









# **National Manufacturing Institute Scotland:**

# Assistant Research & Development Engineer

Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)	Reference No	229963
Staff Category	Knowledge Exchange	Grade:	6
Salary Range:	£27,830 - £31,302	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 expertise and a degree in one or more of the technical areas below and have:

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

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- 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 Assistant 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 contribute to industrial research programmes with a manufacturing engineering focus, and deliver solutions to industrial partners.

# Main Activities/Responsibilities:

- Contribute to industrial led collaborative engineering research, by supporting the determination of appropriate research methods and contributing to the development of new research methods and completion of literature reviews.
- 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. Contribute to the identification of 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. Liaising directly with external partners, under appropriate supervision, to provide support consistent with the terms of research and development projects.
- 6. Write up results of own research and development activities and contribute to the production of relevant reports and publications.
- 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)

- E. I First degree in a relevant engineering discipline
- D.I Pursuing/holding membership of professional body in an appropriate discipline.

#### **Experience**

- E.2 Knowledge of basic engineering principles
- E.3 Knowledge and experience of reporting and interpreting data and results
- E.4 Expertise of one of the technical areas related to NMIS
- E.5 Experience in a customer facing role
- E.6 Knowledge and experience of undertaking literature surveys and writing up experimental test results
- D.2 Experience of engineering design through the use of CAD software and assisting the preparation of engineering drawings for manufacture
- D.3 Relevant industrial work experience (for example placements/internships/previous employment)

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D.4 Experience working in an academic or industrial research centre, laboratory or workshop

#### **Job Related Skills and Achievements**

- E.7 An ability to plan and organise own workload effectively with general supervision from senior colleagues.
- E.8 Excellent IT skills including experience in a variety of office and technical software packages
- E.9 Ability to work proactively and flexibly
- E.10 Excellent analytical skills with good attention to detail
- D.5 Evidence of contribution to the successful planning and delivery of projects within an academic or industrial environment.
- D.6 Experience of knowledge exchange related activities (e.g. company interaction during student projects), an ability to disseminate results and to contribute to research and commercial proposals.

#### **Personal Attributes**

- E.11 Excellent verbal and written communication skills, with an ability to interact with a range of stakeholders in both industry and academia.
- E.12 An ability to work independently and as part of a team, through participation in collaborative projects.
- E.13 An active interest in developing technical and business knowledge and skills enthusiastic learner

# **Other Relevant Factors**

- E.14 Evidence of the ability to work in a team and to listen, engage, and persuade in an accessible way to a range of audiences
- D.7 A developing ability 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 <a href="mailto:NMIS-recruitment@strath.ac.uk">NMIS-recruitment@strath.ac.uk</a>.

# 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.













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