



College of Engineering

Mechanical Engineering

## FACULTY POSITION IN INTERFACIAL DESIGN IN ENERGY STORAGE

The Department of Mechanical Engineering at San Diego State University (SDSU) seeks to fill a tenure-track position at the Assistant Professor level in the area of experimental interfacial design in energy storage starting Fall 2023. The successful candidate will have expertise in electrode/electrolyte interfacial design in lithium-based batteries. Mechanical Engineering (<https://mechanical.sdsu.edu>) is one of four departments in the College of Engineering (<https://engineering.sdsu.edu>) at SDSU offering 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, advanced manufacturing, 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 focused on electrochemical interface science. This includes linking with emerging research opportunities at SDSU's Imperial Valley campus where significant investment in engineering research motivated by the discovery of large deposits of lithium (Lithium Valley) is anticipated. 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 will be expected to teach undergraduate and graduate level courses in the general area of energy and thermofluids. Additional required criteria are listed in the paragraph below.

San Diego State University (<https://sdsu.edu>) is one of the largest universities in California and the oldest institution of higher education in the San Diego region. SDSU is included in the Carnegie Foundation's Doctoral Universities: High Research Activity category. Established in 1897, SDSU offers bachelor degrees in 97 areas, masters in 84 and doctorates in 23. It 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 near-by 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 existing Imperial Valley campus located about 100 miles east of San Diego. SDSU is a large, diverse, urban university and Hispanic-Serving Institution with a 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.

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 and military research facilities, 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. In addition to expertise in the search area, SDSU is 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.

Application materials to be uploaded to Interfolio at <https://apply.interfolio.com/113175> are:

- 1.) Cover letter
- 2.) Curriculum Vitae
- 3.) Research Statement (max. 5 pages)
- 4.) Teaching Statement (max. 2 pages)
- 5.) Statement on contributions to Building on Inclusive Excellence - Indicate how at least two of eight criteria in position ad are met. (max. 2 pages)
- 6.) List of 3 References with full contact information
- 7.) Three relevant publications.

Applications received by December 1, 2022 will receive full consideration; the position will remain open until filled. Questions related to this search may be addressed to [mech.engineering@sdsu.edu](mailto:mech.engineering@sdsu.edu).

*As part of its commitment to a safe and equitable “OneSDSU” community, SDSU requires that individuals seeking faculty employment provide at the time of application authorization to conduct background checks if they become a finalist for the position; applications without this authorization will be considered incomplete and not considered.*

*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.*

*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.*

*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.*