Research Assistant

Department	Design, Manufacture and Engineering Management (www.strath.ac.uk/dmem/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Research	Reference No	112141
Reports To	The Head of Department, through Professor Yi Qin	Grade:	6
Salary Range:	£27,285 - £30,688	Contract Type:	Fixed Term (1 year)
FTE:	1	Closing Date	Sunday, 4 March 2018

Job Advert

The Department of Design, Manufacture and Engineering Management seeks to recruit a Research Assistant to support research projects in the design of new manufacturing tools. Specifically, this will involve the development of mechanical and mechatronics designs, 3D CAD models and engineering drawings for the fast cooling of sheet metals. The Research Assistant will also liaise with a manufacturer who carries out mechanical fabrications of parts and assembly. The Research Assistant is expected to report progress on the project to the project leader on a regular basis.

To be considered for the role, you will be educated to a minimum of Degree level in a product design discipline and you will have experience in designing fast cooling systems for hot sheet metals and a good knowledge of sheet metal hot stamping. You will have excellent communication skills with the ability to listen, engage and persuade and to present complex information in an accessible way to a range of audiences. You will also have good report writing skills, an ability to work well independently as well as within a team, and you will have an ability to plan and manage your own workload.

Whilst not essential for the role, applications are welcomed from candidates with a relevant Master's Degree, from candidates with experience of working on a EU funded materials and/or manufacturing project, and from candidates with experience of working with a research team in design and manufacture within a university/research institute/company.

Job Description

Brief Outline of Job:

To support a research project in the design of fast cooling systems for sheet metal forming, reporting progress to the project leader on a regular basis. To provide research support in the development of spray and contact cooling systems for hot sheet metal forming applications. To support the design of mechanical and mechatronics devices/systems being carried out within the Centre for Precision Manufacturing. To establish a personal research/design portfolio and identify design requirements, with assistance from senior colleagues as required; to engage where required in relevant teaching tutorials and knowledge exchange activities; and to provide input to administrative activities.

Main Activities/Responsibilities:

1.	Plan for the design, based on the design requirements from the end-users; undertake the design work and geometric modelling; and produce detailed engineering drawings acceptable to the manufacturer.

2.	Support a wide range of research group activities through contributing to the development of the machines and tools being carried out within the Centre for Precision Manufacturing
3.	Train students in design and modelling with CAD software
4.	Present the designs to project consortium members, write up results of own research, and disseminate through peer reviewed journal publication and conference presentations
5.	Manage and prioritise own workload within agreed objectives to ensure that all activities are completed to deadlines
6.	Attend and contribute to relevant internal and external meetings/conferences.
7.	Continue to update knowledge and develop skills through continuous personal development.
8.	Assist in supervision of student projects, as required
9.	Input as a team member to Department/School, Faculty and/or University administrative activities

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)

E.1	A Degree in Product Design or a relevant discipline
E.2	A Master's Degree in a relevant discipline
Experience	
E.3	Experience of designing a spray cooling system for hot sheet metal forming
E.4	Experience in designing a contact cooling system for hot sheet metal forming
D.1	Relevant experience of working within a design/manufacturing team
D.2	Experience of working on EU funded projects
Job Related Skills and Achievements	
E.5	Ability to conduct individual, industry-relevant design work, to write reports, and to communicate with the manufacturer(s) on the design(s) produced
E.6	Sufficient breadth or depth of knowledge in sheet metal forming
E.7	Skilled in the application of CAD software SOLID WORKS
Personal Attributes	
E.8	Excellent verbal and written communication skills, with the ability to listen, engage and persuade, and to present complex information in an accessible way to audiences
E.9	Ability to work independently and as part of a team
E.10	An ability to plan and manage your own workload

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview without permission, unless you indicate that you would prefer otherwise. Applicants should also submit 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 Professor Yi Qin (qin.yi@strath.ac.uk/ 0141 548 3130).

Probation
Where applicable, the successful applicant will be required to serve a 6 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.

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.