Senior Lecturer/Reader/Professor in Geophysics
School of Geosciences

Closing date: 10 November 2019
Interview date: TBC
Reference number: GEO380A
Introduction

The University seeks to expand its research and teaching capabilities by appointing a Senior Lecturer/Reader/Professor in Geophysics

The School of Geosciences at the University of Aberdeen seeks to recruit a Senior Lecturer/Reader/Professor to the geophysics team. The appointee will play a major role in the strategic development of geophysics research and teaching in Aberdeen, by growing their own research programme and contributing to postgraduate and undergraduate teaching in geophysics. The applicant could specialise in any area of geophysics, although the School is particularly keen to add expertise and experience in industry-facing geophysics research.

Geophysics research and teaching in the School of Geosciences is undertaken in the Departments of Geology & Petroleum Geology, Geography & Environment and Archaeology, e.g. solid Earth and exploration geophysics, near-surface geophysics for subsurface fluid-flow imaging, archaeo-geophysics and environmental monitoring. Existing strengths of the Aberdeen geophysics group include passive seismology, quantitative seismic interpretation, hydrogeophysics, gravity and magnetics, basin modelling, lithosphere dynamics, rock physics and seismic image analysis. The School is well-equipped and successful centre for geophysics research, with a growing PhD student population and research profile. Current externally funded research projects support the work of 5 FTE geophysics academic staff, 1 post-doc and 14 PhD students. The School houses the Aberdeen University Geophysical Equipment Repository (AUGER), an equipment pool comprising 10 Güralp 6TD seismometers, Geode seismic reflection/refraction, Geoscanners multi-antenna GPR, IRIS resistivity tomography, Leica dGPS and Geometrics total field magnetometers, with associated processing/modelling software. The School has a dedicated seismic analysis and interpretation facility (SeisLab), housing numerous industry-standard software packages and access to the University’s High Performance Computing (HPC) cluster, Maxwell.

We seek to build on these strengths, successes and facilities through interdisciplinary research that has the potential to deliver impact in many areas of fundamental geophysics research, including the areas of hydrocarbon, mineral extraction, shallow investigation or other industry-focussed geophysics applications. The successful individual will bring the experience necessary to drive the geophysics group to future growth and success in research, research impact, knowledge transfer and teaching in these or complementary areas. Applicants with expertise in any field of geophysics are welcome but there is a particular interest in those with demonstrable expertise in methods that can be integrated with seismological analyses.

Commensurate with the appointment grade, the role will provide research leadership to the growing geophysics group in Aberdeen and contribute to enhancing the delivery of existing MSc and BSc Geophysics degree programmes. To date, Aberdeen has launched both a successful MSc and a new undergraduate programme in geophysics. The Aberdeen MSc Geophysics programme commenced in September 2014, has recently been awarded industry scholarship and benefits from an industry advisory board. It has a strong external reputation in academia and industry and attracts a solid stream of excellent students. The focus of the programme is to educate 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. The undergraduate BSc Geophysics degree started in 2017 and runs in parallel with the BSc. Geology and Physics programmes until years 3 and 4, after which it includes dedicated geophysics modules.
Job description

Main purpose of the role:
This position will enhance existing research excellence in the School of Geosciences through high profile publications and high-impact research resourced from externally-funded projects, including funding from industry. The aim is to build on existing geophysical and cross-disciplinary expertise to address industry challenges. This is aligned with the University’s institutional commitment to directing its research profile towards interdisciplinary challenge-orientated research.

Key responsibilities:

Senior Lecturer / Reader / Chair in Geophysics

- Development of an internationally-leading research profile through an externally funded research programme in geophysics
- Publication of 3*/*4* papers in internationally-leading geophysics journals to contribute to the University REF return
- Delivering research with academic and non-academic (e.g. industrial) impact and high-profile outreach
- Commitment to developing collaborations with other leading national and international groups in universities and research institutions
- Delivering teaching in geophysics courses at undergraduate and/or 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
- Leading a thematic research group of post-doctoral fellows and PhD students that will complement the existing strengths within the School (Chair)
- Commitment to lead inter-disciplinary geophysical research initiatives across the University (Chair)

At a glance

Salary: Negotiable
Hours of work: Full time
Contract type: Substantive
**Candidate background**

The successful candidate will have an outstanding existing research profile in geophysics with a commitment to publication in leading international scientific journals. The appointee will have a PhD in geophysics or a related area. They will have a commitment to further developing this through challenge-orientated research projects in collaboration with other staff in School of Geosciences and elsewhere in the University. The appointee’s research portfolio will ideally include an applied orientation to understanding and solving industry challenges and will be designed for delivering impactful research that is publicised through outreach activities. The appointee will be a team player with the potential or proven ability to lead interdisciplinary research projects.

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.

**Terms of appointment**

For appointments made at Senior Lecturer/Reader level, salary will be paid at the appropriate point on Grade 8 salary scale (£52,559 - £59,135 per annum).

A competitive remuneration package will be available for exceptional candidates considered at Professorial level.

Any appointment will be made subject to satisfactory references

For further information on various staff benefits and policies please visit [www.abdn.ac.uk/staffnet/working-here](http://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 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](mailto:h.m.clark@abdn.ac.uk) for further information.
## Person Specification

### Education/Qualifications
**Academic, technical and professional education and training**
- PhD in geophysics or related science
- Expert knowledge of the broad field of geophysics
- Formal Higher Education teaching qualification and/or Fellowship of the Higher Education Academy
- Expert knowledge of geophysics applied to industry challenges, its research needs and directions.

### Work and Other relevant experience (including training)
**e.g. Specialist knowledge, levels of experience, supervisory experience, research**
- Demonstrable record in leading research in specialist area.
- Strong research profile with ability to develop and lead complex multi-sector research projects.
- Excellent record of publications in peer-reviewed international journals.
- Record of research funding and managing/contributing to major research projects (commensurate with level).
- Experience of university teaching and supervision of students.
- Experience in the administration of academic affairs or similar experience in industry.
- Potential to develop industrial applications from geophysical techniques and modelling.
- Experience in commercialisation of research output (e.g. knowledge transfer, consultancy, spin-out company development).
- Demonstrable record of research funding from industry.
- Experience in geophysics course development/improvement at both undergraduate and postgraduate level.

### Personal qualities and abilities
**e.g. initiative, leadership, ability to work on own or with others, communication skills**
- Excellent written, oral and presentation skills.
- Ability to present complicated scientific work across a range of media.
- Ability to bridge the boundaries between academic research and industry needs. International recognition through invited lectures, nominated UK expert, research visits, honours, etc.
- Excellent skills to develop strong relationships with industry partners and/or with academics and researchers from other institutions.

### Other
**e.g. special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements 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 that 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, seaside 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 10 November 2019

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

Please do not send application forms or CVs to Professor Jolley

Please quote reference number GEO380A on all correspondence

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