ENG  Metallurgical/Materials Science Engineer  537706

Posting End Date

08/31/2019

Job Title:  Core Engineering Sr. Associate, Core Engineering Specialist, Core Engineering Sr. Specialist

Specific Job Responsibilities:

Provide technology development from concept through bench and pilot scale leading to Production application, in support of Y-12 National Security Complex (Y-12) plans, programs, and missions. Support a variety of theoretical, experimental, and practical applications of metallurgical theory/practice on a range of metals/alloys used at Y-12.

Support technical needs of the Development Organization related to theoretical, experimental, and practical materials application of uranium/uranium alloys, steels/stainless steels, and other materials of interest to the Nuclear Security Enterprise (NSE). Conceive and develop metals processes and techniques in response to NSE and Y-12 forecasted needs. Working across Y-12 and the Nuclear Weapons Complex, design and carry out experiments assessing metal and material properties and processing for production applications. Provide technical support to operating organizations and execute experimental plans as required to ensure highest quality in materials development, characterization, and manufacturing development activities.  Provide technical support in the areas of welding and joining technologies for metals. Direct the technical development of junior staff members. Develop technical leadership in the area of metallurgy/materials for Y-12 and NSE applications. Function as consultant to Y-12 and the NSE on metals/materials technology, fabrication, characterization and certification.

Manage laboratory facilities and various types of relevant metals processing equipment including casting, rolling, heat treating, and ancillary metal processing equipment. Comply with facility safety basis requirements and prepare/execute work control documentation for hands-on work according to Development guidelines.

Provide theoretically-based production problem solving for a wide range of metals and other materials requiring high, nuclear-grade precision and quality.

Develop project proposals for technical development work in response to Y-12 and NSE needs, and execute projects on schedule and within budget.

Report progress and experimental results to line and project management on a regular basis.

Provide technical support in areas of expertise to other Development Sections as needed.

Team formally and informally as required with other Y-12 technical/operations/project personnel for innovative and effective synergistic solutions to complex needs involving materials processing.

Represent Y-12 on various NSE teams working NSE-wide issues and projects. Interact with Design Agency and other NSE-site technical/program personnel on requirements and specifications involving materials processing. Function as consultant to Y-12 and the NSE on metals/materials technology, fabrication, characterization and certification.

Specific Job Knowledge & Training Required:

Required Education and Experience:

An ABET accredited BS in engineering or materials science discipline with 2 years of relevant experience or MS is required.

Ten or more years of relevant education, training, and/or progressive experience may be considered to satisfy educational and years-of-experience requirements for this posting.

Requires strong technical planning and written and verbal communication skills. Requires the ability to execute projects within constraints and to work on teams solving complex technical challenges. Requires hands-on ability and working knowledge of laboratory processes and metallurgy equipment.

Preferred Education and Experience:
PhD in Materials Science/Metallurgical Engineering, or a Master's Degree in Materials Science/Metallurgical Engineering plus a minimum of four years relevant materials experience (casting/rolling/heat treating/joining and support activities involving uranium alloys, or steels, or other materials).

NOTES:

Requires a Q clearance; however all qualified candidates will be considered regardless of their current clearance status. The ability to obtain and maintain a Department of Energy "Q" clearance is required.

Position may require entry into Materials Access Areas (MAA) and participation in the Human Reliability Program (HRP).  If HRP is required, candidate must complete a counterintelligence-scope polygraph, pursuant to 10CFR 709. Medical requirements may apply.

Full-time

Y-12 is a drug-free workplace.  Candidates accepting a job offer will be required to pass a pre-placement physical, drug screening and background investigation.  As an employee, you must also be able to receive and maintain a security clearance from the United States Department of Energy in order to meet eligibility requirements for access to classified information or matter.   All employees with a security clearance are also subject to being randomly selected for drug testing without advance notification.

Y-12 is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, gender, sexual orientation, gender identity, age, religion, national origin, ancestry, genetic information, disability or veteran status.

To Apply use this link <https://www.y12.doe.gov/careers/>