Role Guide

Scientist

Reports to: Director of Science
Direct Reports: None
Working arrangements: Liverpool office-based, with worldwide travel, frequently at immediate or short notice, and extended periods away from home where assignments require.

Company Overview:

Founded in Liverpool in 1903, Brookes Bell is a leading multidisciplinary technical and scientific consultancy serving the global maritime and energy industries. The firm is widely recognised for casualty investigation, forensic analysis, technical dispute resolution, expert witness work, and the delivery of practical solutions to complex technical problems. Its specialists work across interrelated disciplines including marine and mechanical engineering; master mariner services; naval architecture; salvage and wreck removal; cargo science; fuels and liquid cargoes; fire and explosion investigation; paint and coatings; metallurgy; inspection and non-destructive testing; and laboratory and technical services.

Brookes Bell supports P&I clubs, shipowners, charterers, underwriters, hull and machinery insurers, cargo interests, law firms, salvors, shipyards, government departments, and other organisations operating across the maritime, energy and commodity sectors. By bringing together experts from complementary disciplines, the firm can investigate matters from multiple technical perspectives and coordinate substantial or complex assignments through a single point of contact. This integrated capability is particularly valuable in high-value casualties, major claims, litigation, salvage operations, and projects requiring rapid mobilisation, robust evidence, and clear, independent conclusions.

With teams located in strategic maritime and energy centres across the UK, Europe, Asia-Pacific, and the Americas, Brookes Bell combines international reach with local knowledge and can deploy appropriately qualified specialists wherever assistance is required. Its wider capabilities include The Lab at Brookes Bell, which provides materials testing, failure investigation, forensic analysis, and related scientific services, and 3D Marine, its full-service consulting business in the Americas. Across its work, Brookes Bell emphasises excellence, integrity, independence, innovation, impartial advice, and the recruitment and development of leading technical experts.

Overall Objective of Role:

This role offers the opportunity to turn the candidate's scientific research skills into practical solutions to real-world problems, while developing a career in cargo science and forensic investigation. The candidate will bring strong research, analytical, and report-writing skills; previous experience in marine cargo investigation or expert witness work is not essential. Full training across a wide range of areas will be provided to the successful candidate joining our team. Becoming a fully-fledged investigator within the company requires a great deal of dedication and patience. The successful candidate must be willing to accept constructive criticism and learn quickly from it. Through the company's training and development programme and work alongside colleagues from complementary disciplines, the role holder will build specialist knowledge and take on greater responsibility as their competence and experience grow.

The role holder will apply their scientific curiosity and analytical skills to investigating cargo commodities and associated incidents worldwide, helping to provide high-quality findings and practical technical advice. The work spans a wide variety of cargoes, including grain, oilseeds, refrigerated fruit and vegetables, fertilisers, minerals, and chemicals, as well as serious incidents such as cargo fires, contamination, pollution, and infestations.

The role combines hands-on investigation with scientific analysis and clear communication. The role holder will attend vessels, ports, storage facilities, and casualty sites; examine cargoes, records, and

other evidence; undertake sampling and analysis where required; and present accurate, well-supported findings to clients and other stakeholders. The role holder will work principally for shipowners and charterers, their insurers, cargo underwriters, shippers, and lawyers. As their competence and experience develop, the role holder may also prepare expert reports and give evidence as an expert witness in arbitration proceedings and court hearings.

Working alongside multidisciplinary Brookes Bell teams and independently within their competence, the role holder will contribute to assignments from initial instruction through to completion. As their cargo investigation experience grows, the role holder will take on greater responsibility for understanding clients' requirements, defining and managing allocated work, identifying technical risks and information gaps, communicating progress and emerging findings, and delivering outputs within agreed timescales and budgets.

The role holder will uphold the company's standards of technical quality, independence, integrity, confidentiality, and health and safety, while building trusted working relationships with colleagues, clients, insurers, legal advisers, classification societies, regulatory authorities, contractors, and other interested parties.

Technical review, knowledge sharing, continuous professional development, and lessons learned from completed assignments will help the role holder build their expertise. The role holder will also share their own scientific knowledge and contribute to the continuing development of the Science team and the wider business.

