

**University of St Andrews**  
**School of Earth and Environmental Sciences**  
**Research Fellow – AR2839RDO**  
**Further Particulars for Applicants**

**School of Earth and Environmental Sciences**

The School of Earth & Environmental Sciences is home to 20 permanent academic faculty, a cohort of roughly 12 postdocs, 24 PhD students and a number of secretarial and technical support staff. Research topics span from the formation of terrestrial planets to the origin and evolution of life, modern climate change, and the exploration of natural resources.

Analytical facilities include the StAGE laboratory comprising a recently installed Agilent 8800 QQQ-ICPMS, Nu Plasma MC-ICPMS plus a laser ablation setup. Other analytical facilities include a Neptune MC-ICPMS, Nu Sapphire MC-ICPMS, two MAT-253 IRMS, a Delta Plus XP IRMS with peripherals, a Trace 1310 ISQ GC-MS, and two class 100 clean rooms; XRD, XRF, 514nm Raman and NIR-ATR spectroscopy, and reflected and transmitted-light microscopes and a recently installed electron microprobe. Through the St Andrews Centre for Advanced Materials we access TEM, X-, W- and Q-band ESR, XP and NMR spectroscopy plus multi-laser Raman micro-mapping.

We collaborate with the European Marine Biology Research Centre, Scottish Oceans Institute and Marine Alliance for Science and Technology for Scotland. Several members of staff, as well as their students and postdocs, are actively involved in the St Andrews Centre for Exoplanet Science. We also have competitive-based access to the UK's national laboratories including the Diamond synchrotron and NERC cosmogenic isotope, radiocarbon, isotope geoscience and ion microprobe facilities. The School is a member of the Iapetus 2 NERC Doctoral Training Partnership.

Our undergraduate teaching centres on three accredited BSc Honours degrees: Geology, Environmental Earth Sciences and MGeol in Earth Science. We also run joint BSc Honours with Biology and Chemistry and two MSc courses, one in Geochemistry and the other in Strategic Earth Resources. In the national League Tables of UK Geology/Earth Science degrees, the School consistently ranks in the top 5, and our graduates have some of the highest levels of employability across the University.

**The job description for this role is attached below.**

## Job Description

Job Title: Research Fellow	Working Hours: Full time / 36.25 hours per week
School/Unit: School of Earth & Environmental Sciences	Grade/Salary Range: Grade 6 / Salary: £ 37,099 - £40,521 per annum
Reporting to: Dr Nicholas Gardiner, Senior Lecturer	Reference No: AR2839DO
Responsible for: Research; optionally MSc student supervision	Start Date: 1 October 2024, or as soon as possible thereafter.
Job Family: Academic Research	
Duration of Post: Fixed term until 14 January 2027	

### Main Purpose of Role

This contract is for a fixed term as it is dependent on external funding. As such, the need for the post will cease to exist when funding runs out.

This fixed term post is funded by the Leverhulme Trust, and the successful candidate will be primarily focused on delivery of the project "*Testing a new concept for critical metal enrichment in Late Archean granites*". They will develop and integrate both empirical and modelling approaches to build new petrogenetic models for the formation of economically critical mineral deposits, and disseminate these findings both to the academic community and to the wider mineral exploration community.

### Key Duties and Responsibilities

1. Analytical method development and analysis
2. Fieldwork in southern Africa
3. Petrological modelling
4. Integration of results to build new models for the formation of granite-hosted mineral deposits
5. Assisting with PhD and MSc student projects
6. Curating analytical results and metadata
7. Publication of results at conferences and in scientific papers

*Please note that this job description is not exhaustive, and the role holder may be required to undertake other relevant duties commensurate with the grading of the post. Activities may be subject to amendment over time as the role develops and/or priorities and requirements evolve.*

## Person Specification

This section details the attributes e.g. skills, knowledge/qualifications and competencies which are required in order to undertake the full remit of this post.

<b>Attributes</b>	<b>Essential</b>	<b>Desirable</b>	<b>Means of Assessment</b> (i.e. application form, interview, test, presentation etc)
Education & Qualifications <i>(technical, professional, academic qualifications and training required)</i>	Doctorate in Earth Science/Geochemistry		Application form, interview
Experience & Knowledge <i>(examples of specific experience and knowledge sought)</i>	Experience with LA-ICPMS.  Background in high temperature geochemistry and mineralogy.	Knowledge of thermodynamics and phase equilibria modelling  Understanding of granite-hosted mineralisation processes.  Fieldwork experience.  Experience of mineral exploration.	Application form, interview
Competencies & Skills <i>(e.g. effective communication skills, initiative, flexibility, leadership etc)</i>	Demonstrated ability to publish results of scientific research in relevant international journals.  Initiative to pursue project ideas.	Interpersonal skills commensurate with supporting academic and administrative colleagues together with the demonstrated ability and willingness to work in a collaborative environment.	Application form, interview
Other Attributes/Abilities  (if applicable)	Good communicator, well organized.		Application form, interview

**Essential Criteria** – requirements without which a candidate would not be able to undertake the full remit of the role. Applicants who have not clearly demonstrated in their application that they possess the essential requirements will normally be rejected at the short-listing stage.

