

# ABERDEEN

### **Lecturer/Senior Lecturer in Decommissioning** Geophysics School of Geosciences

**Closing date:** Interview date: твс GEO363A **Reference number:** 

6 June 2019













#### Introduction



The University seeks a Lecturer/Senior Lecturer in Decommissioning Geophysics as part of its National Decommissioning Centre (NDC), a multi-million-pound research and development facility for decommissioning and late life-life asset management.

The NDC was established in 2018 through a partnership between the University of Aberdeen and the Oil & Gas Technology Centre (OGTC), and with funding from the UK and Scottish Governments. It builds on the original proposal within the Aberdeen City Region Deal to leverage the combined capabilities of academia, industry and other organisations to help create competitive advantage in decommissioning within the global energy sector.

The National Decommissioning Centre is based at Newburgh, Aberdeenshire, and includes state-of-the-art engineering laboratories and hangar space for the design and development of decommissioning technology, as well as a suite of environmental commercial testing facilities. At the heart of the Centre is the Decommissioning Immersive Collaborative Environment (DICE), a high-tech digital visualisation suite designed to enable collaboration.

The research programmes within the NDC spans a range of disciplines and schools within the University including: Engineering, Biological Sciences, Natural & Computing Sciences, Law, Geosciences and the Business School, which together represent the breadth of research expertise relating to decommissioning and late-life asset management. Researchers and post graduate students from across the constituent disciplines will be located in the Centre, along with industry partners creating an innovative model for academic-industry, interdisciplinary collaboration.

The OGTC-sponsored Lecturer in Decommissioning Geophysics within the School of Geosciences will focus on geophysical exploration and monitoring using fibre-optic cables in so-called Distributed Acoustic Sensors (DAS), in order to increase efficiency during extraction, to be employed permanently in wells for post-abandonment monitoring and to provide continuous information for risk assessment. This appointee will ideally develop links between their research and active research and industrial development in the distributed sensor technology sector. The successful candidate will obtain funding from industry and research funding agencies to support their research. Collaboration with industry is expected to acquire new datasets to push the boundaries of what is possible with this emerging technology, by modifying existing geophysical processing techniques and by developing new ones to extract as much information from DAS as possible in surface, undersea and well deployments. More broadly, the post will provide an opportunity to determine through geophysical research an unbiased perspective on what is "best" for the environment and society in terms of decommissioning and development of new energy technologies while ensuring safety of sea users and other stakeholders. As such, the appointee will contribute to UK competitiveness in the global decommissioning market both in education and the knowledge-driven economy. There is a clear opportunity to build knowledge within the decommissioning industry from its experience in the UK continental shelf and translate this to worldwide basins that are becoming mature and moving towards decommissioning.

The appointee will also facilitate interdisciplinary teaching at the University of Aberdeen. The cross-School MSc in Decommissioning is a multi-disciplinary course and aims to align with overseas markets so that the NDC becomes fully international in scope and a participant in a global knowledge-driven economy. The appointee would also be expected to contribute to teaching on the undergraduate and postgraduate geophysics programmes in the School of Geosciences. The Aberdeen MSc. Geophysics programme was launched in September 2014 and has enrolled 36 students over its 5-year existence. It is building a strong external reputation across academia and industry, building income, status and growth, It has recently been awarded a scholarship from BP and benefits from an industry advisory board. The

focus of the programme is to educate students via research-led teaching in the broadest aspects of fundamental geophysics. Graduated students have a very high employment rate, in: i) the energy industry; ii) near-surface geophysics; iii) digital technology and; iv) continuing their education as PhD researchers. Application of geophysics to decommissioning will likely form a growth employment area, and the appointee will lead research-led teaching in this area.









### **Job description**

#### Main purpose of the role:

This position will primarily enhance existing research excellence in the School of Geosciences through high profile publications and high-impact research resourced from externally-funded projects, particularly in relation to UK Industrial Strategy Funding, Global Challenge Funding or commercialisation activities. The aim is to build on existing expertise in the NDC and in the School through geophysical monitoring approaches applied to decommissioning. This is aligned with the University's institutional commitment to directing its research profile towards interdisciplinary challenge-orientated research. Consequently, the successful candidate should have, or rapidly develop, strong international orientation to their research. This broad remit would apply at both Lecturer and Senior Lecturer levels, though the expected levels of experience and achievement would be greater for the latter.

