

## PhD Scholarship in biogeochemistry in Australia.

The role of tidal wetlands and shallow vegetated coastal systems as sources or sinks of greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O)

Despite coastal systems being important aquatic sources and sinks of greenhouse gases there are still significant gaps in understanding of carbon and nitrogen cycling in these systems, and the associated fluxes of greenhouse gases. This fully funded project will study a number of tidal wetlands or shallow vegetated coastal systems (i.e. large seagrass areas) along the east coast of Australia to determine if they are net sources or sinks of greenhouse gases, and the factors controlling these sources or sinks. This project will use a combination of different techniques such as stable isotopes, cavity ring down spectroscopy, floating chambers and benthic process measurements.

Applicants will need to have an Honours or Master degree, undertaken in English, in a related field such as biogeochemistry, environmental chemistry, or closely related. The project will involve extended periods in the field, including in boats, sometimes in remote areas. The PhD scholarship will provide a tax-free stipend of \$27,400 and tuition fees will be exempt. Interested applicants should send their CV highlighting their research background and interests in this area to Prof. Bradley Eyre – ([bradley.eyre@scu.edu.au](mailto:bradley.eyre@scu.edu.au)). Only short-listed applicants will be notified. Closing date August 16, 2019 although it may be extended longer if position is not filled. Starting date is flexible, but preferably by January 2020.

The project will be undertaken in the Centre for Coastal Biogeochemistry ([www.scu.edu.au/coastal-biogeochemistry](http://www.scu.edu.au/coastal-biogeochemistry)) at Southern Cross University which received the highest rank of 5.0, well above world average, in geochemistry in the most recent assessment of research excellence by the Australian government.