

Job Description for Senior Specialist, Metallurgy Lab II

Overview

The Senior Specialist, Metallurgy Lab II, is a critical role responsible for conducting detailed metallurgical analysis, supporting research and development projects, and ensuring the highest standards of quality control within the laboratory. This position demands deep technical expertise in metallurgy, strong analytical skills, and the ability to work collaboratively with cross-functional teams.

Responsibilities

- **Metallurgical Analysis:** Perform complex metallurgical analyses using various techniques such as microscopy, spectroscopy, and mechanical testing to evaluate the properties and behavior of metals and alloys.
- **Research and Development:** Support and lead R&D projects aimed at developing new materials, improving existing processes, and solving metallurgical problems. Collaborate with research teams to design experiments and interpret results.
- **Quality Control:** Ensure all laboratory processes and outcomes meet stringent quality standards. Develop and implement quality control protocols and procedures to maintain consistency and reliability in test results.
- **Data Interpretation:** Analyze and interpret complex data to provide actionable insights and recommendations. Prepare detailed reports and presentations to communicate findings to stakeholders.
- **Equipment Maintenance:** Maintain and calibrate laboratory equipment to ensure accuracy and precision in testing. Troubleshoot and resolve any technical issues that arise.
- **Documentation:** Accurately document all laboratory activities, experimental procedures, and results. Ensure compliance with industry standards and regulatory requirements.
- **Training and Mentorship:** Provide guidance and training to junior laboratory staff and interns. Foster a collaborative and learning-oriented environment within the lab.
- **Continuous Improvement:** Identify opportunities for process improvements and implement best practices to enhance laboratory efficiency and effectiveness.

Qualifications

- **Education:** Bachelor's degree in Metallurgy, Materials Science, or a related field.
- **Experience:** Minimum of 5 years of experience in a metallurgical laboratory or related environment. Previous experience in a senior or specialist role is highly desirable.

- **Technical Skills:** Proficiency in metallurgical testing techniques, including microscopy, spectroscopy, and mechanical testing. Familiarity with metallurgical software and data analysis tools.
- **Analytical Skills:** Strong analytical and problem-solving skills with the ability to interpret complex data and provide actionable insights.
- **Communication Skills:** Excellent written and verbal communication skills. Ability to prepare and present detailed reports and presentations.
- **Team Collaboration:** Demonstrated ability to work effectively in cross-functional teams. Strong interpersonal skills and the ability to mentor junior staff.
- **Attention to Detail:** High level of attention to detail and accuracy in all laboratory activities and documentation.
- **Adaptability:** Ability to adapt to changing priorities and work effectively in a fast-paced environment.