

National Manufacturing Institute Scotland: Research & Development Engineer

Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)	Reference No	229958
Staff Category	Knowledge Exchange	Grade:	7
Salary Range:	£32,236 - £39,609	Contract Type:	Open Contract
FTE:	1	Closing Date	Sunday, 21 July 2019

Job Advert

Who we are

The National Manufacturing Institute Scotland (NMIS) is a bold and ambitious industry-centred project to create an international centre of advanced manufacturing expertise and excellence where industry, academia and public-sector support agencies work together to transform skills, productivity and innovation, making Scotland and the UK a global leader in advanced manufacturing.

NMIS will be an industry-led international centre of manufacturing expertise where research, industry and the public sector work together to transform skills, productivity and innovation to attract investment and make Scotland a global leader in advanced manufacturing.

NMIS will be delivered in partnership through Scottish Enterprise. Partners are the Scottish Government, Scottish Enterprise, Highlands and Islands Enterprise, Skills Development Scotland, Scottish Funding Council, Renfrewshire Council and the University of Strathclyde. NMIS is a truly collaborative project, with partners including the Scottish government, Scottish Enterprise, Highlands and Islands Enterprise, Skills Development Scotland, the Scottish Funding Council, Renfrewshire Council and the UK government through the High Value Manufacturing Catapult. The University of Strathclyde is the host University for NMIS, which will link to the wider academic communities in Scotland through the Scottish Research Partnership in Engineering and across the UK High Value Manufacturing Catapult network.

NMIS will encompass a dedicated facility that will house the Manufacturing Skills Academy (MSA), Digital Factory 2050 and the Innovation Collaboratory. Along with this dedicated new facility, existing and developing research centres will also be part of the broader NMIS Group including the Advanced Forming Research Centre (AFRC) and the Lightweight Manufacturing Centre (LMC). The posts advertised here will be based in one of these centres.

For more information, visit the National Manufacturing Institute Scotland (NMIS) Website:

<https://www.strath.ac.uk/workwithus/nationalmanufacturinginstitutescotland/> or email NMIS-recruitment@strath.ac.uk

The Opportunity

We are looking to appoint up to 40 innovative and enthusiastic engineers to be part of NMIS who are interested in manufacturing the future, working with a range of innovative industrial partners and academic experts, new and emerging technologies and challenging manufacturing in Scotland. We would love to hear from you, if you have an established track record in providing engineering solutions in an industrial context, a good first degree and substantial experience or PhD qualification, and experience and expertise in one or more of the technical areas below:

- Materials and Lightweighting
- Production systems, manufacturing systems, operations and supply chain management.
- Digital Manufacturing (including robotics and automation)
- Manufacturing technologies
- Measurement and sensing

- Design for manufacturing and new product introduction

You'll be rewarded with:

- The opportunity to work with a variety of innovative industry partners and leading academics.
- The opportunity to work with cutting edge and bold technologies.
- Excellent employee benefits and opportunities for career development.

Job Description

Brief Outline of Job:

The Research and Development Engineer will support NMIS research programmes and the development and operation of NMIS manufacturing capability, including research and development with partners and customers. In particular, the post holder will be expected to lead and contribute to industrial research programmes with a manufacturing engineering focus, and deliver solutions to industrial partners.

Main Activities/Responsibilities:

1.	Conduct industrial led collaborative engineering research, including determining appropriate research methods and contributing to the development of new research methods.
2.	Work as part of a project team to deliver against specific requirements of industrial led projects.
3.	Enhancing the NMIS manufacturing related capability by proposing improvements based on estimated future requirements and research needs.
4.	Identify sources of funding and contribute to the securing of funds for research and development activities, including drafting grant proposals and planning for future proposals.
5.	Build contacts internally and externally, and participate in networks for the exchange of information, form relationships with customers, suppliers and colleagues for future collaboration.
6.	Write up reports, individually or in collaboration with colleagues, for external organisations, and further write up findings for additional dissemination (e.g. professional publications or peer review journal publication) as appropriate.
7.	Assisting in the training and development of staff and external clients in manufacturing engineering methods and processes.
8.	Contribute to collaborative decision making with colleagues on academic/engineering content in areas of research.
9.	Contributing to the overall NMIS growth by working as an integral part of the NMIS team effort, inputting to the research programme and capability development, as necessary, to meet strategic objectives.

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 first degree (minimum class 2:1) in a relevant engineering discipline, e.g. mechanical engineering, materials or manufacturing.

E2 Substantial work experience or a PhD in a relevant engineering discipline.

D1 Chartered Engineer/Scientist, Member of professional body in an appropriate discipline.

Experience

E3 Sufficient breadth or depth of knowledge in a relevant area to NMIS, to be able contribute to research and development programmes and activities.

E4 Ability to conduct research and development projects, work directly and independently with clients, and to prepare new research and development proposals and work with the wider delivery team.

E5 Experience working at a similar level in a research and development environment or equivalent

E6 Knowledge and experience of working with advanced manufacturing technology

D2 First-hand experience of addressing manufacturing research challenges within an industrial or academic environment

Job Related Skills and Achievements

E7 Evidence of contribution to the successful delivery of research within an academic or industrial environment.

E8 An ability to plan and organise own workload effectively with general supervision from senior colleagues.

E9 Experience in project planning and delivery.

D3 Experience of research and development related activities.

Personal Attributes

E10 Excellent written and verbal communication skills, with an ability to interact with a range of stakeholders in both industry and academia.

E11 An ability to disseminate results and to contribute to research and commercial proposals.

E12 An ability to work as part of a team, through participation in collaborative projects, and developing evidence of leadership.

E13 Ability to plan and organise own work effectively with general supervision from senior colleagues

Other Relevant Factors

E14 An ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences

Application Procedure

To apply, [click here](#) to visit Strathclyde's vacancies portal and provide:

- A fully completed application form;
- A detailed CV; and
- A cover letter detailing how your experience matches the person specification.
- As part of the application form, you'll also be asked to select a technical area from the list which best suits your expertise.

For more information, or to contact a Strathclyde colleague who would love to talk to you about this opportunity, visit the [NMIS website](#) or email NMIS-recruitment@strath.ac.uk.

Other Information

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.

