# MISSOURI

## **ADVANCED MATERIALS FACULTY POSITION**

Advanced Materials for Sustainable Infrastructure Signature Area

### Missouri S&T is seeking highly qualified, motivated faculty members in the signature area of Advanced Materials for Sustainable Infrastructure.

As part of a focused hiring campaign in this signature area, S&T invites applications for full-time, tenure-track faculty positions at the assistant and associate professor levels; however, outstanding applicants at the full professor level may be considered. The priority hiring areas for this cluster hire are:

#### Advanced Polymer Materials for Construction of Civil

**Infrastructure** — Areas of interest include synthesis, development and characterization of polymers, particularly those used for regulating the rheology and optimizing mechanical properties and durability of traditional and novel construction material systems.

#### • Modeling and Design of Construction Materials for Infrastructure

**Applications** — Areas of interest include development and use of advanced computational tools (e.g. atomic- or molecular-scale and higher length scale computational models) to elucidate fundamental relationships between composition, structure, and macroscopic properties of construction materials and reinforcement.

• **Construction Automation and Robotics** – Areas of interest include all aspects of robotics as applied to civil construction automation from pre-fabrication of components to on-site assembly to repair and maintenance, real-time monitoring of construction processes, and automated inspection of constructed facilities.

Depending on the area of focus, candidates are expected to have a strong background in a number of the following areas: cement-admixture interaction, polymer chemistry, physical chemistry, automation in construction operations including inspection, multi-scale constitutive modeling of civil infrastructure systems, construction automation, and robotics.

Candidates should have a Ph.D. in chemistry, chemical engineering, polymer or materials science, mechanical engineering, civil engineering, or a closely related discipline, with research experience in the particular cluster area discipline. The successful candidate is expected to collaborate on interdisciplinary research with colleagues from science, engineering, and social science departments through the Center for Infrastructure Engineering Studies (http://cies.mst.edu) and to develop and sustain a strong externally funded research program. Candidates should have excellent communication skills and a commitment to excellence in teaching at all levels.

The appointment is anticipated to **begin in fall 2018**.



The Advanced Materials for Sustainable Infrastructure signature area plays a critical role in improving the resilience and service life of the nation's existing transportation, nuclear, and utility infrastructure in an environmentally sustainable manner. Additional information regarding this signature area is online at: **signature.mst.edu**.

Review of applications will begin on **Jan. 9, 2018**, and applications will be accepted and reviewed until the position is filled.

Learn more about campus online at **www.mst.edu**.

## → SUBMIT YOUR APPLICATION

Review of applications will continue until the position is filled. Interested candidates should electronically submit an application at http://hr.mst.edu/careers/academic/.

Applications MUST include:

- a current curriculum vitae
- a statement of research plans
- a statement of teaching philosophy
- complete information for three references

All application materials must have position reference number **00067779** for the associate professor position, or **00067780** for the assistant professor position, in order to be processed. Acceptable electronic formats that can be used for electronic submission of an application include PDF and Word; hardcopy materials will not be accepted. S&T seeks to meet the needs of dual-career couples.

Missouri S&T is an AA/EEO employer and does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, disability or status as a protected veteran. Females, minorities, and persons with disabilities are encouraged to apply. Missouri S&T participates in E-Verify. For more information on E-Verify, please contact DHS at 1-888-464-4218.

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