Candidate Information

Position:	Senior Engineer Composites Processing
School/Department:	BRCD AMIC
Reference:	25/112902
Closing Date:	Monday 20 October 2025
Salary:	£41,519 -£49,536 per annum.
Anticipated Interview Date:	Tuesday 4 November 2025
Duration:	3 years

JOB PURPOSE:

We are seeking a highly motivated Senior Engineer to work in AMICâ€™s Sustainable Polymer and Composite team to lead projects being delivered as part of AMICâ€™s advanced manufacturing activities.â€¯

AMIC is a Â£100M investment through the Belfast Region City Deal - 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.

Our launch team of experienced staff has core capabilities in digitalising manufacturing, smart design, sustainable polymers & composites and nanotechnologies & photonics. Weâ€™re excited to be expanding the team throughout 2025.

We are seeking engineers who want to innovate and apply their knowledge to the challenges of industry and society to support the delivery of industrially focused composite projects within AMICâ€™s advanced manufacturing activities. You will apply your specialist knowledge and experience of methods, processes and process validation to generate innovative research outputs which have a direct economic and technical benefit to companies and sectors. You will work collaboratively with the sustainable polymer and composite team, wider AMIC team, industry partners, technology providers, national technology centres and academia to deliver key projects focused on advanced composite processing.

MAJOR DUTIES:

1. Plan and organise own project work to achieve technical objectives ensuring delivery to time, quality and budget.
2. Provide guidance and direction to colleagues assisting with research projects.
3. Participate constructively in multi-disciplinary research projects to ensure timely delivery of project objectives.
4. Apply technical knowledge in the operation and optimisation of composite processing equipment (e.g. including DFP, press, autoclave, RTM, infusion, etc).
5. Take a leading role in the development, demonstration and validation of novel composite designs and component manufacturing processes. e.g. processing trials, case studies and direct client project delivery.
6. Take a leading role in the development and implementation of Digital Technologies, e.g. sensors and software to improve cost and quality of manufactured components.
7. Connect and evaluate concepts of manufacturing, testing and simulation to deliver innovative solutions for industrial partners.
8. Undertake high-quality industrial research and knowledge transfer in composite processing and advanced manufacturing.
9. Produce high-quality technical reports and demonstrations to assist in generating funding opportunities to support further research activity.

10. Support business development through engagement with industrial partners and contribution to proposals.
11. Ensure all equipment is used safely and in accordance with standard operating procedures and Health and Safety guidance.
12. Undertake any other duties that may reasonably be requested by management.

ESSENTIAL CRITERIA:

1. Honours degree or equivalent in a relevant engineering discipline, science, or a related discipline with significant relevant industrial experience OR minimum HND in a related engineering discipline with extensive recent and relevant industrial experience.
2. Demonstrable experience and in-depth understanding of engineering requirements and the appropriate selection and composite manufacturing processes ensuring the selected process techniques meet our customer's requirements for safety, quality, cost, delivery and lead time.
3. Evidence of applying process knowledge to develop or improve components, manufacturing methods or technologies, with measurable impact.
4. Experience of using software packages to assist with the design, processing and testing of parts or fixturing in support of project delivery goals.
5. Demonstrable evidence of working on a range of composite manufacturing projects including new process development and existing process improvement and the integration of composite materials into new and existing products.
6. Knowledge and practical application of safety systems, risk management, and COSHH requirements relevant to composite processing workshop environments.
7. Demonstrable evidence of design for manufacture, including concept development for parts, moulds, jigs/fixtures, and introduction of suitable processing technologies to optimise time, accuracy, and performance.
8. Proven ability to work with tooling vendors and cross-functional teams to ensure manufacturing tooling and processes meet quality, performance, and delivery standards.
9. Evidence of identifying and implementing process improvements, cost reductions, and efficiency gains within composites manufacturing.
10. Demonstrable evidence of delivering projects to agreed deadlines within budget, and to required quality standards, including leading project teams to manage risks and achieve objectives.
11. Evidence of complex problem-solving skills in an engineering environment, with the ability to develop effective solutions under challenging conditions.
12. Excellent written and verbal communication skills, including the ability to produce high-quality technical reports and convey complex technical information clearly to a range of stakeholders.

DESIRABLE CRITERIA:

1. Postgraduate qualification in a relevant discipline.
2. Experienced in design and design for manufacture of composite components and mould design.
3. Develop the Technical Package (Equipment Specification, PFMEAs, Tooling, Equipment and HSE documentation) to define the manufacturing process and control it effectively.
4. Experience in the use of process or structural simulation software, i.e., Moldex, DIGIMAT, ABAQUS, ANSYS.
5. Experience with manufacturing automation technologies.
6. Experience with composite characterisation methods including destructive and non-destructive testing.
7. Understanding of technology readiness levels (TRL) (or similar processes such as MRL) and driving processes and projects to maturity.
8. Experience working to aerospace management systems and following process controls.
9. Experience in the development of project proposals to attract new work.
10. Participation in collaborative research projects.
11. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.