



Research Fellow in Data Sharing National Decommissioning Centre

Closing date: 10 July 2020

Interview date: TBC

Reference number: ENG155R



Introduction

The National Decommissioning Centre (NDC) is a multi-million pound research and development facility for decommissioning and late life-life asset management.

The National Decommissioning Centre (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. The Centre 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 objectives of the NDC are:

- To be a global leader in research and development that transforms oil and gas decommissioning and mature field management
- To be a focal point for all R&D activity in relation to late life and decommissioning – developing a platform to store and disseminate information on R&D activity through collaboration
- To create a Hub and spoke model across the UK to other researcher partners
- To ensure effective and efficient collaboration with industry and other stakeholders
- To help create R&D capacity and capability across the hub and spokes

The NDC, based in Newburgh, Aberdeenshire, includes a high-tech digital visualisation suite designed to enable collaboration, state-of-the-art engineering laboratories and a hangar space for the design and development of decommissioning technology, as well as a suite of environmental commercial testing facilities. The most recent investment has been in a state-of-the-art, real-time, real-physics marine simulator with a 300-degree immersive environment and 4 control stations. The simulator is funded partly by the Scottish Government's Decommissioning Challenge Fund (DCF) and partly by the Centre itself and is being supplied by the Offshore Simulation Centre AS in Aalesund, Norway (<https://osc.no/>) who will provide ongoing support and collaboration. The system is capable of simulating and displaying in real-time the interaction between vessels, cranes, remote operated vehicles, structures and the seabed with realistic environmental conditions for wind, wave current etc.



Job description

Main purpose of the role:

The post is supported by the Scottish Government's Decommissioning Challenge Fund and is aimed at investigating the use of the University's SafeHaven data repository (for health data) for use as the basis for data sharing to enhance collaboration and reduce costs in decommissioning. Currently, there is little advanced visibility of the data required by the supply chain to undertake decommissioning projects before a tender is opened by an operator.

The role will see you being responsible initially for undertaking stakeholder engagement and scoping to ascertain the data provisions required for the industry and the current landscape in terms of existing data repositories, their contents, curation and access. This will be followed by assessing what will be curated in the new repository and assessing the applicability of the University's current SafeHaven data repository to support this. The final stage will be to build a demonstrator database with relevant access levels/protocols.

Other opportunities will include working with staff and students at the NDC and the Oil and Gas Authority to develop a "Smart Basin" concept using the simulator to visualise relevant data from the database across the entire UK continental shelf to assist in decision making.

You will work closely with Ms Katie Wilde, Research IT Manager, Professor Wamberto Vasconcelos in Computing Sciences and the NDC team, to champion the use and development of the simulator. You will interact extensively with industry and must have good interpersonal and communication skills as well as a high level of technical ability in modelling/simulation. You will have a PhD in a relevant topic e.g. computing science, artificial intelligence, statistics, mathematics. You should also be able to evidence working effectively in a multi-disciplinary team.

At a glance

Salary:

£33,797 per annum

Hours of work:

Full Time

Contract type:

Available for 12 months

Key responsibilities:

Research Fellow

1. Stakeholder Engagement

- Undertake stakeholder engagement and scoping to ascertain the data provisions required for the industry.

2. Data Collection and Curation

- Understand the current landscape in terms of existing data repositories, their contents, curation and access.
- Build a demonstrator database to showcase to the industry.
- Meet with potential NDC anchor/project partners and research collaborators to demonstrate and provide an overview of the capabilities of the developed database and discuss potential applications.
- Link with the OGA funded Smart Basin project to provide data curation expertise

3. Infrastructure and Services

- Provide the primary interface between the NDC and IT services for the data repository project.

4. General

- Undertake regular update training to ensure up-to-date knowledge of the required software and hardware
- Pro-actively develop links with those in similar roles within the University of Aberdeen and at other universities and research institutions.
- Participate in a regular Staff Development Review

Candidate background

We are looking for a candidate with experience in digital research, including technologies, methodologies, and approaches to and management/curation of large data sets. The ideal applicant will have sound technical knowledge, and also a reasonable knowledge of the oil and gas sector. The role requires someone who is good at problem solving, with excellent customer facing abilities. Programming and software development skills will also be useful in this role.



