#14572 Metallurgist - R&D Alloy and Process Modeling Engineer – Melting and Solidification

Carpenter Technology Corporation is a leading producer and distributor of premium specialty alloys, including titanium alloys, nickel and cobalt based superalloys, stainless steels, alloy steels and tool steels. Carpenter’s high-performance materials and advanced process solutions are an integral part of critical applications used within the aerospace, transportation, medical and energy markets, among other markets. Building on its history of innovation, Carpenter’s powder technology capabilities support a range of next-generation products and manufacturing techniques, including additive manufacturing and 3D printing.

The successful candidate is expected to have a strong background in modeling of metallic alloys and an understanding of processing as well as physical and mechanical metallurgy. Candidates should demonstrate an understanding of modeling tools and techniques used for melting and solidification processes and have a thorough understanding of computational fluid dynamics. This position will be a technical expert using modeling software used to simulate VIM, ESR and VAR re-melting and other melting techniques as well as supporting further development of modeling approaches for casting simulations, solidification related phenomena, thermal handling, fluid flow, and gas atomized powder production. The candidate will interact with R&D Engineers and computational modelers to assist in development of new alloys and processes and to design experiments using standard experimental design techniques. Candidate must be able to interface with manufacturing personnel to understand needs for modeling support to improve and develop processing of Carpenter’s product portfolio.

Candidates should demonstrate:

•Advanced degree in Metallurgical Engineering or equivalent discipline.

•A thorough understanding of solidification phenomena and computational fluid dynamics (CFD).

•Knowledge of liquid metal processing of specialty alloys and the connection to properties and quality.

•Understanding of physical metallurgy and structure-property relationships in superalloys and specialty steels.

•Candidate must have experience working in team efforts and must demonstrate strong communication and interpersonal skills..

•Candidate must be self-motivated to identify and manage new projects and applied research opportunities.

Carpenter Technology Company offers a competitive salary and a comprehensive benefits package including life, medical, dental, vision, flexible spending accounts, disability coverage, 401k with company contributions as well as many other options to employees.

Carpenter Technology Corporation’s policy is to fully and effectively maintain a program of equal employment opportunity and nondiscrimination for all employees, to employ affirmative action for all protected classes, and to recruit and develop the best qualified persons available regardless of age, race, color, religion, sex, gender identity, sexual orientation, marital status, national origin, political affiliation or any other characteristic protected by law. The Company also will recruit, develop and provide opportunities for qualified persons with disabilities and protected veterans.

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