Duties & Responsibilities:

- Travel worldwide, frequently at immediate or short notice, to vessels, ports, terminals, storage facilities, laboratories, and other relevant locations, remaining on site as required, including extended periods away from home that may occasionally last weeks or months.
- Investigate the nature, cause, and extent of cargo damage, deterioration, shortage, contamination, infestation, fire, pollution, and other cargo-related problems through systematic, independent, and evidence-based scientific enquiry.
- Progress from contributing to investigations to leading allocated assignments as competence and experience develop, exercising sound scientific judgement, working within the individual's expertise, and seeking additional specialist input or escalating matters when needed.
- Inspect cargoes, vessels, holds, tanks, containers, warehouses, handling equipment, and surrounding conditions, recording relevant observations and evidence accurately.
- Plan and undertake representative sampling, arrange appropriate laboratory testing and analysis, and maintain clear records and continuity of evidence.
- Manage site investigations safely and effectively, complying with company procedures and local requirements, identifying hazards, and raising health, safety, or operational concerns promptly.
- Review bills of lading, charterparty documentation, certificates, logs, survey reports, photographs, laboratory results, correspondence, and other documentary evidence relevant to the assignment.
- Respond promptly and professionally to client enquiries, providing practical guidance and scientific opinions grounded in site findings, documentary evidence, test results, and established scientific principles, within the limits of the available evidence and the individual's expertise.
- Prepare clear, accurate, and well-structured technical reports setting out the evidence considered, methodology, findings, limitations, opinions, and conclusions.
- Develop the competence required to prepare expert reports and give evidence as an expert witness in arbitration proceedings and court hearings, undertaking these responsibilities where required once appropriately trained and experienced.
- Liaise with shipowners, charterers, insurers, cargo interests, lawyers, surveyors, laboratories, vessel personnel, port representatives, and other parties, keeping clients and internal project leads

informed of progress, emerging findings, evidence gaps, anticipated timescales, and material changes in scope or cost.
- Manage allocated assignments in accordance with agreed priorities, budgets, and deadlines, maintaining accurate records of time, expenses, samples, evidence, correspondence, and project documentation.
- Maintain the confidentiality, integrity, and secure handling of client information, samples, evidence, reports, and commercially sensitive material throughout each assignment.
- Engage actively in business development and marketing activities, including attending client and industry functions, supporting promotional initiatives, and developing professional relationships.
- Prepare and deliver talks, presentations, and technical briefings on cargo science and related subjects to clients, colleagues, and industry audiences.
- Build cargo investigation expertise through active participation in the company's training and development programme, learning from constructive feedback, colleagues, and practical experience.

Person Specification:

- A PhD in a scientific discipline. Post-doctoral research or relevant industrial experience would be welcome but is not essential.
- A wide-ranging interest in science and a broad scientific knowledge base, with the ability and curiosity to work across varied cargo commodities and technical subject areas.
- Experience of planning and conducting rigorous, systematic, and evidence-based scientific research or investigations. This may come from the candidate's doctoral research, post-doctoral research, or relevant industrial work; previous commercial investigation experience is not required.
- Strong analytical and problem-solving skills, with the ability to evaluate complex evidence and form clear, balanced, and reliable scientific opinions.
- The ability to prepare succinct, accurate, and well-structured scientific reports in high-quality written English, explaining technical matters clearly to both technical and non-technical audiences.
- An adaptable and motivated approach, with a willingness to learn, explore unfamiliar problems, and develop new skills. The ability to organise their work, manage competing priorities, exercise judgement within their competence, and ask for specialist input when needed.
- Strong interpersonal and communication skills, together with a commitment to scientific quality, integrity, impartiality, confidentiality, health and safety, and the secure handling of client information, samples, and evidence.
- Practical laboratory, fieldwork, sampling, analytical, or industrial experience relevant to scientific investigation would be advantageous.
- Willingness and ability to travel worldwide, frequently at immediate or short notice, and to remain away from home for extended periods where an investigation requires it.

Behaviours:

- Managing Relationships — Expected
- Communicating and Influencing — Expected
- Drive and Resilience — Expected
- Planning and Accountability — Expected
- Analysis and Judgement — Expected
- Commercial Awareness — Expected
- Change and Innovation — Expected