



Geomagnetism Scientist

UKRI – NERC – BGS

The Lyell Centre, Edinburgh

£24,435 to £26,560 per annum (depending on qualifications and experience)

Full-Time – 37 hours a week (a range of flexible working options may be available)

Fixed Term Appointment (12 months)

About us

The British Geological Survey (BGS) is an applied geoscience research centre that is housed in UK Research and Innovation (UKRI) and affiliated to the Natural Environment Research Council (NERC). It is a world leading geological survey that provides a core science mission to inform government of science related to the subsurface and its interfaces and also undertakes applied research for solutions to earth and environmental processes, both in the UK and globally. It is funded directly by UKRI as well as through research grants and via private sector contracts.

BGS has an annual budget of approximately £60 million and employs 650 people. It has two main sites, a head office in Keyworth near Nottingham and the Lyell Centre, which is a joint collaboration with Heriot Watt University in Edinburgh. BGS works with more than 150 private sector organisations as well as having close links with 40 universities and sponsors approximately 100 PhD students each year.

We have an opportunity for a talented and motivated scientist to join the BGS Geomagnetism Team based in our offices in Edinburgh which are located on the Heriot Watt University campus.

About the role

The [Geomagnetism Team](#) undertakes long-term monitoring of the Earth's magnetic field through the operation of magnetic observatories in the UK and overseas. We use worldwide land, marine, airborne and satellite data to make global models describing how the Earth's magnetic field changes in space and time and what that reveals about physical processes within the solid Earth.

We also research the magnetic field changes in satellite and observatory data that result from space weather and solar activity and how this impacts modern technology. We apply our science in precision navigation, including directional drilling for oil and gas as well as researching the impact of space weather on ground-based technology and our environment.

The primary tasks of this role will be to:

- Contribute to the team's activities in processing data from the BGS magnetic observatories by carrying out quality control checking and helping to maintain the automated real-time delivery of high quality data and data products to both scientific and commercial users.



- Contribute to the team's provision of geomagnetic hazard and space weather services by participating in the space weather and geomagnetic activity daily forecast.
- Support, where appropriate, scientific research into the space weather impact on ground based systems ([SWIGS Project](#)).

You will also be expected to:

- Provide support to scientific and IT colleagues working on existing and new developments for the improvement of geomagnetic hazard and space weather services and other applications in geomagnetism.
- Participate in scientific outreach to customer groups and the general public, as and when required.

About you

Candidates should have a BSc (Hons) in Geophysics, Space Science, Physics, Mathematics or a similar relevant discipline. Candidates should be able to demonstrate a working knowledge of scientific computing languages or packages (e.g. FORTRAN, C, Java, Python, Matlab, GMT, R) as well as data analysis.

The post would suit a self-motivated person with excellent communication skills and who is willing to be an active team player. The post holder must be able to attend the Edinburgh office during normal business hours.

Please refer to the specific essential and desirable skills criteria for this post.

What we offer

A generous benefits package is also offered, including a very competitive pension scheme, 30 days annual leave plus bank holidays, free parking and access to flexi-time. For a salary at the top end of the advertised range, you will also need to meet the desirable criteria detailed on the TopCareer.jobs website.

We also offer the 'Bike to Work' scheme, free parking, health and wellbeing support, social clubs and on-site sports facilities.

Please note that any internal BGS staff applying for this post would, if successful, be appointed to new UKRI Terms and Conditions and pay.

How to Apply

Applicants are required to include a cover letter outlining their suitability for this role. We would stress the importance of this paperwork in our selection process. **A well thought through application addressing the advertised essential and desirable criteria for the post will be considered far more favourably than a generic covering letter and CV.**

Applications are being handled by UK Shared Business Services, to apply please visit our job board at http://www.topcareer.jobs/Vacancy/irc248383_9179.aspx



Applicants who are unable to apply online should contact us by telephone on +44 (0)1793 867000.

Closing date for receipt of applications is 10 March 2019. Interviews will take place in early April 2019 in Edinburgh.

BGS provides a range of flexible working options including flexible working patterns, compressed hours and home working so if you have a need for flexibility, please raise this in the recruitment process when your needs, balanced with the requirements of the role, will be fully considered.

We are committed to promoting equality and diversity across our organisation as well as across all areas of our science community. As such, we aim to have a workforce with employees from all backgrounds with people who are passionate about earth science and who share our commitment to work for the good of the environment and the benefit of society.

We will actively seek to avoid discrimination on the grounds of age, being or becoming a transsexual person, being married or in a civil partnership, being pregnant or on maternity leave, disability, race (including colour, nationality, ethnic or national origin), sex or sexual orientation.

The British Geological Survey is an Investors in People organisation and has achieved Bronze status for Athena SWAN – a scheme that recognises an organisation's commitment and progress in developing a diverse and inclusive workforce.



Specific Skills Criteria		
	<i>Essential</i>	<i>Desirable</i>
QUALIFICATIONS	<ul style="list-style-type: none"> BSc (Hons) in Geophysics, Space Science, Physics, Mathematics or a similar relevant discipline Scottish Higher or A-Level in Mathematics or evidence of a similar capability 	<ul style="list-style-type: none"> Geomagnetism or space weather research and modelling experience



EXPERIENCE	<ul style="list-style-type: none"> • Familiarity with scientific data analysis techniques • Experience in scientific computer programming 	<ul style="list-style-type: none"> • Experience in analysing geomagnetic and/or space science time series data
KNOWLEDGE	<ul style="list-style-type: none"> • Demonstrable programming skills in one or more scientific computing languages or packages (e.g. FORTRAN, C, Java, Python, Matlab, GMT, R) • Competence in using personal computers and standard Microsoft Office applications 	<ul style="list-style-type: none"> • Demonstrable understanding of the Earth's magnetic field • Experience of working on Linux-based computers or on other non-windows based operating systems
SKILLS AND ABILITIES	<ul style="list-style-type: none"> • Ability to present work clearly to experts and non-experts alike • Effective written, spoken and presentational communication skills • Ability to work unsupervised, prioritise work effectively and meet tight deadlines 	<ul style="list-style-type: none"> • Demonstrates the ability to solve problems • Full driving licence
PERSONAL QUALITIES	<ul style="list-style-type: none"> • Ability to work well in a team context and to liaise closely with colleagues • Demonstrates a clear ability to pay close attention to detail 	<ul style="list-style-type: none"> • Logical and methodical in your approach to tasks
MOTIVATION	<ul style="list-style-type: none"> • Demonstrates an interest in the work of Geomagnetism, BGS, NERC and UKRI • Displays an enthusiasm for science and a strong desire to develop this further 	<ul style="list-style-type: none"> • Demonstrates curiosity and a drive to resolve scientific problems • Evidence of self-motivation

