

## Reconstructing Ocean Acidification and its Impacts at High Resolution

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Atmospheric CO<sub>2</sub> increases since industrialisation have led to a 0.09 unit drop in the pH of surface oceans – a process known as ocean acidification (OA). Continued anthropogenic CO<sub>2</sub> emissions throughout the 21<sup>st</sup> century are projected to cause ocean pH to drop by 0.3 – 0.5 units. There are great concerns that projected OA will have detrimental effects on marine organisms and the resources they supply. Biogenic calcium carbonate is abundant in the marine environment where many marine invertebrates produce calcium carbonate structures. This research will calibrate marine calcifying organisms that are robust to OA as pH proxies and use them to reconstruct palaeo-pH at high resolution. Changes in pH will also be compared to changes in marine productivity.

This study will involve laboratory and mesocosm studies as well as some field work using SCUBA (not compulsory). The student will be based in the School of Geographical and Earth Sciences at the University of Glasgow.

### Application procedure and deadlines

To be considered for PhD studentships to be held in the School of Geographical and Earth Sciences (GES), suitably qualified candidates should apply via the website of the College of Science and Engineering

(<http://www.gla.ac.uk/colleges/scienceengineering/graduateschool/prospectivestudents/essentialinformation/>). Closing dates for University and research council funded studentships will be in early in the new year, as stated on the GES studentships page:

<http://www.gla.ac.uk/schools/ges/research/postgraduate/>.

Non- English speakers must meet the University's English language requirements. Candidates for NERC studentships should also meet the NERC's requirements for both academic qualifications and residential eligibility. For more information go to

<http://www.nerc.ac.uk/funding/application/studentships> and please note that *non-UK European Union citizens will be awarded fees only by NERC*.

For informal enquiries about the research projects please contact the relevant supervisors.

Information on the GES graduate school and the application process can be obtained from Mrs Jean McPartland, the assistant to head of the School ([Jean.McPartland@glasgow.ac.uk](mailto:Jean.McPartland@glasgow.ac.uk)).