

CANDIDATE BRIEF

Research Assistant in Concrete Technology,

Faculty of Engineering and Physical Sciences



Salary: Grade 6 (£32,296 – £37,999 p.a. pro rata)

Reference: EPSCV1159

Location: Leeds main campus

Closing date: Tuesday 25 February 2025

Part time, 20 hours per week

Fixed-term for 6 months

We are open to discussing flexible working arrangements

Research Assistant in Concrete Technology, School of Civil Engineering.

Are you a researcher looking for your first challenge? Do you have a background in Concrete Technology? Do you want to further your career in one of the UK's leading research-intensive universities?

The shift in steel production in the UK towards the low-carbon Electric Arc Furnace (EAF) processes is accompanied with an increase in the EAF slag generated for which currently only limited use exists as low-value recycling in backfilling and road embankments.

The selected candidate will conduct experimental work aiming to characterise EAF slag generated by UK and US steel factories and activated by one of our industrial partners. The slag will be used as a Supplementary Cementitious Material (SCM) or binder in concrete or concrete products. With further concrete mix design optimisation, it will fit the industry specifications of the desired concrete.

What does the role entail?

As a Research Assistant, your main duties will include:

- Carrying out the characterisation of raw materials, materials processing and testing of the designed cementitious mixes (mortars and concretes);
- Supporting research activities, including contributing to research results and outputs and to the generation of original ideas, ensuring a successful programme of investigation;
- Writing reports, undertaking literature reviews and preparing papers for publication, with guidance as necessary;
- Collating and analysing data to inform the direction and progression of the research project;
- Participating in the research group and presenting research output where appropriate;
- Working both independently and as part of a larger team of researchers and stakeholders;
- Contributing to the research culture of the School, where appropriate;



 Continually updating your knowledge, understanding and skills in the research field.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Assistant you will have:

- An undergraduate or masters degree in Civil and Environmental Engineering or a closely allied discipline;
- A strong background in material characterisation, especially cement and poststeel production by-products;
- A strong background in soil, mortar and concrete testing as well as concrete design;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Well-developed analytical skills;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and in a team;
- The ability to work accurately, unsupervised and use your own initiative.

You may also have:

- A PhD (or close to completion) in Civil and Environmental Engineering or a closely allied discipline;
- Experience of contributing to the writing of papers for publication;
- Knowledge about Circular Economy and Sustainable Circular Economy and Sustainable Construction Materials.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23:59** (UK time) on the advertised <u>closing date</u>.



Contact information

To explore the post further or for any queries you may have, please contact:

Michal P. Drewniok, Lecturer in Civil Engineering

Tel: +44 (0)113 343 1586

Email: M.P.Drewniok@leeds.ac.uk

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the <u>Faculty of Engineering & Physical Sciences</u>, and the <u>School of Civil Engineering</u>.

Working at Leeds

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our Working at Leeds information page.

A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN <u>Silver</u> Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality and inclusion</u> <u>webpage</u> provides more information.



Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our How to Apply information page or by getting in touch by emailing HR via hr@leeds.ac.uk.

Criminal Record Information Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records</u> information page.

Salary Requirements of the Skilled Worker Visa Route

Please note that due to Home Office visa requirements, this role may only be suitable for first-time Skilled Worker visa applicants if they are eligible for salary concessions. For more information, please visit the Government's Skilled Worker visa page.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit the Government's page, Apply for the Global Talent visa.

