

Candidate Information

Position:	General Manager - Engineering
School/Department:	Mechanical & Manufacturing Engineering
Reference:	21/108786
Closing Date:	Monday 17 May 2021
Salary:	Commensurate with experience.
Anticipated Interview Date:	Wednesday 2 July 2021
Duration:	This is a fixed term contract position available until 28 February 2023 in the first instance.

Background:

The Northern Ireland Advanced Composites & Engineering Centre (NIACE) is a university-hosted, industry facing centre that has become a technology hub for the research and development of advanced materials technologies, particularly in the area of advanced composites technologies, materials characterisation and nanotechnology. The Centre has established itself as a creative environment to encourage and assist Northern Ireland's manufacturing sector to innovate and develop technical capabilities, to compete more successfully in national and global markets.

By developing relevant technological solutions for a breadth of manufacturing applications the Centre has enabled companies to work at a scale and in collaborations not feasible before its creation. With financial assistance from Invest NI and collaboration between QUB, UU and the National Composites Centre (NCC), NIACE is now entering a new, exciting phase of growth and development as part of the Advanced Manufacturing Innovation Centre (AMIC-NIACE). In particular, it is establishing itself as a fully-functioning R&D centre with staff and technical capability to define, support and deliver industry focused R&D programmes in partnership with clients or on their behalf. The new, enhanced Centre will develop a pipeline of R&D projects that will provide a sustainable, future revenue stream and grow our industrial engagement and presence. As part of the Centre's evolution we are looking to recruit a number of key personnel. Funding has been secured for two years that is the interim period until AMIC is formally created. The expectation is for AMIC-NIACE to transition into an AMIC entity after this interim period with appropriate funding arrangements.

Job Purpose:

As the face of AMIC-NIACE, you will hold an exceptional and pivotal role, providing operational leadership to your team and NIACE Industry members, as well as having a unique opportunity to shape, develop and implement the Centre's future strategy and direction. Reporting to the NIACE Board, with parallel reporting lines to senior staff of sponsor Universities responsible for the Invest NI contract. Managing an initial small team of Engineering, Technical and Administrative staff, you will work collaboratively with a diverse range of public and private sector stakeholders. You will be in a position to facilitate the formation of business collaborations to exploit current and anticipated advanced engineering and composites/materials R&D opportunities and to grow the membership of the Centre.

Key responsibilities include the development and delivery of industry focused collaborative R&D programmes, both independently and in partnership with clients. Whilst the Centre's predominant focus is in the area of composite materials, other areas include advanced engineering and manufacturing related themes. Working closely with the NIACE Board, Senior staff and Academics of QUB and UU, Industrial Centre members and other key stakeholders including government departments and agencies, you will provide tailored technical and strategic advice, solutions and guidance to industry and academia. You will also promote and market the Centre's services and expertise nationally and internationally.

Main Duties:

1. Develop AMIC-NIACE into a fully functioning, industry focussed R&D Centre to deliver against all objectives and deliver the targets included in the Invest NI Project, enabling collaboration with engineering and manufacturing businesses across NI / UK.
2. In consultation with the NIACE Board, and senior staff from QUB and UU, develop and implement the Centre business plan (with clear milestones and deliverables) and regularly report on progress.
3. Generate a range of proposals for funding innovation and collaborative R&D projects (INI, KTPs, Innovate UK, ATI, UKRI).

