Candidate Information

Position:	Head of Nanotech and Photonics
School/Department:	BRCD AMIC
Reference:	25/112609
Closing Date:	Monday 23 June 2025
Salary:	£62,087 - £71,945 per annum
Anticipated Interview Date:	Tuesday 8 July 2025
Duration:	Permanent

JOB PURPOSE:

We are seeking an experienced, dynamic leader with strong expertise and experience in nanotechnology and photonics R&D, to lead implementation of technology strategy and business development for the AMIC Nanotech & Photonics (NT&P) Group and oversee operational & financial delivery.

As a member of the AMIC senior management team, you will work with the executive leadership to develop and implement our nanotech & photonics technology roadmap. You will be responsible for leading a team to hit financial and programme delivery targets for the group, developing and managing multiple-work streams of activity, managing significant project resources and mitigating major risks and issues. You will establish a UK wide and global reputation for the group, establishing key research and industrial partnerships and securing funds to advance the technology strategy and deliver impact for the industrial sector in NI and beyond.

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.

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

MAJOR DUTIES:

1. Technology Strategy:
   a. Work with AMIC leadership to shape technology strategy, where you will engage stakeholders, initiate, develop, implement and lead a comprehensive technology strategy aligned with the centre's overall business goals ensuring major risk mitigation is considered at all stages.
   b. Lead the identification, selection, implementation, and integration of key technologies in Nanotech & Photonics to ensure operational efficiency and agility.
   c. Oversee the research and development (R&D) function in Nanotech & Photonics, driving innovation whilst exploring emerging technologies that align to current and/or future centre objectives.
   d. Manage the Nanotech & Photonics technology budget and resources effectively to maximise performance.
   e. Foster a culture of continuous improvement, collaboration and technological excellence within the Nanotech & Photonics (NT&P) group.

2. Business Development:
   a. Develop and lead complex multi-stakeholder engagement strategies both internally and externally, building strong internal and external commitment to planned business development projects.
   b. Identify and evaluate new business opportunities particularly focussed on Nanotech & Photonics, aligned with AMIC's technology roadmap and lead implementation of the strategy as it relates to Nanotech and Photonics.
   c. Drive strategies that result in market expansion and revenue growth for Nanotech & Photonics.
   d. Represent AMIC Nanotech & Photonics Group at industry events and conferences, building insight, long-term relationships, brand awareness and thought leadership.
3. Operational & Financial Delivery:
   a. Lead the day to day coordination of all operational aspects of the research group.
   b. Ensure delivery of financial and growth targets for the group.
   c. Ensure delivery of quality project outputs on time and on budget.
   d. Work with executive leadership to develop and evolve AMIC operational processes, monitoring and reporting, with responsibility for implementation in the Nanotech & Photonics Group.
4. Leadership and Communication:
   a. Build and lead a high-performing team of Nanotech & Photonics technology professionals.
   b. Effectively communicate the technology vision and strategy to all stakeholders, both internal and external, with expertise in Nanotech & Photonics.
   c. As part of AMIC senior management, deliver Centre success and alignment through close collaboration across all capability groups and functional areas.
   d. Foster a culture of openness, transparency, and trust within the organisation.

ESSENTIAL CRITERIA:

1. Honours degree, equivalent or higher qualification in Manufacturing, Engineering, Physical Sciences or a related field or substantial relevant experience working in a similar role.
2. Significant evidence of leading R&D teams in nanotechnology and photonics, including motivating and developing a collaborative team to meet financial and programme delivery targets across multiple work streams.
3. Significant and relevant experience in a leadership role within nanotech and photonics research and innovation that has delivered demonstrable industry impact.
4. Recent and relevant proven track record in developing successful industry stakeholder relationships and delivering high quality, on time, and within budget project outcomes for a range of complex and innovative projects.
5. Strong and evidenced understanding of business development principles and practices.
6. Strong track record in securing or contributing successfully to multi-million (+£1m) R&D funding applications from local, national and international private and public funders.
7. Robust and resilient, with strong presence and the ability to confidently deliver complex messages to a diverse and demanding audience and the ability to negotiate and influence at all levels.
8. An analytical mindset with the ability to manage and mitigate risk, with a positive creative instinct to develop solutions to support the objectives of the Advanced Manufacturing Innovation Centre.
9. Excellent communication skills – ability to communicate effectively with colleagues across the institution as well as with outside agencies and a strong commitment to collaboration and collegiality.
10. Demonstrable ability to build networks with and to influence funding bodies, major corporate partners and key stakeholders.
11. Demonstrable commitment to the mission and values of Queen’s University Belfast, AMIC and the objectives of the Belfast Region City Deal.
12. Commitment to personal and team development and growing expertise in nanotechnology and photonics.
13. Passionate about innovation and driving business growth through technology.

DESIRABLE CRITERIA:

1. Hold a postgraduate qualification in a relevant field.
2. Relevant professional qualification.
3. Demonstrable experience of research commercialisation in one or more of the following areas:
   a. Photonic device design and manufacture
   b. Device packaging
   c. Nanotechnology & associated manufacturing
4. Experience of successful collaboration and working with international OEMs and SMEs.

ADDITIONAL INFORMATION:
informal enquiries may be directed to: Ciaran Prunty at c.prunty@qub.ac.uk