BANGOR UNIVERSITY

Post Title:Lecturer in Forest SciencesSchool:School of Natural SciencesGrade:Grade 7 or 8Salary:£34,304 - £50,296 p.a.Contract duration:PermanentClosing date:4th January 2022Link to job description and application details here

ADVERT TEXT

Bangor University is a leading UK and international academic centre in the field of forest sciences, with a strongly upward trajectory. To maintain and grow our record of excellence, we invite applications to a full-time, permanent lectureship in forest sciences. We welcome applicants with expertise in forest inventory, assessment and monitoring (especially the application of advanced remote sensing technology and the analysis and modelling of the resulting geo-spatial 'big data'). The focus of their teaching and research at Bangor will be to use this expertise to advance scientific understanding of the world's forest resources to underpin their sustainable management and deliver on key international policy objectives. We are seeking to put Bangor at the forefront of international research to enhance the crucial role of forests in mitigating and adapting to climate change, conservation of biodiversity, and delivery of the full range of other ecosystem services. We place an emphasis on 'whole-systems' assessment, not just at the ecosystem level but also up to the scale of the landscape, socio-ecological systems and the forest products value chain.

The post holder will have a PhD in a relevant subject area and we welcome applicants with expertise from a variety of backgrounds, whether this be in the domain of forestry or other fields of applied science related to forest ecosystems. Bangor's research and teaching in forestry has a global perspective so candidates may have experience of any forest types across the range from tropical to temperate and boreal, from moist to dry, and from natural forests to plantations, urban forests or agroforestry.

The successful candidate will be expected to make a strong contribution to our existing ethos of collaborative research and teaching, team work and multidisciplinarity. We place a high value on excellent interpersonal skills. They will enhance and complement our existing areas of expertise specifically in forestry but also across environmental, conservation and biological sciences. The post holder will develop a research programme in their specialist discipline that will attract external funding, and generate high-quality outputs, international recognition and impact. They will also be enthusiastic to make an important contribution to teaching the key subject of forest inventory, assessment and monitoring, and supervise student projects, at undergraduate and postgraduate levels. For this post a strong interest in engagement with external stakeholders will be key. This may include the government agency Forest Research which has its Wales national headquarters in Bangor University. The successful candidates will be expected to commence by 01 June 2022 or as soon as possible thereafter.

Informal enquiries can be made by contacting Professor John Healey, Professor of Forest Sciences (<u>i.healey@bangor.ac.uk</u>) or Professor Nia Whiteley, Head of School (<u>n.m.whiteley@bangor.ac.uk</u>).

Applications will only be accepted via our on-line recruitment website, <u>https://jobs.bangor.ac.uk/</u>.

Committed to Equal Opportunities

Overview:

Bangor University has an open and dynamic atmosphere in which ambitious academics thrive. The University is located in one of the most beautiful parts of the UK, adjacent to the Snowdonia National Park in the midst of a landscape of sea, mountains, forests and unspoiled countryside. The city of Bangor is also well connected to metropolitan areas in the UK with direct train services to London, Manchester, Birmingham and Cardiff, and by road via the A55 North Wales expressway.

The University was established in 1884 and currently has over 11,000 students. It comprises 9 Academic Schools grouped in 3 colleges. The College of Environmental Sciences and Engineering has over 2300 students and 350 teaching and support staff. It comprises the Schools of Natural Sciences, Ocean Sciences and Computer Science and Electronic Engineering, and the Biocomposites Centre. The Schools of Natural Sciences and Ocean Sciences have a world-class reputation for research and teaching in environmental sciences, natural resources, soil science, ecology, conservation and zoology, with forest science identified as a distinctive key strength. We have one of the largest concentrations of multidisciplinary environmental and natural resource scientists of any UK university. A notable feature is our strong multidisciplinary groups, which foster inter-disciplinary research, build on our existing strengths and enable us to respond to the needs of policy makers, society and industry, through strong pathways to impact via our global networks. A distinctive ethos of the College is its linkage between environmental sciences and electronic engineering - of key importance for new technology to enhance capacity for forest inventory and monitoring.

