

**Post-Doctoral Research Assistant/Associate: Igneous Petrology & Geochemistry,
Department of Earth Sciences, University of Cambridge, UK
Job ref : LB39036 Salary: £36,024-£44,263 Closing Date: 19th November 2023**

Research topic: Influence of lithospheric structure and composition on the distribution of CO₂-rich intraplate volcanism and rare-earth-element mineralisation (REE-LITH)

- **Fixed-term post:** Applications are invited for a Post-Doctoral Research Associate (PDRA, Grade 7) in igneous petrology/geochemistry to work on a new [NERC](#) funded Pushing the Frontiers Project. Funding for this PDRA post is available for 30 months, beginning 16th February 2024 (a slightly later starting date is also possible).
- **Project Aim:** The overarching goal of the REE-LITH project is to reach a fundamental new understanding as to how lithospheric structure and mantle dynamics control the Archean to Recent origins of CO₂-rich intraplate magmatism and associated rare-earth element (REE) deposits.
- **REE-LITH scientific team:** The REE-LITH project involves a multi-disciplinary international team of Earth Scientists -- from the Universities of Cambridge ([Gibson](#) & [Lebedev](#)), Exeter ([Broom-Fendley](#)), St Andrews ([Hutchison](#)), Madrid ([Fullea](#)) and Bergen ([Rondenay](#)). An additional Postdoctoral Research Associate in seismology is being sought for the same project (see [here](#)).
- **Location:** The successful candidate will be based in the Department of Earth Sciences (Downing Site) at the University of Cambridge and will work closely with Prof Sally Gibson and all co-investigators in the research team. They will undertake petrological investigations and geochemical analyses, together with numerical models, of CO₂-rich intraplate volcanic rocks to place novel constraints on their origin, the evolution of continental lithosphere and REE mineralisation.
- **Expertise:** Applicants for this PDRA must have (or be about to obtain) a PhD in petrology and geochemistry. Previous experience in petrology and geochemical analysis is required and a knowledge of numerical modelling of mantle-derived melts and REE/critical metal mineralisation is desirable. The research will involve use of sample preparation laboratories and [state-of-the-art analytical facilities](#) in Cambridge (e.g. EPMA, LA-ICP-MS, QEMSCAN). Samples exist in established collections and while fieldwork is not required by the project, there will be opportunities to take part if desired. All necessary training will be provided. The successful candidate will be highly motivated, have a strong publication record (commensurate with their career stage) and good communication skills. Attending and presenting results from REE-LITH at international conferences will be supported and encouraged. The successful applicant will be mentored and supported in

developing their career and research interests by the Principal Investigator and [University of Cambridge Postdoc Academy](#).

- **Equality, diversity & inclusion:** The project scientists and the University of Cambridge actively support equality, diversity and inclusion and encourage applications from all sections of society. The University holds an institutional Athena-SWAN silver award and the Department of Earth Sciences is a bronze award holder. Details of some of the family-friendly policies operated by the University are at: <http://www.hr.admin.cam.ac.uk/pay-benefits/cambens-employee-benefits/family-friendly>.
- **Visas & healthcare:** The University of Cambridge has a responsibility to ensure that all employees are eligible to live and work in the UK. Visa costs and the healthcare surcharge will be covered for the successful applicant. Advice and support will be offered to facilitate moving to the UK.
- **Further details:** Enquiries concerning this research post can be sent to the Principal Investigator Sally Gibson (sally@esc.cam.ac.uk). Please quote reference LB39036 on your application and in any correspondence about this vacancy.
- **How to apply:** Please visit [here](#) and click the 'Apply online' button to register an account with our recruitment system (if you have not already) and apply online. Ensure that you upload your Curriculum Vitae (CV), a covering letter and publications list in the upload section of the online application. If you upload any additional documents that have not been requested, we will not be able to consider these as part of your application.

