

College/Division:	ANU College of Science
Faculty/School/Centre:	Research School of Earth Sciences
Department/Unit:	Geodynamics
Position Title:	Postdoctoral Fellow
Classification:	Level A
Position No:	TBC
Responsible to:	Louis Moresi
Number of positions that report to this role:	0
Delegation(s) Assigned:	N/A

PURPOSE STATEMENT:

The Research School of Earth Sciences is a leading centre of research in earth and environmental sciences in Australia. Our cutting-edge research is led by our 60 academic staff, and provides an unparalleled environment for high-quality research training of our 100 graduate students. Our people and facilities are also the foundation for our vision to deliver world-class research-led undergraduate teaching in the Earth sciences.

The Postdoctoral Fellow is expected to undertake work in all three areas of academic activity – research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the appointee's research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Postdoctoral Fellow may also be required to supervise or assist in the supervision of students and contribute cooperatively to the overall intellectual life of the School, College and University.

POSITION DIMENSION AND RELATIONSHIPS:

The Postdoctoral Fellow will be a member of Research School of Earth Sciences, accountable to Professor Louis Moresi and Director of the School. The Postdoctoral Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

Role Statement:

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

- Undertake independent research in the area of computational geodynamics and numerical algorithm development with a 1. view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, collaborate with other researchers at a national level, and disseminate software implementations to the broad community.
- 2. Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
- Contribute to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited 3. to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations, and with students or acting as subject coordinators.
- Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist 4. with supervision of research students.
- 5. Assist in supervising research support staff in the relevant research area.

- 6. Actively contribute to all aspects of the operation of the School.
- 7. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- 8. Maintain high academic standards in all education, research and administration endeavours.
- 9. Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
- 10. Demonstrate an understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- 11. Other duties as required that are consistent with the classification of the position.

Skill Base

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. A Level A academic will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

A Level A academic will normally contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. The contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

SELECTION CRITERIA:

- 1. A PhD (or awarding of a PhD within six months of appointment commencement) in geophysics, computational geodynamics or quantitative geological modelling, or equivalent qualifications and experience in a related area, with a track record of independent research in the field as evidenced by publications in peer-reviewed journals and conferences.
- 2. Evidence of the ability to articulate and prosecute innovative research in the field of computational geodynamics.
- 3. Evidence of the capacity to develop complex software applications in geodynamics and to support their promulgation to other researchers.
- 4. Expertise in computational frameworks for scalable parallel mathematical model development such as PETSc, PETSc4py or evidence of the ability to acquire expertise under self-direction.
- 5. An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
- 6. Evidence of an ability and willingness to teach at all levels and assist in the supervision of students working on research projects.
- 7. The ability to work as part of a team and to meet deadlines.
- 8. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- 9. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Delegate Signature:	Date:	
Printed Name:	Position:	

References:		
Academic Minimum Standards		