



# Research Assistant in Novel Wind Turbine Aerodynamics

Department	Electronic and Electrical Engineering ( <a href="http://www.strath.ac.uk/engineering/electronicalelectricalengineering/">www.strath.ac.uk/engineering/electronicalelectricalengineering/</a> )		
Faculty	Faculty of Engineering ( <a href="http://www.strath.ac.uk/engineering/">www.strath.ac.uk/engineering/</a> )		
Staff Category	Research	Reference No	646034
Reports To	Head of Department/Institute, through Dr James Carroll	Grade	6
Salary Range	£31396 - £34980	Contract Type	Fixed Term (6 months)
FTE	1 (35 hours/week)	Closing Date	13/09/2024
Working Arrangements	Hybrid. The standard requirement across the University is that at least three days per week (based on IFTE) will be spent working on-site (with flexibility as appropriate).		
Holidays	31 days + 11 statutory days Option to purchase additional holidays.		
Pensions	Contributory pension scheme available to all staff including generous employer contribution.		
Training	Professional Development with <a href="#">Organisational and Staff Development Unit</a> (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 Institute for Energy and Environment (InstEE) based in the Department of Electronic & Electrical Engineering (EEE) at the University of Strathclyde, is seeking to recruit a Research Associate to lead research in the area of novel wind turbine concept development. The role will involve structural analysis, ANSYS and CFD work.

The candidate will join the Wind Energy and Control Centre (WECC), within the Institute for Energy and Environment. The internationally recognised WECC research group currently comprises 8 academic staff, and more than 40 postdoctoral and PhD researchers, and operates from the University's flagship, multi-disciplinary engineering and science building, the Technology and Innovation Centre (TIC) as well as the Royal College Building.

As a Research Assistant, under the general guidance of a research leader, you will develop research objectives and proposals, play a lead role in relation to a specific project/s or part of a broader project, conduct individual and/or collaborative research, contribute to the development of new research methods, identify sources of funding, and contribute to the securing of funds for research, including drafting grant proposals and planning for future proposals. You will write up research work for publication, individually or in collaboration with colleagues, and disseminate the results via peer reviewed journal publications

and presentation at conferences. You will join external networks to share information and ideas, inform the development of research objectives and to identify potential sources of funding. You will collaborate with colleagues to ensure that research advances inform departmental teaching effort and you will 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. You will supervise student projects, provide advice to students and contribute to teaching as required by, for example, running tutorials and supervising practical work. You will contribute in a developing capacity to Department/School, Faculty and/or University administrative and management functions and committees and engage in continuous professional development.

To be considered for the role, you will be educated to a minimum of Bachelors level in an engineering field, or have significant relevant experience in addition to a relevant degree. You will have sufficient breadth or depth of knowledge in wind turbine design and development and a developing ability to conduct individual research work, to disseminate results and to prepare research proposals. You will have an ability to plan and organise your own workload effectively and an ability to work within a team environment. You will have 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.

Whilst not essential for the role, applications are welcomed from candidates with: relevant work experience, membership of relevant Chartered/professional bodies (including the Higher Education Academy), experience of relevant student supervision and teaching activities, and/or experience of knowledge exchange related activities.

## Job Description

### Brief Outline of Job:

To undertake a specific research project/s under the general guidance of a research leader; to establish a personal research portfolio and plan research proposals, with assistance from senior colleagues as required; to engage where required in relevant teaching, professional and knowledge exchange activities; and input to administrative activities.

### Main Activities/Responsibilities:

1.	Conduct research in the area of novel wind turbine concept development. Focusing on aerodynamic and loading elements of the design.
2.	Engage with Industry stakeholders such as wind turbine OEMs, Operators and New Energy Companies
3.	Meet deliverables on industrial projects related to novel turbine concept development
4.	Plan and manage own workload, with guidance from colleagues as required.
5.	Supervise student projects, provide advice to students and contribute to teaching as required by, for example, running tutorials and supervising practical work.
6.	Identify sources of funding and contribute to the securing of funds for research, including drafting grant proposals and planning for future proposals.
7.	Collaborate with colleagues to ensure that research advances inform departmental teaching effort, including contributing to relevant teaching programmes as appropriate.
8.	Join external networks to share information and ideas, inform the development of research objectives and to identify potential sources of funding.
9.	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.
10.	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 (or equivalent professional experience) in an appropriate discipline i.e. Engineering, Maths or Physics

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

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## Experience

- E2 Past industrial or academic experience in wind turbine design, novel concept development, turbine aerodynamic analysis.
- E3 Relevant Research Experience Developing Radical Wind Turbine concepts
- E4 Past research experience with BEM, QBlade and Optimisation
- E5 Experience of engaging with academic and industrial partners

## Job Related Skills and Achievements

- E6 Developing ability to conduct individual research work, to disseminate results and to prepare research proposals.
- E7 Ability to plan and organise own workload effectively.
- E8 Ability to work within a team environment.

## Personal Attributes

- E9 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.
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## Application Procedure

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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

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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 James Carroll, Co-Director of the Wind Energy and Control Group ([j.carroll@strath.ac.uk](mailto:j.carroll@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.

