

Department	School of Applied Sciences
Job Status	Full Time PhD Studentship
Contract Type	Fixed Term 3.5 years

Applications are invited from those who wish to pursue a PhD on:

**Responses of Aquatic Invertebrates to Underwater Sound Across
Different Life History Stages**

This internally funded PhD studentship is available at the School of Applied Sciences at Edinburgh Napier University. Many aquatic animals use sound for communication, navigation and predator detection. Levels of introduced anthropogenic underwater sound have increased significantly over the last century and man-made noise is now recognized as a significant marine and freshwater pollutant. The responses of most aquatic invertebrate taxa (and communities) to noise are poorly understood, yet respective information is needed to advise regulatory bodies and the government on the effects of noise.

The proposed PhD project will investigate the effects of natural and anthropogenic sounds on selected ecologically and/or commercially important invertebrate species and join our team in underwater sound research. The research will be conducted in the AquaLab at Edinburgh Napier University and at the St Abbs Marine Station, and could also involve a fieldwork component. We will address short-term and longer-term effects and study different life history stages, including the vulnerable early ones. Response parameters will involve e.g. behaviour, growth, metabolism and gene expression. Edinburgh Napier University is a member of MASTS, the Marine Alliance for Science and Technology for Scotland (www.masts.ac.uk) and a partner of the St Abbs Marine Station on the Scottish East coast (www.marinstation.co.uk). The project will be supervised by Dr Karen Diele and involve further internal and external research collaborations.

The successful candidate will benefit from an extensive training programme at Edinburgh Napier University to support your professional development. The student will also engage with MASTS, which provides additional education and training to ensure that PhD students gain the full complement of skills required to achieve the best in their future careers.

The stipend is £15,220 p.a. and tuitions fees are fully covered for UK and EU students. Non-UK/EU residents are also eligible, providing they cover the difference between the home/EU and overseas tuition fees. Candidates whose first language is not English must meet the University's English language requirements.

The ideal candidate will:

- have a strong interest in aquatic biology and in researching a topic relevant to conservation and environmental change mitigation
- hold a master degree (or international equivalent) in a relevant field such as marine or freshwater biology, fisheries biology, environmental biology, or ecology. A first or upper second class undergraduate honours degree will also be considered
- have experience with aquarium set-ups and cultivation methods and a basic knowledge of molecular biological techniques
- have a solid background in experimental design and good data analysis skills
- be scientifically curious and creative and have excellent communication and scientific writing skills
- be highly organised and self-motivated
- have a full driving license or would be willing to obtain one

Start Date: The studentship would ideally begin 1st of February 2017

Application Deadline: Sunday 13th November 2016

Interviews are expected to take place on Tuesday 29th November

Edinburgh Napier University is committed to supporting equality in the workplace and encourages diversity. We currently hold a bronze Athena SWAN institutional award.

Contact: For informal enquiries about the PhD project, please contact **Dr Karen Diele** (k.diele@napier.ac.uk)

To apply, please email your CV and your completed application form (RD1 form):

<http://www.napier.ac.uk/~media/documents/research-documents/application-form-rd1.ashx?la=en>

to Hilary Sawers at h.sawers@napier.ac.uk by midnight on the closing date.