Terms of appointment

Salary will be paid at the rate of £33,797 per annum on Grade 6 of the University Salary Scale. For individuals in the final stages of completing their PhD consideration will be given to making an appointment at Research Assistant level on Grade 5 of the University salary scales.

As this post is funded by the Scottish Government Decommissioning challenge Fund it is available for 12 months.

Any appointment will be made subject to satisfactory references and a 12 month probation period.

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

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 Global Talent 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 h.m.clark@abdn.ac.uk for further information.

Person specification

	<i>Essential</i>	<i>Desirable</i>
Education/Qualifications	<ul style="list-style-type: none"> Honours degree in a relevant subject e.g. physics, engineering, naval architecture etc PhD (or near completion) in relevant topic e.g. computing science, artificial intelligence, statistics, mathematics 	
Work and Other relevant experience (including training)	<ul style="list-style-type: none"> Experience of digital research, including technologies, methodologies, and approaches, management/curation of large data sets, digital experiment design, design and implementation of automatic (large-scale) experimental analysis and evaluation Experience of data structures Able to develop questionnaires and undertake interviews 	<ul style="list-style-type: none"> Knowledge/experience of security protocols Programming skills Knowledge/experience of a Trusted Research Environment Knowledge of the oil and gas sector
Personal qualities and abilities	<ul style="list-style-type: none"> <i>Customer driven service-oriented outlook and approach.</i> <i>Excellent interpersonal skills.</i> <i>Excellent written & verbal communication skills.</i> <i>Ability to work under own initiative, individually or as part of a multi-disciplinary team.</i> <i>Ability to work effectively in a busy environment and deliver to a schedule.</i> 	<ul style="list-style-type: none"> <i>History of working in teams and alone to resolve issues and deliver projects and work packages</i>
Other	<ul style="list-style-type: none"> The post holder may need to undertake short trips within the UK to undertake interviews etc. 	

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 Oil and Gas Technology Centre

Launched in February 2017, the Oil & Gas Technology Centre is a not-for-profit, research and knowledge company, which aims to become the go-to technology centre for the oil and gas industry in the UK and globally.

With £180 million funding from the UK and Scottish Governments, through the Aberdeen City Region Deal, the Centre inspires and accelerates innovation, co-investing in industry-led projects to take new technologies from concept through to deployment in the oil field.



Its goals are to unlock the full potential of the UK North Sea, anchor the supply chain in North-East Scotland, and create a culture of innovation that attracts industry and academia to the region.

The city and the region

Aberdeen and Aberdeenshire

Aberdeen is world renowned as the oil capital of Europe and the region is both the agricultural heartland of Scotland and a hub of the food and drink industry.

With the population approaching 230,000, Aberdeen is big enough to provide all the advantages of city life, yet compact enough to enjoy the more intimate atmosphere usually associated with small towns.

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.VisitScotland.com

How to apply

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

The closing date for receipt of applications is 10 July 2020

Should you wish to make an informal enquiry please contact Richard Neilson (Director of NDC) by telephone on 01224274407 or email r.d.neilson@abdn.ac.uk or Ms Katie Wilde by telephone on 01224 437044 or email k.wilde@abdn.ac.uk or Professor Wamberto Vasconcelos by telephone on 01224 272283 or email w.w.vasconcelos@abdn.ac.uk or

Please do not send application forms or CVs to the above named individuals

Please quote reference number ENG155R on all correspondence

The National Decommissioning Centre welcomes a diverse working environment and recognises the benefits this can bring. The NDC is keen to receive applications from individuals from across all of the equality protected characteristics (race, gender, disability, gender reassignment, age, sexual orientation, religion/belief, pregnancy/maternity, marriage/civil partnership).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found here:

<https://www.abdn.ac.uk/staffnet/working-here/flexible-working--5607.php>

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award. The University is also a Stonewall Diversity Champion to further LGBT equality and a Disability Committed Employer recognising our commitment to supporting disabled staff and students.

<https://www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277.php>