University of Michigan Department of Civil and Environmental Engineering Faculty Position in Water-Geo-Energy Systems

The University of Michigan's Department of Civil and Environmental Engineering (CEE), as part of its strategic initiatives on interactions between water and energy production and use as well as human-earth systems-infrastructure interfaces (see: <u>http://cee.engin.umich.edu/futurestrategy</u>), is searching for a faculty candidate to join a growing multidisciplinary team of faculty who focus on environmental aspects of energy. The tenure/tenure-track position is expected to be filled at the Assistant or Associate Professor level. However, exceptional candidates will be considered at the rank of Professor. Applicants shall have a doctorate in civil engineering, environmental engineering, energy/petroleum engineering, chemical engineering, engineering geophysics, geochemistry, geology or a related field of study. Candidates should have a strong interest in inter-disciplinary and cross-cutting research, and an outstanding record of scholarship, professional leadership, and experience with externally-funded research commensurate with the appointment rank. The intellectual depth, innovation and promise of the candidate are of higher priority than their specific research area in the Water-Geo-Energy Systems domain.

The successful candidate is expected to bring world-class research expertise that will advance the understanding of water-geo-energy systems, their interdependencies, and how to make them more resilient to human activities and natural events. Areas of expertise may include but are not limited to: field and laboratory experimentation and modeling related to innovative characterization approaches; complexities of ground (rock, soil) behavior under energy recovery-induced processes; sensing and monitoring of water-geo-energy systems; information management of large geo-data collections; modeling for optimum water-geo-energy processes; management, energy, and environmental implications of underground space and underground resource recovery; innovation in design and analyses of foundation systems for geo-thermal, offshore wind, oil and gas systems; design and analyses of nuclear and other energy extraction waste products and their impoundment, stabilization and containment; and remediation of natural resources impacted by energy extraction activities.

The selected candidate will be expected to teach existing undergraduate and graduate courses, as well as introduce graduate courses in the candidate's area of expertise. The successful candidate should also establish an active research program in the CEE Department, and conduct multi-disciplinary research and teaching with colleagues in other departments and colleges. The University of Michigan has a number of initiatives in research and education related to energy (e.g., <u>http://www.graham.umich.edu/</u> and <u>http://energy.umich.edu/</u>), and the candidate will be expected to become active in these activities.

Interested individuals should submit their curriculum vitae, statements of research interests and teaching philosophy, copies of representative research publications, and contact information for five references via email in a single pdf file to: <u>wges_search2014@ctools.umich.edu</u>. All other inquiries may be directed to Professor Lutgarde Raskin, Faculty Search Committee Chair. Applications are requested by December 2, 2013, but will be accepted until the position is filled.

The University of Michigan is a premier public university with top-rated Engineering, Medical, Law and Business programs, and is responsive to the needs of dual career families. The College of Engineering is dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment. The Department of Civil and Environmental Engineering is at the forefront of innovation through active collaboration with other departments in the College of Engineering as well as with other campus entities including the School of Natural Resources and Environment, Taubman College of Architecture and Urban Planning, the Department of Earth and Environmental Sciences, the School of Public Health, and the Medical School.