



**Non-Tenure-Track Faculty  
Position in Nuclear Engineering**  
Missouri University of Science and Technology  
Rolla, Missouri  
<https://mne.mst.edu/>

The Mining and Nuclear Engineering Department at Missouri S&T is seeking outstanding applicants for an assistant or associate professor, non-tenure-track faculty position in all areas of nuclear engineering. Preference will be given to applicants who can contribute to the department's areas of strength such as delivery of fundamental and core nuclear science and engineering classes at undergraduate and graduate levels, delivery of instruction mode that embraces innovative teaching/experiential learning, and; deployment of successful distance education/e-learning. Successful candidates will be expected to have strong commitments to (a) high-quality teaching both at the undergraduate and graduate levels, (b) service in the applicant's professional community and our institution, and (c) increasing the diversity of both the student body and faculty. Applicants must hold a Ph.D. in nuclear engineering or a closely related field. Further details on required and desired attributes, skills and characteristics of the successful candidate, and the department's vision and strategic plan, activities, and research may be found at: <https://mne.mst.edu/>.

Interested candidates should electronically submit their application consisting of: 1) a cover letter, 2) a current curriculum vitae, 3) a teaching statement, 4) a diversity statement, and 5) complete contact information for at least four references to Missouri S&T's Human Resources Office at: <http://hr.mst.edu/careers/academic/> using Reference Number **00072965**. Acceptable electronic formats are PDF and MS Word. Applications will be reviewed as they are received and the review of applications will continue until the position is filled. For full consideration, applicants must apply by November 25, 2018. For more information prior to submitting an application, please contact the Search Committee Chair, Ayodeji Alajo, at: [alajoa@mst.edu](mailto:alajoa@mst.edu).

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 seeks to meet the needs of dual-career couples. The university participates in E-Verify. For more information on E-Verify, please contact DHS at: 1-888-464-4218.

ities for DHS and nine federal agencies, including the Nuclear Regulatory Commission, with the goal of strengthening cybersecurity and improving the agencies' ability to respond rapidly to cyberattacks.

■ **Avingtrans PLC** announced on September 17 that its **Hayward Tyler** subsidiary has been awarded contracts worth more than \$3 million related to molten salt applications in advanced nuclear and solar power technologies in the United States. The first set of contracts is valued at approximately \$2.4 million and calls for the design, manufacture, and testing of high-temperature (>700 °C) molten salt pumps for advanced nuclear test facilities. The second set of contracts relates to government-funded projects worth about \$1 million for the research and development of pumps to be deployed in both advanced solar and nuclear test facilities. Development work and equipment will be provided by Hayward Tyler's facility in Colchester, Vt.

■ **Smiths Detection Inc.** announced on September 5 a more than \$10-million order for its RadSeeker handheld radioisotope detectors and identifiers from the Department of Homeland Security's Domestic Nuclear Detection Office (DNDO). The detectors will be used for screening at the customs and border protection ports of entry and are part of a five-year indefinite delivery/indefinite quantity contract with the DNDO that was announced in January 2016. The RadSeeker, developed over several years of collaboration between Smiths Detection and the DNDO, locates the source of radiological material and can identify whether it is harmful (that is, that it should not be where it has been found) or is naturally occurring.

■ **Cavendish Nuclear**, a wholly owned subsidiary of **Babcock International Group**, announced on October 15 that it has received a contract for engineering services from the U.K. Atomic Energy Authority to support fusion energy research being conducted at the Culham Science Centre. Cavendish will provide engineering support and will supply mechanical and electrical, control and instrumentation, piping, civil engineering, process and building services, and robotics to various facilities, including the Joint European Torus (JET), ITER, and RACE (Remote Applications in Challenging Environments).

## 10 CFR PART 21

### MOPs become sluggish over time; other reports

Engine Systems Inc. reported on September 12 that a batch of its Motor Operated Potentiometers (MOP) (Part No. 72-07900-100-ESI) that were supplied to

Duke Energy's Catawba nuclear power plant were found to contain motors that exhibit increasing current draw as they accumulate run time and eventually exceed the MOP circuit allowance. Consequently, the motor operation becomes erratic, which leads to a sluggish MOP. The MOP is used in a safety-related system to control emergency diesel generator output voltage and its failure can negatively affect the generator output. According to ESI, the root cause of the excessive current draw was found to be the buildup of carbonaceous deposits between the commutator sections of the motor, either from the carbon brushes, contamination, or a combination of both. ESI said that it will revise the test procedure to incorporate an extended run time while trending the motor for any adverse changes. Any MOPs from the affected batch are considered suspect and may be returned to ESI for rework or replacement. For units installed, the motor performance should be assessed prior to continued use, the company said.

■ On September 14, AAF Flanders notified the Nuclear Regulatory Commission that it would not be able to complete an evaluation of an unapproved design change in a high-efficiency particulate air filter by September 15 as it had previously stated it would. AAF Flanders said that the evaluation is pending third-party qualification testing of the HEPA filter and requested an extension until October 31 to submit a final report. According to the company, the affected filters (Model No. 0-007-C-42-03-NU-11-13-GG FU5), which were supplied to Xcel Energy's Prairie Island nuclear power plant, have been recalled and are currently segregated and stored at the AAF Flanders facility. The potential deviation was first discovered on May 2 (NN, Aug. 2018, p. 135).

■ Curtiss-Wright reported on October 8 that a Namco limit switch (Part No. EA700-90964) the company supplied to Exelon's Dresden plant had failed during a planned maintenance test. According to Curtiss-Wright, the switch contacts were found to be sluggish in returning to the normal shelf state after actuation, or would not return at all. The switch was provided as a safety-related component to Exelon in September 2005. According to Exelon, the switch was stored for eight years, and then failed approximately five years after being put into service. The switch was subsequently sent for evaluation to Exelon Powerlabs, where it was found that there was insufficient lubrication in place to support normal switch function. The switch was then sent to Namco for further evaluation and Namco confirmed that the lack of lubricant was the likely cause of the failure. Curtiss-Wright said that it is currently investigating this issue and will provide a follow-up report by November 15. **NN**