PhD Research opportunity in the School of Geosciences

Project description

This project is part of an Industry-funded grant and aims to simulate source-to-sink systems at global scale using the new numerical tool Gospl. It will consist in building new functionalities within the code and analysing models' outputs under different geological scenarios.
In collaboration with supervisors and industry partners, the candidate will oversee:

1. classical modelling activities (parameterisation/calibration/validation) with applications to specific continental margins,
2. improvements of numerical solutions to either increase the performance of the existing code or to build new functionalities, &
3. development of interactive workflows to ease quantitative comparisons between simulation results and complex geo-Earth datasets.

About you

You have a master's degree in Geosciences, Computer Sciences or related fields. Strong curiosity in the project's topic and strong interest in modelling and its combination with field data (experience in modelling and programming are of advantage). In addition, you will be interacting with our Industry partners and will have the opportunity to work with data scientists from the Sydney Informatics Hub (SIH). The SIH will offer courses on programming in Python, covering relevant know-how for the project, and provide broad, transferable skills for industry, government organisations or academia after the completion of the PhD.

Student experience

You will join a dynamic team of Earth scientists at the University of Sydney. We have a recognised track record in community software development, open-access data sets and virtual Earth modelling. We foster cross-disciplinary collaboration across a range of interests and research areas in Australia and overseas. Opportunities to attend national and international conferences are encouraged to disseminate scientific research and collaborate with researchers and industry partners.

Closing application date
28/09/21

How to apply
Follow this link.

More information
For further information and informal expressions of interest, please do not hesitate to contact the prospective academic supervisors
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