

## University of California, Berkeley Department of Mechanical Engineering Seeks Applications for a Tenure-Track Faculty Position

The DEPARTMENT OF MECHANICAL ENGINEERING, University of California, Berkeley, seeks applications for one faculty position. The position is at the tenure-track, Assistant Professor level in the areas of Energy Science and Micro/Nanoscale Sensors and Systems.

Topics of specialization within these areas include but are not limited to: Energy Science: combustion and primary energy conversion processes, design of energy systems, alternative energy technologies, energy efficient processes with basis in thermodynamics and heat transfer. Fundamental study of energy transfer in materials, devices and systems. Study of transport phenomena in advanced materials processing and manufacturing. Sustainability and climate change resilience (e.g., alternative energy technologies, efficient, sustainable and resilient water, food and energy production and distribution). Scalable surface and nanoscale engineering to improve the efficiency of large-scale thermal energy storage, CO<sub>2</sub> sequestration and mitigation, and direct energy conversion processes such as solar-thermal power and oxyfuel combustion, the development of optimized hybrid energy conversion systems, as well as novel ultra-efficient active and passive energy conversion and energy storage systems. Micro/Nanoscale Systems Engineering: nanoscale engineering or engineering science in one of the fields of micro/nanoscale mechanics, materials, heat transfer, dynamics, materials processing and manufacturing, and device and system design along with the appropriate analytical and computational capabilities. Development of smart and inexpensive environmental monitoring and pollution protection/mitigation, disaster prevention, safety and security systems. Novel nanoscale sensing and actuation for application in smart and personalized healthcare, health diagnosis, monitoring and maintenance and human assistance, rehabilitation and exercise technologies. Integrated low-cost gyroscopes, accelerometers, force and pressure sensors, novel bio-sensing techniques at the cellular and sub-cellular levels and non-invasive micro-surgery techniques; nanostructured biosystems, including artificial organs and drug test models; advanced and affordable point-of-care devices/systems to assist diagnostics for health monitoring, evaluation of disease status and treatments, and clinical interventions in centralized and decentralized locations.

We seek candidates with exceptional promise in research, teaching and service, who will proactively contribute to our department's commitment to diversity, equity and inclusion. We may consider possible joint appointments with other UC Berkeley departments or College of Engineering-affiliated institutes.

**Diversity, equity, and inclusion are core values in the College of Engineering.** Our excellence can only be fully realized by faculty, students, and staff who share our commitment to these values. Successful candidates for our faculty positions will have to demonstrate evidence of a commitment to equity and inclusion. Financial and in-kind resources are available to pursue activities that help accelerate our efforts to achieve our equity and inclusion goals, with the full backing of the College. **Examples of ongoing programming at the College are available at:** 

https://engineering.berkeley.edu/diversity

**Basic Qualifications**: Applicants must have a Ph.D. (or equivalent international degree), or be enrolled in a Ph.D. or equivalent international degree granting program at the time of application.

All applicants must submit a cover letter, curriculum vitae, statement of research, statement of teaching, one required publication, and two optional publications. In addition, please provide a statement on past experience or future plans to advance diversity, equity, and inclusion, including information about your understanding of these issues, your record of activities to date, and your specific plans and goals for advancing equity and inclusion if hired as a Berkeley faculty member (guidelines to support applicants in writing effective statements that demonstrate commitment to diversity, equity, and inclusion, can be found at: https://ofew.berkeley.edu/recruitment/contributions-diversity/support-faculty-candidates).

Please provide names and contact information of three professional references who will send letters of recommendation. Recommenders providing letters of reference should submit them as early as possible, preferably by February 18, 2019. Candidates are responsible for asking their references to upload the letters as part of the online application process. All letters will be treated as confidential per University of California policy and California state law. Please refer potential letter-writers, including those who may provide letters via third party (i.e., dossier service or career center), to the University of California, Berkeley statement of confidentiality <a href="http://apo.berkeley.edu/evalltr.html">http://apo.berkeley.edu/evalltr.html</a>) prior to submitting their letters.

The deadline to apply is February 18, 2019 and applications received after the deadline will not be considered. The expected start date of the successful candidate is July 1, 2019.

The department is committed to addressing the family needs of faculty, including dual career couples and single parents. For more information please visit: <a href="http://ofew.berkeley.edu/new-faculty">http://ofew.berkeley.edu/new-faculty</a>. To learn more about the department please visit <a href="https://www.me.berkeley.edu/">https://www.me.berkeley.edu/</a>.

To apply, please go to the following link, <a href="https://aprecruit.berkeley.edu/apply/JPF02013">https://aprecruit.berkeley.edu/apply/JPF02013</a>

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: <a href="http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct">http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct</a>.

For questions regarding this position, please contact: Debra Chin, debramchin@berkeley.edu.