

Reference: NCT003
Job Title: Principal Metallurgist
Company: ESR Technology
Location: Warrington (near Manchester)
Employment Category: Full Time (37.5 hours per week)
Salary/Benefits: Competitive salary (dependent on experience), 25 days annual leave plus statutory holidays, additional leave purchase, up to 8% matched pension contribution, health care, life assurance & more

- Do you have an expert metallurgical understanding of how metals are manufactured and processed, such as casting, rolling, forging and welding?
- Can you interpret microstructures of ferrous and non-ferrous materials?
- Do you have knowledge of how microstructures affect material properties?
- Are you suited to customer facing consultancy & problem solving?
- Do you want to work on a wide range of industrial projects?
- Do you want a varied and satisfying career?
- Do you expect to be recognised for your performance?

The Company

ESR Technology is a leading Science & Engineering services company working within the rail, oil & gas, process plant, utilities, aviation and space industries. We are seeking highly motivated technical staff to join a successful consultancy team, working on challenging projects for industrial clients. We need confident, capable people who can take project responsibilities in their stride, help us grow our business and develop robust client relationships.

The Job

A vacancy for an experienced metallurgist has become available within our National Centre of Tribology. We are looking for a specialist in Forensic Engineering, Failure Analysis and Materials to work on a variety of industrial projects for customers based mainly in the UK although occasionally abroad. Our work involves finding robust solutions and providing reliable advice on problems of importance to our customers.

The job will require a practical understanding of metallurgy, failure investigation and laboratory practices, working on forensic examination and component reliability projects.

The role will include microscopic examination of failed components, fractography, materials analysis and testing, defect analysis and material characterisation.

Site visits, critical thinking, a forensic approach to problem solving and attention to detail are all a necessary part of the role.

Good communication skills are an absolute essential. The candidate must be able to produce clear concise written reports and be able to formally present project findings to technically informed customers. The candidate will also be business aware and able to work to controlled budgets and fixed time constraints.

The type of work requires someone with practical skills, willing when necessary, to use hand tools to investigate component assemblies; inspect components using state of the art scanning electron microscope (SEM) and the interpret microstructures using various optical microscopes.

Requirements

The successful candidate will need to be self-motivated, able to prioritise work and learn quickly from practical investigations and from working alongside experienced colleagues. It is essential that the candidate has:

Problem solving skills

- Good theoretical and practical problem-solving skills
- A creative and original approach to finding solutions that will achieve customer objectives
- An understanding of how engineering components function and ultimately fail
- An ability to synthesise information and data to rapidly focus on the core issues
- Tribological knowledge and an understanding of the roll of the subject in all moving systems

Technical expertise

- A thorough understanding of the techniques of root cause failure analysis
- An expert understanding and use of an optical microscope, SEM and EDX
- Understanding of failure mechanisms of material including processes such as corrosion, SCC, HE, fatigue, wear, thermal degradation etc
- Experience with the safe metallurgical preparation of a range of materials
- Provide the 'expert' role for one or more specialist areas and be recognised as such both within the company and in the wider industry sector.

Commercial awareness and project management skills

- Experience working with customers at all levels from shop floor to board of directors
- Identify, secure, undertake and manage technical consultancy work in materials engineering
- Job management: from handling enquires and preparing priced proposals to completion of projects, including working to QA and safety requirements
- Business Development: contribute to winning new business in materials engineering
- People Management: effective & adaptable leadership & coaching skills to get the best from project teams working on client projects.
- Accountable for performance of projects up to a total contract value of typically £200K pa.

Customer focus

- Excellent written and verbal communication of technical results for non-technical and technical customers
- Responsible for recommendations affecting operation of client assets with business and safety implications
- Conduct technical investigations, solve problems and provide solutions for clients across the industry spectrum
- Make recommendations that may have significant impact on a clients' business
- Responsibility for project purchases within delegated authority and within project budget
- Responsibility for managing own workload and planning for other staff resources

Qualifications

- Metallurgical or Materials degree or equivalent academic and professional experience.
- Membership of a professional body would be expected.

Travel

Occasional UK and International travel.

Experience

At least 10 to 15 years relevant experience in the relevant technical area is required.



Right to Work

Prospective candidates for this role should be aware that any offer of employment in connection with this vacancy is conditional upon, and subject to the candidate obtaining, and at all times continuing to have, the right to live and work in the United Kingdom.

Application

If you are passionate about delivering outstanding value to our clients and our business, then this could be the role for you. Write with full CV, highlighting what you can contribute in this diverse and interesting role to: careers@esrtechnology.com