

College of Engineering, Michigan State University Faculty Positions in Coatings and Diamond Technologies

Join Michigan State University's Global Impact Initiative, designed to address the grand challenges through the creation of over 100 new faculty positions in some of the most promising and exciting fields of research. We welcome applicants from diverse backgrounds. MSU offers an inclusive and collaborative work environment. To learn more visit <http://research.msu.edu/global-impact>.

The Departments of Electrical and Computer Engineering (ECE) and Chemical Engineering and Materials Science (CHEMS) at Michigan State University invite applications for a junior level tenure-system faculty position and an open-rank, fixed-term faculty position in the areas of electronic materials, devices or functional coatings. The tenure-system position is targeted at the junior faculty level, but senior candidates with outstanding credentials may be considered. These faculty positions are part of an expansion of the MSU/Fraunhofer Center for Coatings and Diamond Technologies (CCD), which is located on the MSU campus and includes 30 individuals consisting of faculty, graduate students, Fraunhofer USA engineers and staff, and student interns (<http://www.egr.msu.edu/fraunhofer-ccd>). CCD is looking to expand its research and development activities in the areas of diamond and ultra-wide bandgap electronics, devices, and sensors and in the area of hard functional coatings. The current CCD activities include diamond synthesis, diamond synthesis machine design, diamond electronics, diamond device and sensor microfabrication, diamond-like carbon (DLC) coatings and their applications and other hard, functional coatings.

Exceptional candidates should have an established record of excellence in one or more of the following areas: wide bandgap electronics, electronic device design, modeling, simulation, fabrication and testing; electronic device packaging, especially high power and high frequency wide bandgap electronics; diamond photonics, optics and X-ray optics; diamond electro-chemistry and sensors; functional coatings; electronic materials characterization; wide bandgap electronics reliability and lifetime; or diamond and related wide bandgap semiconductor synthesis and processing. Candidates with either experimental or computational expertise in wide bandgap material, device and sensors are sought. Also sought is a candidate with experimental characterization expertise to lead the materials characterization effort in the coatings and diamond areas.

The openings are available starting August 16, 2016. The tenure-system position include research, teaching and service responsibilities, while the fixed-term position has primarily research responsibilities. These appointments can be either in the ECE Department or CHEMS Department, or joint in both departments. Multidisciplinary research across a broad range of disciplines is strongly encouraged.

The ECE Department presently has 49 faculty members including two National Academy of Engineering members, 18 IEEE Fellows, and 13 NSF CAREER awardees and it administers B.S., M.S. and PhD programs. The Department has strong research programs in all major areas of electrical and computer engineering, with annual research expenditure of over \$17M. The Department has accredited B.S. degree programs in both Electrical Engineering and Computer

Engineering. The current enrollment is approximately 260 full-time graduate students and 770 undergraduate students.

The CHEMS Department consists of 28 faculty members, including three University Distinguished Professors and eight professional society fellows. Research programs span all major areas in chemical engineering and materials science, with annual research expenditures of \$9M. The Department offers degree programs at the BS, MS, and PhD levels in both chemical engineering and materials science and engineering. Bachelor's programs in both CHE and MSE are fully accredited, and current enrollment for the department stands at approximately 110 graduate students and 730 undergraduates.

MSU enjoys a park-like campus with outlying research facilities and natural areas. The campus is adjacent to the city of East Lansing and the capital city of Lansing. The Lansing metropolitan area has a diverse population of approximately 450,000. Local communities have excellent school systems and place a high value on education. Michigan State University is pro-active in exploring opportunities for employment for dual career couples, both inside and outside the University. Information about MSU's dual career support can be found at <http://miwin.msu.edu/>. Information about WorkLife at MSU and the College of Engineering can be found at <http://www.egr.msu.edu/WE>.

Candidates should submit an application for these positions through: <http://jobs.msu.edu/> and refer to position #2293 for the tenure-stream position and #2257 for the fixed-term position. Applicants should include a cover letter, curriculum vitae, the names of at least three references, and statements of research and teaching interests. For full consideration, applications should be received before January 25, 2016. Applications will be reviewed thereafter on a continuing basis until the positions are filled. Nominations or questions are welcome by contacting the search committee chair through email at ece-diamond-facultysearch@egr.msu.edu.

Michigan State University has been advancing the common good with uncommon will for more than 160 years. A member of the Association of American Universities, MSU is a research-intensive institution with 17 degree-granting colleges.

MSU is an affirmative-action, equal opportunity employer. MSU is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. The university actively encourages applications or nominations of women, persons of color, veterans, and persons with disabilities.