Applications are sought for a fully-funded 4-year PhD position at the University of Glasgow. *Application deadline 15th January 2015* Please feel free to forward details to any potential candidates

PROJECT TITLE: Terrestrial Impact Craters: The 'Cradles of life'?

BRIEF DESCRIPTION:

This project will identify the molecular 'fingerprint' and origin of Earth's earliest carbon by reconstructing both the transfer of extraterrestrial carbon to the geological record and the alteration of terrestrial carbon during meteorite bombardment. These goals will be achieved through analysis of a suite of meteorites, samples from terrestrial impact craters, plus material from a series of laboratory hypervelocity impact experiments. The student will combine ultra-high resolution isotopic and spectroscopic analytical techniques and expertise from the biomedical, geological and engineering sciences at Glasgow University in an entirely novel approach that will isolate and identify carbon compounds, and their alteration, in meteoritic and geological samples at unprecedented levels of precision and accuracy. Results will be assessed by multivariate analysis and intelligent data mining methods in order to investigate the origins of Earth's earliest carbon cycle and the complex carbon forms essential for life. Answering these questions will transform our understanding of carbon in 'Deep Time' and will allow us exciting new insights into the environment of the Hadean and Achaean Earth, which, despite comprising over 50% of Earth's history, remains its most poorly understood component.

The studentship will cover maintenance grant costs at the research council recommended rates (£14,002), and a research budget of up to £5300 per annum.

Further information about the project is given under 'Science and Engineering' at:http://www.gla.ac.uk/services/postgraduateresearch/scholarships/kelvinsmith/shortlistedscholarshipprojects/#d.en.240419

APPLICANT PROFILE:

We seek dynamic candidates, able to function across disciplines, but with sound laboratory and analytical skills. Applicants should hold, or expect to obtain, a minimum of a UK Undergraduate Honors Degree at 2:1 level or equivalent (e.g. Bachelor's degree with good GPA) in a relevant discipline (e.g. Geology, Earth Science, Chemistry).

HOW TO APPLY:

Interested applicants should contact Dr. Philippa Ascough (philippa.ascough@gla.ac.uk) in the first instance.

Full details of how to apply for the position using the University of Glasgow online application system are given

at:http://www.gla.ac.uk/colleges/scienceengineering/graduateschool/scholarships/kelvinsmithscholarship/

Please note that applications should include a statement expressing your particular attributes and/or achievements and suitability to undertake the proposed project.