During the past ten years Bangor University has also received major strategic government investment to increase research capacity, excellence and impact across the broader field of geo-environmental science and technology, totalling > \pounds 12 million, and is commencing a major development programme to enhance the building infrastructure of the Deiniol Road Science Site, in which the School of Natural Sciences is located, with a major focus on low carbon energy research.

The Bangor forestry group and its research

The forestry group comprises 12 academic staff, with other Bangor staff working in fields, such as conservation, microbiology, environmental and human geography, hydrology and wood science, closely associated with the group. More than 20 PhD students are researching forest projects and form the core of our frequent forest research seminars.

The group is carrying out high-profile research across a range of subjects, with an important inter-disciplinary component, including:

- tropical and temperate forest ecology, biogeochemistry and soil function; forest resilience and restoration
- biophysical and socio-economic aspects of agroforestry systems and nontimber forest products (linking to food security)
- forest conservation including the impact of forest operations and effectiveness of conservation interventions (from both biodiversity and social equity considerations)
- broad applications of remote sensing, in particular lidar, to inventory and monitoring of forest structure, biomass, dynamics and management
- tree pathogen microbiology and mitigation of disease impacts
- applications of molecular ecology to forest science
- impacts of forest management, agroforestry and land use change on water resources
- landscape-scale modelling of deforestation and forest degradation impacts on biodiversity and ecosystem function
- economic and systems modelling of ecosystem service delivery
- social science of forest governance, management (including participatory forest management) and wildlife (including rewilding).

A key link that we are restrengthening, to enable full system assessment of the forest production value chain as a key component of the circular bioeconomy, is to the University's Biocomposites Centre, which specialises in biorenewable products, with a strong tradition in wood science. The forestry group also plays a prominent role in the University's recently established <u>Sir William Roberts Centre for Sustainable Land</u> <u>Use</u>, which addresses the need to develop integrated approaches to environmental and socio-economic sustainability across land uses at the landscape scale.

Key cross-cutting themes are:

- climate change mitigation through forest carbon sequestration and wood products
- elevated CO₂, climate change and disturbance impacts on forest ecosystems.

We have very strong national and international networks that play a key role in facilitating Bangor's forestry research and education. Bangor University is a partner in the Natural Environment Research Council <u>Doctoral Training Partnership</u> <u>'Envision'</u>, with Lancaster and Nottingham Universities and three other research organisations, that is funding multiple PhDs in tropical and temperate forest sciences, many based in Bangor. Bangor University leads the <u>Low Carbon Energy</u> <u>and Environment Research Network Wales</u>. Of rapidly growing importance is our partnership with the Central South University of Forestry and Technology in Hunan,

China (where Bangor University has its China campus), which is fostering a rapidly expanding set of collaborative research projects (including access to their large research forest). In addition, we have well-established collaborative partnerships with both the <u>World Agroforestry Centre (ICRAF</u>) and the <u>Tropical Agricultural</u> <u>Research and Higher Education Center (CATIE</u>), resulting in many joint PhDs, as well as project collaboration with the <u>Center for International Forestry Research</u> (<u>CIFOR</u>). We are members of the International Union of Forest Research Organisations (IUFRO), the European Forest Institute (EFI) and the UK's forest industry confederation (CONFOR).

Forestry students and teaching at Bangor

Bangor University is both the first and largest educator of students in the forestry subject area in the UK, spanning a big group of PhD students, full-time and part-time distance-learning MSc degrees, and BSc degrees. These are characterised by highly motivated cohorts of students, many with considerable existing experience. Our teaching is highly innovative, with many new opportunities. Bangor's excellence in education in forestry is recognised by its overall ranking of 3rd in the UK for Agriculture and Forestry and 1st for teaching quality and student experience (Times/Sunday Times Good University Guide 2021).