#### Key responsibilities:

#### Lecturer/Senior Lecturer in Decommissioning Geophysics

- Development or enhancement of an internationally-leading research profile through an externally funded programme in decommissioning geophysics
- Publication of 3\*/4\* papers in internationally-leading journals to contribute to the University REF return
- Delivering research with non-academic impact and high-profile public outreach
- Evolving a thematic research group of post-doctoral fellows and PhD students that will complement the existing strengths within the School
- Commitment to developing inter-disciplinary geophysical research initiatives across the university
- Commitment to developing collaborations with other leading national and international groups in Universities and research institutions
- Delivering teaching in geophysics courses at undergraduate and postgraduate levels.
- Input into the development of the geophysics courses and associated materials, ensuring the courses are relevant and up to date
- Contribution to the development of the School and University, including the promotion and advocacy of research and teaching within geophysics

For further information, please refer to the Person Specification.

We encourage applications from candidates representing a broad range of career stages, backgrounds and gender identities. The Department of Geology & Petroleum Geology currently holds a Bronze Athena Swan award and is committed to further improve its representation diversity.



#### At a glance

Salary:

£40,792 - £48,676 per annum

Hours of work:

Full time

Contract type:

Substantive

### **Candidate background**

The successful candidate will have an outstanding emerging or existing research profile in geophysics with a commitment to publication in leading international scientific journals and a PhD in geophysics or a related area. The candidate will be committed to developing their existing research profile through challenge-orientated research projects in collaboration with other staff in the NDC, the School of Geosciences and elsewhere in the University. The appointee's research portfolio will have a strong applied orientation focused on understanding and tackling decommissioning challenges. The appointee will be committed to delivering high-impact research that is publicised through outreach activities, and will be a team player able to lead and participate in larger, complex interdisciplinary research projects

#### **Terms of appointment**

For appointments at Lecturer level, salary will be at the appropriate point on the Grade 7 salary scale (£40,792 - £48,676 per annum). For appointment made at Senior Lecturer level, salary will be at the appropriate point on Grade 8 salary scale (£51,630 - £58,089 per annum) and negotiable with placement according to gualifications and experience.

Any appointment will be made subject to satisfactory references and a 3 year probation period.

For further information on various staff benefits and policies please visit <u>www.abdn.ac.uk/staffnet/working-here</u>

Should you require a visa to undertake paid employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship and Tier 2 visa. As appropriate, at the time an offer of appointment is made you will be asked to demonstrate that you fulfil the criteria in respect of financial maintenance and competency in English. Please do not hesitate to contact Heather Clark, HR Adviser on +44 (0)1224 273244 or email h.m.clark@abdn.ac.uk for further information.









# **Person specification**



	Essential	Desirable
Education/Qualifications Academic, technical and professional education and training	<ul> <li>PhD in geophysics or related science/engineering</li> <li>Good knowledge of the broad field of geophysics, its research needs and directions.</li> </ul>	<ul> <li>Using innovative geophysical approaches to monitor environmental processes</li> <li>Formal Higher Education teaching qualification and/or Fellowship of the Higher Education Academy</li> </ul>
Work and Other relevant experience (including training) eg Specialist knowledge, levels of experience, supervisory experience, research	<ul> <li>Expertise in geophysics with high level of awareness of issues in the decommissioning industry</li> <li>Record of publications in peer-reviewed international journals (commensurate with career stage)</li> <li>Presentation of research at high profile international conferences</li> <li>Strong research profile with ability to develop, secure income for and lead research projects (commensurate with career stage)</li> <li>Experience of managing research projects and supervising PhD students (for Senior Lecturer)</li> </ul>	<ul> <li>Experience in the development of taught courses at undergraduate or postgraduate level</li> <li>International recognition through invited lectures, nominated UK expert, research visits, honours, etc. (for Senior Lecturer).</li> </ul>
Personal qualities and abilities eg initiative, leadership, ability to work on own or with others, communication skills	<ul> <li>Outstanding communication skills to provide excellence in teaching and research in the areaAbility to contribute to the life of the NDC, the School and the University and to relate well to staff and students</li> <li>Ability to think critically and to work independently and as part of a team environment</li> </ul>	<ul> <li>Ability to bridge the boundaries between academic research, industry and societal needs</li> <li>Ability to present complicated scientific work across a range of media</li> <li>Excellent networking skills in order to develop strong relationships with partners, academics and researchers from other institutions</li> </ul>
Other eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.		<ul> <li>Willingness to travel and participate in international research projects.</li> <li>Willingness to contribute to residential undergraduate and post- graduate field trips.</li> </ul>