4. Representing the Centre, actively negotiate, influence and challenge mind-sets (at Senior Executive levels) within specific stakeholder forums including with Government Agencies, Academic Partners and Industry.
5. Provide specialist guidance and advice to enhance and develop the Centre's reputation, working in partnerships to ensure research innovations mature into job-creating commercial products and services.
6. Provide the problem solving and innovative commercial leadership necessary to ensure the Centre's long term financial viability.
7. Be responsible for your team's (Engineer, Technician and Admin Support) management and development, ensuring systems and behaviours (including Health and Safety) are in place to build a high performing team.
8. Develop and grow the Centre's membership, business interactions and engagements to deliver training, access to equipment, networking opportunities and technical support in support of the NI/UK manufacturing industry.
9. Manage and develop a range of links (e.g. AMIC's Factory of the Future) to support projects, such as automation, robotics, AI and design for manufacture.
10. Facilitate and manage workshops, programmes and meetings with credibility and skill to ensure that objectives are met.
11. Foster an inclusive partnership culture sharing advice and guidance and providing detailed consultancy support to University Colleagues and Industrial partners.
12. Champion and promote the Centre nationally and internationally.
13. Undertake any other duties that may reasonably be requested by the Board.
14. Develop a capability strategy for the centre that meets the needs of the users and regional stakeholders whilst complimenting the overall UK composites capability.

Strategic leadership:

1. Shape the strategic direction of AMIC-NIACE, in the overall context and framework provided by the Board and the sponsor Universities, planning and organising activities of others considering the implications now and in the longer term, to support the Centre's objectives.
2. Develop and lead the implementation of strategies, policies and plans for the Centre (e.g. 5-10 years in the future).
3. Plan own work and lead major projects and initiatives to meet given objectives and processes of strategic impact.
4. Review and analyse the Centre's performance and evaluate operational performance against agreed Centre KPI's. Develop and propose solutions to meet targets. Present results and put forward recommendations to support decision making, e.g. to the Board, and take appropriate actions.
5. Plan and manage for the use of research resources and facilities for Centre members, industry and academic partners.

Resource Management Responsibilities:

1. Manage budgets for AMIC-NIACE, working within the operating and financial frameworks of the sponsor Universities. Utilise and manage allocated budget and resources effectively and flexibly and control all related expenditure to ensure delivery of targets and objects are within budget.
2. Identify and implement opportunities for continuous improvement of core staff and their capabilities.
3. Actively seek opportunities to secure 'external' capabilities to support work delivery where needed.
4. Advise and plan for future physical resources.
5. Ensure research and development resources are used in an effective and efficient manner.

Internal and External Relationships:

1. Advise, influence and challenge mind-sets at senior levels within Industry and Academia.
2. Pro-actively liaise with key service users to establish and implement strategic service requirements and priorities.
3. Develop networks with fellow managers and professionals in the wider Industry / Academic communities to represent and promote the Centre's work.
4. Drive and strengthen external engagements and relationships with commercial partners, suppliers, government bodies and academic institutions related to specialisation.
5. Coordinate and liaise with other members of the project team over work progress.

Essential Criteria:

1. Honours Degree, or equivalent, in related engineering discipline OR minimum HND in related engineering discipline with at least five years relevant experience developing innovative solutions within the Composites / Engineering / Manufacturing sector.
2. At least five years relevant experience.
3. Extensive breadth of vision gained from wide-ranging experience in Composites / Manufacturing / Engineering expertise.
4. Experience of managing significant size projects or leading an activity of strategic importance in a large organisation.

5. Proven ability in developing strategic plans, influencing senior executives, challenging minds-sets and successfully implementing and rolling out operational plans.
6. Experience of managing and developing: either a significant team or teams containing experienced professionals, or a significant complex project, or activity with a significant strategic influence across a large organisation and significant impact upon organisational resources.
7. Experience of preparing project or research proposals and managing and reporting on projects externally funded by UK/EU grants.
8. An awareness of broader manufacturing / engineering developments and a comprehensive knowledge of principles, theory and practices associated with composite / polymer engineering.
9. A well-developed knowledge and understanding of manufacturing and engineering systems, services, regulations and procedures and across functions and how they relate to each other.
10. Highly developed stakeholder management skills with experience of developing effective working with, and influencing, senior management.
11. Effective interpersonal skills including motivating, negotiating, influencing and relationship/partnership building.

Desirable Criteria:

1. Hold or be about to hold a relevant higher degree or Ph.D.
2. Experience of collaborative research and effective working in a team.
3. Experience of working with international OEMs and SMEs.
4. Experience in using commercial manufacturing/simulation software tools.
5. Experience working for a composite / polymer OEM or SME.