

Research Associate (2 Posts)

Department	Naval Architecture, Ocean and Marine Engineering (www.strath.ac.uk/naome/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Research	Reference No	200908
Reports To	Director of the Maritime Safety Research Centre	Grade:	7
Salary Range:	£32,236 - £35,211	Contract Type:	Fixed Term (18 months)
FTE:	1	Closing Date	28/04/2019

Job Advert

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 University is recognised for its world-class research, knowledge exchange and educational programmes. At the heart of this is the Faculty of Engineering, which boasts a growing research portfolio of nearly £100 million.

The Department of Naval Architecture, Ocean and Marine Engineering is a world-leader in research, whose main interests lie in: Ship Design, Stability and Safety, Marine Hydrodynamics, Marine Structures, Ocean Engineering, Marine Engineering, Emerging Technologies, Offshore Renewable Energy and Alternative Fuels. The Department makes a significant contribution to National, European and International policy-making in Marine Technology research and its application.

As part of a significant Industry-University partnership involving, in the first instance, the University of Strathclyde – Department of Naval Architecture, Ocean and Marine Engineering, Royal Caribbean Cruise Lines and DNV GL Classification Society, a Maritime Safety Research Centre (MSRC) of Excellence has been set up. The vision is to establish a world-class centre of excellence, a reference and a shaping force of maritime safety. The mission of the centre is to support the development and nurture the implementation of Life-Cycle Risk Management, accounting rationally and formally for all cost-effective measures of risk reduction and leading to sustainable cost-effective safety improvement for new and existing ships and offshore assets and to the development of a modern regulatory framework to support and nurture safety culture.

MSRC seeks to employ a Research Associate to participate in an ongoing research project. The post holder will work on the EU-funded Horizon2020 project “Transport: Advanced and Modular – TrAM”. The main aim of the project is to develop and validate a concept for waterborne transport by implementing modular design and production methods, with a main focus on electrically powered vessels operating in protected waters (coastal areas and inland waterways). The project will lead to significant reduction of construction costs and engineering hours for new vessels, operating with zero emissions. The appointee will join a multidisciplinary international team with industrial partners from Belgium, Germany, Greece, Netherlands, Norway, Sweden and UK.

As a Research Associate, you will play a key role in this project as part of a team, working under the general supervision of more senior colleagues. You will conduct literature reviews, develop new ship designs, analyse their performance and optimise them, develop questionnaires, conduct surveys, collect and collate data, and undertake and record the outcomes of experiments. You will manage and prioritise your own workload and ensure that all activities are completed to deadlines and you will write up the results of your own research and contribute to the production of research reports and publications. You will input as a team member to administrative activities and assist, where required, with relevant teaching and knowledge exchange activities.

To be considered for the role, you should have a good honours degree and PhD in the relevant engineering subjects. You should have proven capability to write high quality research papers and knowledge of appropriate research methods. It is important to have an ability to plan and prioritise your own workload, with general supervision, and you will have an ability to work within a team environment. Excellent interpersonal and communication skills are very essential, with the ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences and publish in high impact factor journals.

Job Description

Brief Outline of Job:

To undertake the Transport: Advanced and Modular – TrAM research project under the general guidance of the 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.	Take more of a leading role in the delivery of the research project by developing modular ship designs using relevant naval architecture software (e.g. NAPA).
2.	As part of a wider research group or programme, develop research objectives and proposals for own or joint research and play a lead role in relation to a specific project/s or part of a broader project, with guidance from senior colleagues as required.
3.	Plan and manage own workload, with guidance from colleagues as required.
4.	Conduct individual and/or collaborative research, including determining appropriate research methods and contributing to the development of new research methods.
5.	Identify sources of funding and contribute to the securing of funds for research, including drafting grant proposals and planning for future proposals.
6.	Write up research work for publication, individually or in collaboration with colleagues, and disseminate results as appropriate to the discipline by, for example, peer reviewed journal publications and presentation at conferences.
7.	Join external networks to share information and ideas, inform the development of research objectives and to identify potential sources of funding.
8.	Collaborate with colleagues to ensure that research advances inform departmental teaching effort.
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.	Supervise student projects, provide advice to students and contribute to teaching as required by, for example, running tutorials and supervising practical work.
11.	Contribute in a developing capacity to Department/School, Faculty and/or University administrative and management functions and committees.
12.	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 appropriate discipline

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

Experience

E2 Sufficient breadth or depth of knowledge in the relevant discipline/s to contribute to research programmes and to the development of research activities.

E3 Developing ability to conduct individual research work, to disseminate results and to prepare research proposals.

E4 Proven capacity to disseminate results as appropriate to the discipline in peer reviewed high-impact journal publications

D2 Some relevant work experience

D3 Experience of relevant student supervision and teaching activities

D4 Experience of knowledge exchange related activities

Job Related Skills and Achievements

E5 Developing ability to conduct individual research work, to disseminate results and to prepare research proposals.

E6 Ability to plan and organise own workload effectively

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- E7 Ability to work within a team environment
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- E8 Experience in using marine design software such as NAPA
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- E9 Experience in using CAD software such as Rhino or Autocad
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- D5 Experience in using CFD software such as StarCCM+
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Personal Attributes

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- E10 Ability to plan and organise own workload effectively with general supervision from senior colleagues.
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- E11 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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- E12 Excellent problem solving and decision making skills
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Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview 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 Dr Evangelos Boulougouris, RCCL Reader of Safety of Marine Operations (evangelos.boulougouris@strath.ac.uk/ 0141 548 3875).

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

We value diversity and welcome applications from all sections of the community.

The University currently holds a Bronze Athena SWAN award, recognising our commitment to advancing women's careers in science, technology, engineering, maths and medicine (STEMM) employment in academia.

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.

