

Post: **Professor – Tenure System (Open Rank)**
Other titles/ranks: **Assistant Professor, Associate Professor, Professor**
Number of positions: **1**

Snapshot

The College of Engineering is seeking applications for a tenure system faculty position related to composite materials manufacturing within the Department of Chemical Engineering and Materials Science.

Position Summary

The [College of Engineering](#) at [Michigan State University](#) (MSU) invites applications for a tenure-system faculty position in the [Department of Chemical Engineering and Materials Science](#) (ChEMS) in the areas related to composite materials science and manufacturing. Candidates must have an earned PhD in Materials Science and Engineering, Chemical Engineering, or a closely related discipline at the time of appointment, starting as early as summer of 2027. Applications will be accepted at all ranks. This position leverages the [MSU-Fraunhofer USA Center Midwest](#) (CMW) collaboration, designed to address global grand challenges and national priorities through the creation of new faculty positions in some of the most promising – and critical – fields of research related to coatings, materials, and advanced manufacturing.

The candidate is expected to complement the growing composites portfolio at MSU and CMW with a focus on fundamental and applied research and industry interaction. The position requires close collaboration with CMW and [Fraunhofer Institute for Chemical Technology](#) (ICT) in Germany, as well as other Fraunhofer Institutes active in the composite space. In particular, the candidate will support the ongoing coordination between the composites activities at MSU – including the [Composite Materials and Structures Center](#) (CMSC) – and CMW.

All areas of composite materials and manufacturing will be considered, with particular interest in:

- Experimental processing and manufacturing of structural composites, especially continuous-fiber thermoplastics
- Composite material, interface, and surface development
- Multifunctional and discontinuous-fiber composite systems
- Process monitoring, modeling, automation, and AI-assisted manufacturing
- Design and optimization informed by process–structure–property relationships
- Sustainable, recyclable, and circular composite technologies
- Advanced multi-scale and in situ characterization of composite microstructures and interfaces to establish processing–structure–property relationships

Preference will be given to candidates who can develop a strong experimental laboratory and translate fundamental materials research toward manufacturing applications, including structures for the mobility industry.

Other qualifications include strong leadership and interpersonal skills, excellent written and oral communication skills, an ability to work in a collaborative international research environment, and a commitment to fostering and advancing inclusion. Joint appointments with other engineering departments are possible, considering existing strengths and capabilities, and the candidate's

preferences. With this position, the candidate is expected to advance the reputation of MSU and Fraunhofer through their professional activities. Those who conduct research with broad impact on society at large are of high interest.

This is a union position represented by the Union of Tenure System Faculty (UTSF). The university is working with the union to establish a collective bargaining agreement.

Community of Respect and Innovation

At Michigan State University's College of Engineering, we believe that education and innovation are strongest when built on mutual respect. Guided by MSU's land-grant mission, we are dedicated to advancing knowledge, expanding access to education, and creating solutions that serve the common good. We are committed to a community where each person is respected, supported, and empowered to thrive—engineering with respect, innovating with purpose, building with trust, and growing through resilience. Learn more about our [Community of Respect and Innovation](#).

Minimum Qualifications

- Have an earned PhD in Materials Science and Engineering, Chemical Engineering, or a closely related discipline at the time of appointment
- Potential for high-quality instruction and mentoring at the undergraduate and graduate levels
- Demonstrated ability and/or potential to provide service to the Department, the University, and the profession, and to work with students and faculty from a variety of backgrounds
- For Assistant Professor candidates: strong potential for high-quality research likely to result in top-level publications and national recognition
- For Associate/Full Professor candidates: an established national reputation for original and influential research, with demonstrable evidence of continued growth in national status

Desired Qualifications

- Demonstrated leadership ability, with strong interpersonal skills and the capacity to build effective working relationships across diverse teams
- Excellent written and oral communication skills, with the ability to convey complex information clearly to varied audiences
- Proven ability to thrive in a collaborative, interdisciplinary research environment

Required Application Materials

Interested individuals should apply for this position through <http://careers.msu.edu> and refer to posting #1169882. The application must include the following materials:

1. A detailed CV
2. A cover letter summarizing your qualifications (up to five pages)
3. A research vision statement (up to five pages)
4. Names and contact information for at least three professional references

The vision statement should address the potential impact of work and how it aligns with the existing strengths of the Department, College, CMW, and other programs at MSU in the context of emerging industrial applications. Data indicates a paucity of underrepresented minorities and women faculty in engineering disciplines; individuals from these groups are strongly encouraged to apply.

Special Instructions to Applicants

Review of applications will begin on **12/01/2026** and continue until the position is filled. Questions about this position are welcome and should be directed to the search committee chair by email at compositesfacultysearch@egr.msu.edu.

About The College of Engineering

For more than 130 years, the MSU College of Engineering has advanced, shared, and applied engineering knowledge to tackle society's most pressing challenges. Guided by MSU's land-grant mission, we prepare exceptional graduates, conduct breakthrough research, and drive innovations that improve lives locally and globally. As an R1 institution, we support our faculty and students with world-class facilities and robust infrastructure for discovery and application, underscored by the college's \$71 million in annual research expenditures.

Our eight departments span computational sciences, energy, health, manufacturing, materials, mobility, security, and sustainability. Through strong collaboration and mentorship, the college provides an environment where faculty can thrive, lead transformative research, and help shape the technologies and solutions of the future.

About Fraunhofer USA, Inc.

Fraunhofer USA, Inc. is a 501(c)(3) nonprofit organization that bridges the gap between academic discovery and industrial innovation. Founded in 1994, the organization conducts applied research and development for industry, state governments, and federal agencies across the United States. Fraunhofer USA's Center Midwest (CMW) has been co-located on Michigan State University's campus since 2002.

Working closely with its founding partner, Fraunhofer-Gesellschaft—Europe's largest applied research and development organization—Fraunhofer USA combines German engineering excellence with American entrepreneurial drive to accelerate technological advancement. Through research centers strategically partnered with leading U.S. universities, the organization specializes in advanced manufacturing, sustainable energy, artificial intelligence, software systems, and materials science.

Fraunhofer USA's position within the global Fraunhofer network and its strategic partnerships provide access to domestic and international resources that enhance its research and development services. In an increasingly competitive global environment, the organization strengthens national and transatlantic collaboration in education, applied research, and innovation, helping organizations of all sizes bring new technologies to market and address critical societal challenges.

Required Degree

PhD in Materials Science and Engineering, Chemical Engineering, or a closely related discipline.