### **The University**



Founded in 1495, Aberdeen is Scotland's third oldest University and the fifth oldest in the UK. Ranked within the world top 160 in the Times Higher Education Rankings 2019 and named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019. Aberdeen is 'open to all and dedicated to the pursuit of truth in the service of others'.

Aberdeen is a broad based, research intensive University, which puts students at the head of everything it does. It has significant academic strengths and potential across a wide variety of disciplines. Outstanding in a wide range of discipline areas, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies.

The University has over 14,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges, inspires and helps every individual to reach their full potential.

The University combines a distinguished heritage with a forward-looking attitude. In the past few years, the University has encouraged creativity in its academic staff, broken new ground with an innovative curriculum, and developed state-of-the-art facilities including the new Sir Duncan Rice Library and the Aberdeen Sports Village and Aquatics Centre. In looking to the future, the University seeks to enhance its reputation as one of the world's leading Universities by moving forward with ever more ground-breaking research; ensuring students have an intellectual and social experience second to none; and capitalising upon the dual role as one of the major institutions of the north and as a cornerstone of regional economic and cultural life.

## The city and the region

#### Aberdeen and Aberdeenshire

With a population of approximately 230,000, the city stands between the Rivers Dee and Don. This historic city has many architectural splendours and the use of its sparkling local granite has earned Aberdeen the name of the Silver City. Recognised as the oil capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live.

Aberdeen enjoys excellent communication services with other European cities - e.g. flying time to London is just over one hour with regular daily flights. There are direct air links to London (City, Gatwick, Heathrow, and Luton), Manchester, Birmingham, Leeds, Southampton, Belfast and East Midlands within the U.K. There are also flights to international hub airports: Amsterdam (Schiphol) and Paris (Charles De-Gaulle) as well as flights to other European destinations. http://www.aberdeenairport.com Road and rail links are also well developed.

The Grampian Region which took its name from the Grampian Mountains has a population of approximately 545,000. It is made up of five districts – Aberdeen, Banff & Buchan, Gordon, Kincardine & Deeside and Moray. The city and the surrounding countryside provide a variety of urban, sea-side and country pursuits. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the Aberdeen Exhibition Centre, Museums, and Beach Leisure centre. Within a short time, beach pursuits, equine activities, salmon, trout and sea fishing, hill-walking, mountaineering, golf, sailing, surfing and windsurfing can be reached. The city and the surrounding countryside are repeatedly given high ratings for quality of life in surveys.

Aberdeenshire is one of Scotland's most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen and Aberdeenshire cater for a wide range of tastes in sporting and cultural activities.

To find out more about Aberdeen and Aberdeenshire go to www.visitabdn.com









### How to apply



Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 6 June 2019

Should you wish to make an informal enquiry please contact Professor David Jolley, Head of School 01224 272894 <u>d.jolley@abdn.ac.uk</u>

or

Dr Clare Bond 01224 273492 <u>Clare.bond@abdn.ac.uk</u>

Please do not send application forms or CVs to Professor Jolley or Dr Bond

#### Please quote reference number GEO363A on all correspondence

The University pursues a policy of equal opportunities in the appointment and promotion of staff.