

Faculty Position in Materials Manufacturing – Job Description

The Case School of Engineering (CSE) is seeking qualified candidates to fill a faculty position at the rank of Assistant or Associate Professor in the Department of Materials Science and Engineering (MSE). This is a tenured/tenure-track position and the goal is that this appointed individual will contribute to the new NSF-ERC on Hybrid Autonomous Manufacturing, "Moving from Evolution to Revolution (HAMMER)," bit.ly/3EmyWpE, catalyze collaborative research and education in the area of materials manufacturing, and provide momentum for new and emerging joint activities with other departments at CWRU.

The successful applicant will demonstrate a vision of research and teaching that: advances the theory, practice, and application of advanced manufacturing concepts; using for example, elements of Integrated Computational Materials Engineering (ICME) techniques, including simulation and computational modeling; conducts experiments that integrate sensors, robots, and other proxy measurements of evolving microstructures during deformation processing to enable hybrid autonomous manufacturing; develops new computational algorithms that describe evolving microstructural features, and statistical methods to manage, analyze, and visualize data; and/or gains an understanding of the multi-scale structure and properties of materials that underpin and control their performance.

The applicant will be expected to conduct research, teaching, and service. The candidate will be provided mentoring, access to facilities, and support. The MSE department has access to excellent facilities in the Advanced Manufacturing and Mechanical Reliability Center (AMMRC), Case Metals Processing Lab (CMPL), Nitinol Commercialization Accelerator Lab (NCAL), Swagelok Center for Surface Analysis of Materials (SCSAM), Solar Durability and Lifetime Extension (SDLE), High Performance Computing (HPC), and Sears Think[box], an innovation center and maker space.

Minimum Qualifications:

Candidates at the Assistant Professor level are required to have received a Ph.D. from an accredited University in Materials Science and Engineering, or a related discipline; should have demonstrated a record of research and scholarship demonstrating impact in materials manufacturing, and provide a vision of research and teaching excellence at their convergence.

An appointment at the level of Associate Professor, in addition, will require evidence of a national reputation for research expertise, a distinguished record of publication, funded research, and successfully applied pedagogies for mentoring researchers.

How to Apply:

Applications should include a cover letter, a complete CV, statements of research, teaching, and diversity, and a list of at least three potential references who can be contacted for letters of reference.

- The research statement (5 pages) should provide the committee a clear understanding of the applicant's plans for future research programs and plan of funding submissions.
- The teaching statement (3 pages) should provide insight into the applicant's interests, experiences, and philosophy for enriching the learning of emerging scholars both in and out of the formal classroom.
- The diversity statement (2 pages) should provide a clear record of applicants' past (if applicable) and proposed efforts to promote diversity, equity, and inclusion of historically excluded individuals in their teaching, research, and/or service and/or how individual and/or collaborative efforts promote diversity, equity, and inclusion inside and outside institutions of higher learning.

The full application packet should be sent via email as a single pdf document to:

[Simone Quartell \(*simonetta.quartell@case.edu*\)](mailto:simonetta.quartell@case.edu) with the subject line "[Materials Faculty Opening](#)". *Administrative Assistant, Department of Materials Science and Engineering.* Review of applications will begin on January 3, 2023. Evaluation of candidates will continue until the position is filled.

In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Women, veterans, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply. Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants requiring reasonable accommodation for any part of the application and hiring process should contact the Office of Equity at 216.368.8877 to request a reasonable accommodation. Determinations as to granting reasonable accommodations for any applicant will be made on a case-by-case basis.