At the MSc level, our part-time distance-learning degrees in Forestry, Tropical forestry, and Agroforestry and food security have experienced an increase in recruitment of more than 100% over the past ten years up to a current level of 70 students per year. The Commonwealth Scholarship Commission has recently renewed its award of prestigious MSc studentships for the highest quality applicants, recognising the international leading status of our degree programmes. Delivery of these innovative degrees is blended with our full-time MScs, including the long-established course in Environmental Forestry. We are strategically strengthening our teaching in urban forestry and food security. A notable feature is the composition of the student body on our MSc degrees, which is highly international (from more than 20 countries across 5 continents), including many professionals from government forest departments, NGOs and research organisations, creating excellent opportunities for collaboration.

At the BSc level our degrees in Forestry, and Conservation with forestry have a more UK focus, yet attract a student intake with a notably global perspective on the subject. Bangor alumni are becoming increasingly prominent in leading positions across the whole range of forestry/woodland organisations in UK and worldwide. Student recruitment averages 25 per year. We are introducing a new BSc degree in Woodland management and conservation, targeting the crucial need to bridge between forestry and other land use sectors. At Bangor College China we teach a highly successful and expanding BSc degree in Forestry and environmental management.

We have a very active student-led society (the Bangor Forestry Students Association). Our <u>biennial newsletters</u> communicate developments in forestry@bangor to our outstanding network of forestry alumni and other stakeholders.

Bangor as a location for forestry research and education

Bangor is a major institutional location for environmental sciences and natural resources management. One of the four units of the UK Centre for Ecology and Hydrology is located on the university campus, forming the joint <u>Environment Centre</u> <u>Wales</u> with the School of Natural Sciences, which also hosts the Wales Head Office of the Forest Research agency. The Welsh Government's Natural Resources Wales agency (responsible for conservation, environmental regulation and management of the public forest estate) has one of its largest offices and scientific centres in the City. We have a growing portfolio of collaborative research with all these partners.

Bangor is adjacent to the Snowdonia National Park and within 30 km there is a wide diversity of different forest ecosystems providing excellent opportunities for research and education. These include the <u>Bangor DIVERSE</u> tree diversity experiment and large silvopasture experiment at the University's <u>Henfaes Research Centre</u>; the adjacent internationally important Coedydd Aber woodland National Nature Reserve (an EU Special Area of Conservation); and the 15 ha of high canopy forest, including ancient woodland, at the University's <u>Treborth Botanic Garden</u> on the outskirts of the City of Bangor. Henfaes is a unique research and teaching resource in the UK, comprising 252 ha of land encompassing the environmental gradient from the sea to amongst the highest mountains in Wales, giving a high diversity of habitats, land uses, climates, and geology.

Further information

If you want to discuss this opportunity you are welcome to contact John Healey, Professor of Forest Sciences (<u>i.healey@bangor.ac.uk</u>; <u>https://www.bangor.ac.uk/natural-sciences/staff/john-healey/en</u>) or Professor Nia Whiteley, Head of the School of Natural Sciences (<u>n.m.whiteley@bangor.ac.uk</u>).

Purpose of the Job:

We are seeking to appoint a full-time, permanent lecturer who will develop and complement our existing international reputation for excellence in forest sciences. We welcome applicants with expertise in forest inventory, assessment and monitoring (especially the application of advanced remote sensing technology and the analysis and modelling of the resulting geo-spatial 'big data'). The focus of their teaching and research at Bangor will be to use this expertise to advance scientific understanding of the world's forest resources to underpin their sustainable management and deliver on key international policy objectives. We are seeking to put Bangor at the forefront of international research to enhance the crucial role of forests in mitigating and adapting to climate change, conservation of biodiversity, and delivery of the full range of other ecosystem services. We place an emphasis on 'whole-systems' assessment, not just at the ecosystem level but also up to the scale of the landscape, socio-ecological systems and the forest products value chain.

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The main duties will include:

• To teach at undergraduate and postgraduate levels, including supervision of projects.

To conduct research of an international standard in a relevant field, with substantial, with substantial evidence of quality and international peer recognition.
To provide pastoral and academic support to undergraduate and postgraduate students.

• To conduct administrative tasks as designated by the Head of School.

Information on Main Duties and Responsibilities and Person Specification:

These can be found here.