



WE'RE HIRING

Chief Operating Officer

Lead GC from breakthrough science to global commercial scale, turning world-leading nanomaterials innovation into a reliable, profitable, globally scalable business.

LOCATION	SALARY	REPORTS TO	HOURS
Hybrid · NET Park, Sedgefield, County Durham	£100k base + share options	CEO · Executive Leadership Team	Full-time · international travel

About Us

GC is an innovative advanced materials engineering company, driven by an ethos to create life-changing products.

As a world leader in advanced and nanomaterials research, development and design, we apply our expertise to a wide range of applications. We work with manufacturers to resolve key technical challenges by developing breakthrough solutions and incorporating our technologies to enhance existing product performance.

Role Overview

As GC moves from breakthrough science to global commercial scale, we are appointing a Chief Operating Officer to join the business in our next phase of growth. Reporting to the CEO and serving on the Executive Leadership Team, the COO will own GC's operating model end to end – manufacturing, supply chain, quality, programme delivery and organisational scaling – and turn world-leading nanomaterials innovation into a reliable, profitable, globally scalable business.

The COO will work as a peer and strategic partner to the Chief Technology Officer (CTO), lead the operations team at GC Labs, NET Park, Sedgefield, and direct production and supply chain activity worldwide.

Role Description

The COO will be a core member of GC's Executive Leadership Team, accountable for GC's operating model and operational performance — manufacturing, supply chain, quality, programme delivery, and organisational scaling.

The COO will act as a strategic partner to the CTO to translate R&D and engineering innovation into repeatable, scalable production, while safeguarding the independence of Quality, and will work directly with suppliers and partners across multiple geographies to secure materials, capacity, and strategic manufacturing relationships.

This role suits an enterprise-level leader who can set direction at Board level while staying close enough to the detail to make sure plans are delivered, and who thrives in a fast-moving, technical, scale-up environment.

Key Responsibilities

Operations & Manufacturing

- Own end-to-end operations strategy, including production planning, scale-up of manufacturing processes, and facilities management.
- Own the capital investment plan for facilities and equipment, including build, buy and partner decisions on manufacturing capacity.
- Partner with the CTO to industrialise novel nanomaterial and composite processes, bridging the gap between lab-scale R&D and repeatable commercial manufacturing.
- Work with the Production and Quality Control Manager to ensure continuous improvement in quality management systems, process controls, and safety standards appropriate for advanced materials manufacturing.
- Oversee the Quality function and GC's quality management system, ensuring Quality has the independence and authority to stop or hold production where standards are not met, and direct access to the CEO and Board on quality matters.
- Drive unit economics and gross margin improvement through cost-down roadmaps and process optimisation.

Supply Chain & Partnerships

- Set GC's global sourcing and manufacturing partnership strategy, building and managing relationships with international suppliers, contract manufacturers, and technology partners.
- Negotiate supply agreements, manage supplier performance, and mitigate risk across a global, often specialist, supply base (nanomaterial inputs, speciality chemicals, composite substrates, etc.).
- Identify and develop new strategic partnerships to support GC's growth, geographic expansion, and capacity needs.
- Protect GC's intellectual property and process know-how across the supply chain and all manufacturing partnerships.

Cross-Functional Leadership

- Work in close partnership with the CTO on technology roadmaps, ensuring operational feasibility and cost realities are embedded in R&D and product development decisions.
- Collaborate with Sales, Finance, and Product teams to align operational capacity with commercial demand and forecasts.
- Lead, mentor, and grow the operations team as the company scales, instilling a culture of accountability, safety, and continuous improvement.
- Shape GC's organisational design, workforce planning and culture as the business scales, in partnership with the CEO.

Strategy & Business Management

- As a member of the Executive Leadership Team, shape GC's overall strategy, annual budget and long-range plan.
- Report to the CEO and Board on operational performance, setting and owning the KPI framework for cost, margin, throughput, quality and delivery.
- Drive process, systems, and infrastructure improvements needed to support GC's growth trajectory (ERP/MRP systems, S&OP processes, etc.).
- Support fundraising, due diligence and investor relations activities, presenting the operational plan and scale-up case to GC stakeholders.
- Attend Board meetings and deputise for the CEO as required, representing GC with customers, partners, investors and government bodies.

Risk, Compliance & Governance

- Ensure compliance with relevant regulatory, export control, environmental, health and safety standards across all markets GC operates in.
- Establish robust operational risk management practices, including business continuity and supply chain resilience planning.
- Lead GC's approach to operational safety, environmental stewardship and sustainability, including REACH/UK REACH and COSHH.
- To provide adequate resources to ensure the Production and Quality Manager can achieve and maintain the certifications our target markets require (e.g. ISO 9001, ISO 14001, ISO 45001, AS9100), including the organisational independence of Quality those standards require.

Candidate Profile

Essential:

- Significant senior operations leadership experience (COO, VP Operations, or similar), ideally within advanced materials, nanomaterials, composites, speciality chemicals, or a related deep-tech/hardware manufacturing sector.
- Track record of scaling manufacturing operations from early-stage/pilot production to commercial volume.
- Strong experience managing international supply chains and supplier/partner relationships.
- Comfortable working at the interface of science/engineering and commercial operations; able to communicate fluently with technical (CTO/R&D/Quality) and commercial stakeholders alike.
- Experience operating in a high-growth, resource-constrained scale-up environment. Strong financial and commercial acumen, including budgeting, cost management, and KPI reporting.
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- Proven ability to operate at Board level, with the credibility to influence investors, customers and strategic partners.
- Degree in engineering, materials science, chemistry or a related discipline.

Desirable:

- Experience in defence, healthcare, aerospace, or other regulated/high-specification manufacturing sectors.
- Familiarity with nanomaterials, graphene, or advanced composites engineering
- In-depth knowledge of nanomaterial manufacturing and processing techniques and knowledge of the implications of working with HARN particles.
- Experience supporting fundraising or investor engagement in a venture-backed or scale-up business.
- Experience implementing operational systems (ERP/MRP) in a scaling manufacturing business.
- Experience with ISO 9001, AS9100 or equivalent quality management standards.
- Lean, Six Sigma or equivalent operational excellence qualification.
- Eligible for UK security clearance.

What GC Offers

- Competitive salary
- Performance-based share options, aligned with company growth and value creation
- The opportunity to shape the operational foundation of a pioneering advanced materials company
- A senior seat at the table, working directly with the CEO, CTO, and founding team
- Exposure to cutting-edge nanomaterials and advanced materials engineering technologies applied to breakthrough products, with global market opportunities.

How to Apply

To apply, please send your CV and a covering letter carol@graphenecomposites.com by 31st October 2026.

GC is an equal opportunities employer and welcomes applications from all suitably qualified people, regardless of background.