



SAN DIEGO STATE
UNIVERSITY

Mechanical Engineering
College of Engineering

FACULTY POSITION IN ADVANCED MANUFACTURING

The Department of Mechanical Engineering seeks to fill a tenure-track position at the Assistant Professor level in advanced manufacturing starting Fall 2022. Preferred areas of interest include advanced manufacturing of energy storage materials and systems, biomanufacturing (using engineered biological systems such as proteins, cells and organisms), biomimetic manufacturing (self-assembly, modular manufacturing, hierarchical structures), eco-manufacturing (recyclable and upcyclable manufactured systems, energy efficient manufacturing, safe built environments), smart manufacturing (hybrid human and robot assisted manufacturing, computational design based manufacturing, machine learning and AI assisted manufacturing). Mechanical Engineering (<https://mechanical.sdsu.edu>) is one of four departments in the College of Engineering (<https://engineering.sdsu.edu>) at San Diego State University (SDSU). It offers an EAC ABET-accredited B.S. degree program, as well as M.S. and joint Ph.D. programs. The Department has internationally recognized programs in energy and thermofluids, bioengineering, material science and processing, mechanics, MEMS, NEMS, sensors, robotics, dynamic systems and control. It is expected that the successful candidate will develop synergies with areas of existing research strength and exploit emerging areas of research by developing a vigorous externally funded research program in advanced manufacturing. The candidate is also expected to contribute to emerging research opportunities in SDSU's Imperial Valley campus where significant investment in engineering research related to energy-based materials, lithium mining, and advanced manufacturing is anticipated. A demonstrated ability to collaborate across disciplinary boundaries is essential. The Department shares with the College of Engineering and the University a strong commitment to excellence in undergraduate and graduate education. The successful candidate is expected to supervise teams of undergraduate as well as graduate students. Applicants must have a demonstrated ability to teach undergraduate and graduate level courses. Additional required criteria are listed in the paragraph below.

San Diego State University (<https://sdsu.edu>) is one of the largest universities in California. The highly diverse campus community has a student population of over 36,000 and approximately 6000 faculty and staff. The University is currently expanding its presence in San Diego by developing a campus in Mission Valley. This is anticipated to add about a million square feet of new classroom and research space in its Innovation District. Significant growth is also anticipated at SDSU's Imperial Valley campus. SDSU is included in the Carnegie Foundation's Doctoral Universities: High Research Activity category. SDSU is designated as a Hispanic-Serving Institution with a strong commitment to diversity, equity, and inclusive excellence. Our campus community is diverse in many ways, including race, religion, color, sex, age, disability, marital status, sexual orientation, gender identity and expression, national origin, pregnancy, medical condition, and covered veteran status. We strive to build and sustain a welcoming environment for all. SDSU is especially seeking applicants who (a) are committed to engaging in service with underrepresented populations in engineering, (b) have demonstrated knowledge of barriers for underrepresented students and faculty in engineering, (c) have experience or demonstrated commitment to teaching and mentoring underrepresented students, (d) have experience or demonstrated commitment to integrating understanding of underrepresented populations and communities into research, (e) have

experience or demonstrated commitment to extending knowledge of how to achieve scholarly success to members of an underrepresented group, (f) have experience or demonstrated commitment to research that engages underrepresented communities, (g) have expertise or demonstrated commitment to developing expertise in cross-cultural communication and collaboration, and (h) have research interests that contribute to diversity and equal opportunity in higher education. Successful applicants are expected to meet at least two of these eight criteria. Please indicate clearly in your application how you meet these criteria.

The city of San Diego enjoys a mild climate year-round and is a family-friendly urban environment. The metropolitan area is the hub of several leading industries, including major energy, aerospace and biotech companies, and it offers extensive opportunities for developing industrial research partnerships.

Applicants must have an earned Ph.D. degree in mechanical engineering or a closely related discipline. Applications received by January 1, 2022 will receive full consideration; the position will remain open until filled. Candidates must apply via Interfolio at <https://apply.interfolio.com/98215>. Questions related to this search may be addressed to mech.engineering@sdsu.edu

The person holding this position is considered a “mandated reporter” under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 as a condition of employment.

A background check (including a criminal records check) must be completed satisfactorily before any candidate can be offered a position with the CSU. Failure to satisfactorily complete the background check may affect the application status of applicants or continued employment of current CSU employees who apply for the position.

SDSU is a Title IX, equal opportunity employer and does not discriminate against persons on the basis of race, religion, national origin, sexual orientation, gender, gender identity and expression, marital status, age, disability, pregnancy, medical condition, or covered veteran status.