

## Candidate Information

<b>Position:</b>	Senior Preforming Engineer & Operations
<b>School/Department:</b>	Sustainable Composites and Polymers
<b>Reference:</b>	24/111762
<b>Closing Date:</b>	Sunday 14 April 2024
<b>Salary:</b>	£37,841 - £49,317 per annum
<b>Anticipated Interview Date:</b>	24 - 30 April 2024
<b>Duration:</b>	3 years initially

### AMIC

AMIC - a £100M investment through the Belfast Region City Deal - is a collaborative, innovative powerhouse of advanced manufacturing set to elevate our region globally.

We are supporting economic growth and prosperity for Northern Ireland by creating high quality jobs and increasing inward investment through high value manufacturing innovation clusters.

We are driving industrial transformation, paving the way for future technologies and competing globally with a more sustainable focus.

When you join our team, you will have access to the latest advanced industrial technologies and have the opportunity to grow and develop as an engineer and technology leader. Our mission is to provide you with the environment to innovate and create impact.

Our launch team of over 40 staff has core capabilities in digitalising manufacturing, smart design, sustainable polymers & composites and nanotechnologies & photonics. We're excited to be expanding the team throughout 2024.

### JOB PURPOSE AND IMPACT:

We are seeking engineers who want to innovate and apply their knowledge to the challenges of industry and society to support the expansion of applied research, innovation and knowledge transfer within Sustainable Polymers & Composites within AMIC's advanced manufacturing activities.

You will apply your specialist knowledge and experience in Preforming R&D activities including the development of new methods and processes, operating procedures and maintenance of specialist equipment, to generate innovative research outputs which have a direct economic and technical benefit to companies and sectors. You will work collaboratively with your team, industry, technology providers, national technology centres and academia to deliver key projects focused on advanced composites preforming.

### MAJOR DUTIES:

1. Apply technical knowledge and experience in support of the development of innovative and emerging industry-focused solutions.
2. Plan and deliver high quality experimental and industrial research, development and knowledge transfer in the area of composites preforming and 3D weaving in the AMIC composites facility.
3. Develop manufacturing processes, programming and design of composite components using CAD/CAM.
4. Formally evaluate the effectiveness of new or enhanced methods arising from research.
5. Engage with industrial partners to facilitate the transfer of AMIC capabilities into commercial R&D teams.
6. Undertake work scheduling and resource planning within the AMIC composites building.
7. Support the Head of Operations with roll out and maintenance of operational and quality systems within the AMIC composites facility.
8. Contribute to the planning, development, delivery, maintenance, and trialling of AMIC projects ensuring that all equipment is used in compliance with Health and Safety guidance.
9. Participate constructively in multi-disciplinary research activities, including staff training and development.

10. Help develop the international reputation of AMIC and QUB through presentations, attendance at trade-shows and visiting major companies and research & technology centres worldwide.
11. Produce high quality technical reports and demonstrations to assist in generating funding opportunities to support further programme activity.
12. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
13. Undertake any other duties that may reasonably be requested by management.

**ESSENTIAL CRITERIA (Education, Experience, Skills, Knowledge, etc.):**

1. Honours degree or equivalent in computing, engineering or a related discipline with significant relevant industrial experience OR minimum HND in a related discipline with extensive recent and relevant industrial experience.
2. Experience in 3D weaving technology, loom configuration and design.
3. Demonstrable competence and in-depth understanding in the application of engineering design and composites technology, with clear experience of using CAD/CAM.
4. Demonstrable evidence of working within multifaceted technology environments delivering to deadlines and within budget.
5. Experience of using research tools and techniques resulting in high quality project and technical reports.

**ESSENTIAL CRITERIA (Personal Qualities):**

1. Demonstrable evidence of complex problem-solving skills obtained / relevant for industrial data-related problems.
2. Excellent written and verbal communication skills, including ability to communicate complex technical information.
3. Ability to innovate and rapidly contribute to research projects.
4. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

**DESIRABLE CRITERIA:**

- 1 Postgraduate qualification in a relevant discipline.
2. Experience of collaborative research and effective working in a team.
3. Evidence of resource management.
4. Evidence of working with international OEMs and SMEs.
5. Experience in using 3D forming technologies.