



# Position Description

Postdoctoral Research Associate  
School of Civil and Environmental Engineering

Never Stand Still

Human Resources

<b>Level:</b>	<b>A</b>	<b>Date:</b>	<b>June 2016</b>
<b>School/Unit:</b>	<b>Civil and Environmental Engineering</b>	<b>Faculty/Division:</b>	<b>Engineering</b>
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## POSITION SUMMARY

The position objective is to contribute towards research efforts in the field of water engineering supporting the fluid mechanics and hydraulic engineering research group at WRL. In addition the appointee will support the teaching of large undergraduate courses in particular in the development of teaching materials in blended learning format.

## ORGANISATIONAL ENVIRONMENT

### Overview of the Faculty/School/Divisional Work Unit

The School of Civil and Environmental Engineering comprises 48 academic staff, 120 research centre staff, and 26 professional and technical staff. Its recurrent income is about \$18M per annum, with a further \$15M in research income.

The position will be based at UNSW's Water Research Laboratory (WRL) in Manly Vale. WRL is Australia's largest coastal and hydraulics laboratory facility, with research, teaching, postgraduate student and professional consulting staff based at WRL comprising a major group within the UNSW Water Research Centre. The appointee will join an existing and dynamic Water discipline group with strengths in surface and groundwater hydrology, water quality, water treatment, coastal engineering, hydraulic engineering and environmental fluid mechanics.

### Statistics

The School has about 1,600 undergraduate students, 500 postgraduate coursework students and about 200 postgraduate research students. The School is one of the most active in research at UNSW.

### Reporting Relationships

Supervisor's title: Dr Stefan Felder

Other positions reporting to the supervisor: Research Associates

Positions reporting to this position: None

### **KEY DUTIES & RESPONSIBILITIES**

- Undertake novel research within the area of expertise supporting and strengthening the hydraulics and fluid mechanics research group at WRL
- Assist with the coordination of large undergraduate courses in fluid mechanics including student consultations, lab classes, assignments, field visits and exam marking.
- Assist with development of teaching materials for fluid mechanics course in blended learning format.
- Involvement in co-supervision of PhD, Masters and undergraduate thesis students.
- Conduct research under limited supervision either as a member of a team or, where appropriate, independently, and then produce co-authored research publications including journal papers and conference papers.
- Attendance at meetings associated with the area of research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

### **SELECTION CRITERIA**

- PhD in Water Engineering or related discipline.

- Strong theoretical knowledge of fluid mechanics evidenced in numerical and/or experimental research.
- Demonstrated capacity to conduct research evidenced by a solid track record of high-quality international peer-reviewed publications.
- Involvement in teaching of undergraduate fluid mechanics courses and interest in development of teaching materials in blended learning format.
- Excellent oral and written communication skills.
- Demonstrated ability to work independently and effectively and also as part of a research team.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.