation, planning, delivery and evaluation of teaching primarily within the suite of undergraduate and/or postgraduate topics in the BSc Environmental Science and the postgraduate courses "Groundwater Hydrology" and "Water Resources Management". This may include topic coordination, delivery of lectures, tutorials, laboratories or contributions through other contemporary teaching strategies.
- Delivering inspiring and innovative teaching informed by approaches that enhance the student experience and support students with academic and/or other challenges impeding their academic progress.
- Actively participating in high performing multi-disciplinary teams with an education and research focus and contribute to the development of a respectful, trusting and collaborative working environment.
- Developing and maintaining strategic relationships and networks with a range of stakeholders including industry and professional associations and organisations.
- Some out of hours work (including weekends) as well as rural SA, interstate and overseas travel, may be required.
- Actively contribute to the integration and management of aspects of the academic and administrative life of the College.
- Any other responsibilities in line with the level of the position as assigned by the Supervisor and/or the University.

KEY POSITION CAPABILITIES

- Completion of a PhD in Water Resources Engineering, Groundwater, Civil Engineering, Environmental Engineering, Water Resources or an equivalent qualification.
- Evidence of a strong research track record (for career stage) in an area aligned with research strengths in hydrogeology, including evidence of quality publications and ability to attract external competitive grants.
- Strong technical skills in numerical flow and/or transport modelling.
- A broad knowledge of Australian groundwater issues and the capacity to interact with and contribute positively to a broad range of the research activities of the NCGRT (see www.groundwater.com.au) and more generally the earth and environmental sciences staff in the College (www.flinders.edu.au/science_engineering/environment/).
- Experience in scientific programming (e.g. Python) and data visualisation. (Experience in high-performance computing is desirable.)
- Demonstrated understanding of the nexus between teaching and learning, research and scholarship.
- Demonstrated ability to undertake high quality teaching in a tertiary environment, including involvement in topic coordination. (Expertise in delivery of short courses to industry delegates would be advantageous.)
- Demonstrated excellent oral and written communication skills and interpersonal skills, including the demonstrated ability to establish effective relationships with staff, students and industry.
- Demonstrated experience and successful track record in supervision of honours and higher degree students (Desirable).

