



Research Associate

Department	Civil and Environmental Engineering (www.strath.ac.uk/engineering/civilenvironmentalengineering/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Research	Reference No	620253
Reports To	Professor Edoardo Patelli	Grade	7
Salary Range	£36024	Contract Type	Fixed Term (Until 13/01/2025)
FTE	1 (35 hours/week)	Closing Date	05/06/2024
Holidays	31 days + 11 statutory days Option to purchase additional holidays.	On Site Facilities	Car parking, sports centre, catering.
Pensions	Contributory pension scheme available to all staff including generous employer contribution.		
Training	Professional Development with Organisational and Staff Development Unit (OSDU) plus external training if required.		
Family Friendly Benefits	Generous parental leave provision, on-campus nursery and options for flexible working.		
Health and Wellbeing	University Sport centre, Occupational Health service, access to health and wellbeing events, cycle to work scheme, Employee Assistance Programme, agile working and established carers support network and carer friendly policies.		

Job Advert

The department seeks to appoint a Research Assistant in engineering. The position is specifically related to the EPSRC Project EMEANSS “Enhanced Methodologies for Advanced Nuclear System Safety” requiring the development of method for uncertainty quantification relevant for nuclear engineering application and the British Academy project “Intelligent Digital Twin management platform for natural-technological (NaTech) disasters (Horizon Europe Pump Priming scheme)”. requires assisting the building of an international research consortium and supporting the preparation of research grants for the Horizon Europe call. In addition, the Research Assistant will also assist the development of computational strategies supported by AI and ML for digital twin under severe uncertainty.

To be considered for the role, you will be educated to a minimum of PhD level in relevant disciplines in Engineering. You will have experience in one or more of the following areas: uncertainty quantification, digital twin, modelling and simulation, risk and reliability analysis and optimisation under uncertainty. You will have the proven experience in writing research publication and involvement in international research activities. You will be ambitious and enthusiastic about cross-disciplinary working and be able to work independently and as part of a team, supporting others when required. You will have good interpersonal and communication skills, including an ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences. You will have the ability to work well under pressure and be driven to deliver results.

The Faculty of Engineering at the University of Strathclyde is one of the largest and most successful engineering faculties in the UK, and the largest in Scotland. As a leading international technological university, Strathclyde is recognised for its world class research, knowledge exchange and educational programs. At the heart of this is the Faculty of Engineering which boasts a growing research portfolio of over £85 million. The Department of Civil and Environmental Engineering (CEE) is one of the largest and most successful civil engineering departments in Scotland with over 600 students, including 450 undergraduates,

100 taught postgraduates and almost 100 registered research students. We have a strong commitment to widening access and inclusion while maintaining academic quality and an outstanding student experience.

Job Description

Brief Outline of Job:

To undertake a specific research project/s under the general guidance of a research leader; to establish and maintain a consortium formed by international academics and industry, with assistance from senior colleagues as required; to engage where required in relevant knowledge exchange activities; and input to administrative activities; support the drafting of research proposals and the development of AI and ML tools for uncertainty quantification.

Main Activities/Responsibilities:

1.	Support the required activities within the eMEANSS project and pump-prime funding from British academy
2.	Engage with external partners at national and international level
3.	Support the preparation of proposals and applications to external bodies, e.g. for funding purposes.
4.	Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
5.	Develop AI and ML tools for uncertainty quantification
6.	Attend and contribute to relevant meetings.
7.	Plan and manage own research activities as agreed with PI
8.	Collaborate with colleagues on the development of knowledge exchange activities by, for example, participating in initiatives which establish research links with industry and influence public policy and the professions.
9.	Supervise student projects, provide advice to students and contribute to teaching as required by, for example, running tutorials and supervising practical work.
10.	Contribute in a developing capacity to Department/School, Faculty and/or University administrative and management functions and committees.
11.	Engage in continuous professional development.

Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 Good honours degree and PhD (or equivalent professional experience) in an appropriate discipline i.e. Engineering

D1 Membership of relevant Chartered/professional bodies (including Higher Education Academy).

Experience

D2 A body of published research in journals and conferences.

E2 Experience of model development and scientific computing.

E3 Experience and involvement in international research activities.

E4 Knowledge of research landscape in Europe

D3 Ability to work in an international environment

Job Related Skills and Achievements

E5 Ability to work within a team environment.

E6 General knowledge of Machine Learning and AI in design and decision making

E7 Ability to work on collaborative projects within large networks with multiple partners.

Personal Attributes

E8 Excellent interpersonal and communication skills, with the ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences.

Other Relevant Factors

D4 Secondment at international organisations

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

Informal enquiries about the post can be directed to Edoardo Patelli, Professor (edoardo.patelli@strath.ac.uk).

Conditions of Employment

Conditions of employment relating to the Research staff category can be found at: [Conditions of Employment](#).

Rewards and Benefits

Our staff have access to a wide range of outstanding benefits that include financial rewards, family friendly and wellbeing benefits and career development opportunities, details of which can be found [here](#).

Probation

Where applicable, the successful applicant will be required to serve a 9 month probationary period.

Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from [Payroll and Pensions](#).

Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the Relocation Policy.

Equality and Diversity

The University of Strathclyde is a socially progressive institution that strives to ensure equality of opportunity and celebrates the diversity of its student and staff community. Strathclyde is people-oriented and collaborative, offering a supportive and flexible working culture with a deep commitment to our equality, diversity and inclusion charters, initiatives, groups and networks.

We strongly encourage applications from Black, Asian and minority ethnicity, women, LGBT+, and disabled candidates and candidates from lower socio-economic groups and care-experienced backgrounds.

University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. [Our Values](#) have been derived from how we act and how we expect to be treated as part of Strathclyde.

