

Director Materials Engineering / Metallurgist

Are you a looking to join a high-tech 3D printing company that helps develop the next generation of spacecraft and electric vehicles? Fortius Metals is leading the effort to bring stronger metal alloys to large format robotic additive manufacturing (AM). We are a venture-funded, early stage, high growth company whose products have received multiple awards for high performance applications. We enable stronger, lighter fabrication for aerospace and defense customers with our patented 3D printing and welding alloys. Our long-term goal is to re-shore manufacturing in the USA.

We have an immediate opening for an outstanding leader to join our growing team. This position will improve the capabilities of Fortius Metals by helping the company scale up production of our advanced welding wires, designed for 3D printing using the Reactive Additive Manufacturing (RAM) technology that enables high performance parts to be printed using wire-DED processes. This role will work cross-functionally with Engineering, Sales, Marketing, and Operations.

Located near Boulder, CO, this position is a foundational role in an emerging company. Fortius Metals offers a competitive salary commensurate with experience, a fun work environment, excellent health, dental, and vision benefits, 401K, and an equity position.

All candidates must be United States citizens. Candidates may be required to perform a background check and reference verification, credit check, and/or preemployment drug screening. No relocation reimbursement. Candidates submitted by third-party agencies will not be considered.

What you'll do:

- Lead the development team.
- Provide technical support for metallic materials used in wire direct energy deposition (wire-DED) additive manufacturing, forging, forming, extrusion, brazing, and welding processes.
- Develop and control special procedures for materials and quality processes to standardize and accelerate wire production, evaluation, and internal qualification. Apply Design of Experiments methodologies to development projects and accelerate our path to market.
- Collaborate with business development to ensure customer part designs are compatible with RAM materials and AM processes.
- Assist in writing proposals and presenting at conferences. May serve as Principal Investigator for funded projects.
- Support failure analysis and material evaluation of large AM parts.
- Impart expertise of materials characterization techniques and standards (e.g. SEM, EDS, fractography, metallography, radiography, ultrasound, micrography, and mechanical testing).
- Manage both internal and external projects from start to finish - primarily focused on material development and commercialization.
- Lead and coordinate internal and external laboratory efforts for supporting additive manufacturing and wire production: including the development of weld parameters, wire fabrication process specifications, heat treatment specifications, supplier qualification, part qualification, mechanical testing, and customer-facing updates.
- Typically works with minimal direct supervision, conferring with R&D, operations, and business leaders as needed; has appreciable latitude for independent action or decision.

What you need to know:

To be successful in this role, you need to be a self-starter that can thrive in ambiguity, identify problems and quickly resolve them, and provide definition to the previously undefined. You should have a strong commitment to quality and safety – and you should have the discipline required to maintain both in a fast-paced environment. You will set the tone for how the company develops materials technology and the team. You will be dependable and hard working. You will need to balance a scrappy, get-it-done attitude with a vision for the long-term processes required for scaling and efficiency.

- Advanced degree (PhD preferred) in Materials Engineering, Welding Engineering, Metallurgy, or related field.
- Familiarity with AM materials and processes.
- Proven experience following industrial standards or guidelines focused on metallic materials testing/analysis such as ASTM, AMS, etc.
- Demonstrated experience developing new materials and processes.
- 8+ years of experience relevant to metallic materials and project management.
- Commitment to improve upon daily processes and safety precautions.
- In-depth understanding of hygienic laboratory practices.
- Computer proficiency including MS Office (i.e., Microsoft Word, Excel, PowerPoint) is a must
- Ability to travel to support development and testing opportunities, with potential international travel.
- Ability to respect the perspectives and ideas of those with a different background, education, and culture than yourself.
- High attention to detail with excellent communication, documentation & organization skills.
- Natural curiosity and willingness to learn
- Dependable and hard working
- Takes initiative and has a sense of urgency
- Confident and positive attitude
- Great team worker

Nice to Have but not required:

- In-depth knowledge of aluminum, stainless steel, Fe/Ni/Co-based alloy systems and/or alloy design for AM applications.
- Advanced understanding of metallurgy, heat treatments, and post-processing.
- Solid background in Design for Six Sigma and/or statistical Design of Experiments methodologies
- Experience launching commercial products.

Benefits:

- Benefits include: Medical, dental, vision, basic and supplemental life insurance, paid parental leave, short and long-term disability, 401K with a company match of up to 4%.
- Paid Time Off: Unlimited and 10 company-paid holidays.
- Discretionary bonus: Bonuses are designed to reward individual contributions as well as allow employees to share in company results.

If you meet these requirements and want to join a fast-growth company, email your cover letter and resume to resumes@fortiusmetals.com Include Job Title “Director Materials Engineering” in the subject of your email.

Fortius Metals is an Equal Opportunity Employer. We value diversity and are committed to creating an inclusive environment for all employees. All aspects of employment are decided on the basis of qualifications, merit, competence, performance and business need.

www.fortiusmetals.com