

## PhD Scholarship Position, University of Wollongong, Australia

A PhD Scholarship position is available in the School of Mathematics and Applied Statistics (SMAS) at the University Of Wollongong, to work in the area of statistical modelling for spatial environmental processes. The UOW scholarship is for three (3) years full-time, with a top-up scholarship available for outstanding candidates. The successful applicant will have the opportunity to work with both Australian and international collaborators, and funding is available for conference travel.

Applications are invited from domestic and international students who are able to commence their PhD studies at the University of Wollongong in 2017. Applicants should hold, or be close to completing an Honours 1 undergraduate degree or a Masters degree in Statistics or a closely related field with high GPA. The ideal candidate will have an interest in the development of statistical methodology, and the ability to develop skills in spatial statistical modelling of extremes and exceedances. The candidate will be self-motivated, with strong research potential, good programming skills, and good oral and written communication skills.

The project is motivated by the compelling need to predict the effect of changing greenhouse gas concentrations on Earth's atmosphere for political, social and economic decision making. It aims to develop statistical tools to improve prediction of environmental exceedances (locations where the environmental process of interest exceeds a given threshold). The successful applicant will investigate innovative methods for predicting exceedances for large, non-Gaussian spatial processes, based on output from multiple related scientific models. Computationally efficient modelling techniques will be required, that effectively model the tails of the distribution when there is spatial variation in uncertainty.

Please contact Dr Sandy Burden (sburden [at] uow.edu.au) for further information, or to apply for this position. Applications are due by 1st March 2017.