**Desirable Criteria** – requirements which would be useful for the candidate to hold. When short-listing, these criteria will be considered when more than one applicant meets the essential requirements.

### Other Information

This post will/may be primarily based at the School of Earth and Environmental Sciences, St Andrews.

We encourage applicants to apply online at [www.vacancies.st-andrews.ac.uk/welcome.aspx](http://www.vacancies.st-andrews.ac.uk/welcome.aspx)

For all applications, please quote ref: **AR2839RDO**.

Equality, diversity and inclusion are at the heart of the St Andrews experience. We strive to create a fair and inclusive culture demonstrated through our commitment to diversity awards (Athena Swan, Carer Positive, LGBT Charter, Race Charters and Stonewall). We celebrate diversity by promoting profiles of BAME, LGBTIQ+ staff and supporting networks including the Staff BAME Network; Staff with Disabilities Network; Staff LGBTIQ+ Network; and the Staff Parents & Carers Network. Full details available online: <https://www.st-andrews.ac.uk/hr/edi/>

The University of St Andrews is a charity registered in Scotland (No SC013532).

### Obligations as an Employee

You have a duty to carry out your work in a safe manner in order not to endanger yourself or anyone else by your acts or omissions.

You are required to comply with the University health and safety policy as it relates to your work activities, and to take appropriate action in case of an emergency.

You are required to undertake the Information Security Essentials computer-based training course and adhere to its principles alongside related University Policy and Regulations.

You are responsible for applying the University's equality and diversity policies and principles in your own area of responsibility and in your general conduct.

You have a responsibility to promote high levels of customer care within your own area of work/activities.

You should be adaptable to change, and be willing to acquire new skills and knowledge as applicable to the needs of the role.

You may, with reasonable notice, be required to work within other Schools/Units within the University of St Andrews.

You have the responsibility to engage with the University's environmental sustainability strategy, committing the University to reach net-zero by 2035.

You are required to engage with the technology, systems and communication channels necessary for you to undertake your work and must update your personal details via HR Self Service whenever there is a change.

Employees with staff management responsibilities must familiarize themselves with appropriate policies.

### Who Are We? St Andrews At a Glance

- The third oldest university in the English-speaking world
- Ranked top UK university in the [Guardian Guide 2023](#)
- Ranked 2<sup>nd</sup> in the UK in the [Times and Sunday Times Good University Guide 2023](#)

- Named [University of the Year](#) in 2020, St Andrews is also [top in the UK for student satisfaction](#).
- Research-intensive, more than 88% of research carried out by the University of St Andrews is world-leading or internationally excellent (Research Excellence Framework 2021).
- Athena SWAN [Bronze Award holder](#)
- [Strategy](#) founded on ambition to be World-Leading, Diverse, Global, Entrepreneurial and Socially Responsible
- More than 10,000 students and 3000 staff
- Highly international – more than 30% of students and staff are from outwith the UK
- A non-campus university, closely integrated with the ancient town of St Andrews
- Top quality [sports](#), [music](#) and [nursery](#) facilities for staff and students

## University of St Andrews

Founded in the 15th century, St Andrews is Scotland's first university and the third oldest in the English-speaking world. The University of St Andrews is one of Europe's most research-intensive seats of learning. It is one of the top-rated universities in Europe for research, teaching quality, and student satisfaction.

Today, under the leadership of Principal and Vice-Chancellor Professor Dame Sally Mapstone FRSE, the University's strategy is to broaden its global influence, with a focus on diversity, building a culture of entrepreneurship, research excellence, and social responsibility.

St Andrews is committed to broadening our digital education, enhancing the experience of our on-campus students, while bringing a St Andrews education to much wider global community.

The University of St Andrews is world-leading, with a responsibility to integrate sustainability within our University strategy. From climate science and sustainable development to energy ethics and grass-roots level action across all our communities in which we operate, sustainability is at the heart of all we do. World-leading research on sustainability is taking place across the breadth of the University with researchers addressing key questions on the defining issue of our generation.

The University has set an ambitious target of carbon net zero by 2035, ten years ahead of the Scottish Government's 2045 target.

St Andrews is ranked as the top university in the UK in *The Guardian Guide 2023*, and Scottish University of the Year, top in Scotland and second in the UK in *The Times and Sunday Times University Guide 2023*.