



# SEAHA

CENTRE FOR DOCTORAL TRAINING IN  
SCIENCE AND ENGINEERING IN  
ARTS HERITAGE AND ARCHAEOLOGY

## **SEAHA Studentship: Mortars for controlling moisture problems in damp towers**

The EPSRC Centre for Doctoral Training in Science and Engineering in Arts, Heritage and Archaeology at University College London, University of Oxford and University of Brighton ([www.seaha-cdt.ac.uk](http://www.seaha-cdt.ac.uk)), in collaboration with English Heritage and the Churches Conservation Trust, are seeking applications for one fully funded studentship on the topic “Mortars for controlling moisture problems in damp towers”. Funded by the Engineering and Physical Sciences Research Council (EPSRC) through the Centre for Doctoral Training and co-funded by English Heritage, the four year doctoral research programme will be supervised jointly by University of Oxford School of Geography and the Environment (<http://www.geog.ox.ac.uk/>), EH Buildings Conservation and Research Team (<http://www.english-heritage.org.uk/professional/research/buildings/>), and the Churches Conservation Trust (<http://www.visitchurches.org.uk/>).

Many historic buildings in exposed locations such as the south west of England suffer from damp problems caused by driving rain which can be complex to manage and solve. Tall buildings or those on elevated sites are particularly vulnerable. English Heritage has already carried out extensive research on these problems in the form of the ‘Damp Towers’ project which provides the starting point for this studentship (<http://www.english-heritage.org.uk/professional/research/buildings/building-environment/damp-towers/>). The Damp Towers project looked at grouting and rendering as potential solutions, but did not evaluate the potential role of pointing mortars. The overall aim of the studentship is thus to evaluate the best pointing mortar mixtures and placement methods to reduce driving rain damage. The doctoral project will address two broad research questions:

1. How does driving rain interact with different re-pointing mortars?
2. How can we improve knowledge, skills and practice to maximise the performance of good re-pointing mortars?

The project will involve an innovative range of techniques to assess the impact of mortars based around a sequence of lab experiments, field experiments, monitoring real damp towers and modelling. The student will work closely with heritage professionals and scientists and the exceptionally interdisciplinary nature of the project will provide excellent all-round training and preparation for a wide range of future career paths including academia, conservation and industry.

As a SEAHA student, you will enrol at UCL to complete the MRes SEAHA and then transfer to University of Oxford. You will have unparalleled access to research infrastructure and expertise across three universities and almost 50 heritage, research and industrial partners. In addition to the university doctoral training requirements, SEAHA students take part in an exciting range of cohort activities, ranging from residential events and group projects, to conferences and careers events. Please visit the SEAHA website ([www.seaha-cdt.ac.uk](http://www.seaha-cdt.ac.uk)) for details.

You will have a good first degree in a relevant discipline: preferably building science, engineering, conservation, archaeology, geographical or environmental science.

SEAHA is a Doctoral Training Centre at University College London (UCL), University of Oxford, and University of Brighton. SEAHA is funded by the Engineering and Physical Sciences Research Council (EPSRC).



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For further details contact Professor Heather Viles ([heather.viles@ouce.ox.ac.uk](mailto:heather.viles@ouce.ox.ac.uk)).

The SEAHA Studentship will cover home fees and a stipend of up to a maximum of £16,726 per year (current rate) for eligible applicants (<http://www.seaha-cdt.ac.uk/opportunities/eligibility-criteria/>), and a substantial budget for research, travel, and cohort activities.

The application should include:

- A covering letter clearly stating your motivation
- The UCL graduate application form which can be downloaded via UCL's web site: <http://www.ucl.ac.uk/prospective-students/graduate/apply/apply-now/ucl-graduateapplication-form.pdf>
- Two academic references
- A copy of your degree certificate(s) and transcript(s) of degree(s),
- Proof of meeting the UCL English language proficiency requirements where necessary.. For SEAHA candidates, an advanced level certificate is normally required (details of English language proficiency requirements can be found at <http://www.ucl.ac.uk/prospectivestudents/graduate/apply/english-language/index>)
- A short research proposal (max. 2000 words) written by taking into consideration the above research questions.

The award will be subject to a Grant Agreement between UCL, University of Oxford, English Heritage and the Churches Conservation Trust.

The applications should not be submitted by UCL online admissions system. Instead, they should be sent directly to:

SEAHA Manager  
[manager@seaha-cdt.ac.uk](mailto:manager@seaha-cdt.ac.uk)  
UCL Centre for Sustainable Heritage  
Faculty of the Built Environment  
UCL  
14 Upper Woburn Place  
London WC1E 0NN

UCL Taking Action For Equality.

Application deadline: 16 July 2014; interviews: 23 July 2014.

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