Assistant / Associate Professor - Energy Decarbonization

Posting Details

Posting Detail Information

Working Title                      Assistant / Associate Professor - Energy Decarbonization
Position Location                  Fort Collins, CO
Posting Number                     202100282F
Proposed Annual Salary Range       $95,000 - $120,000

Employee Benefits

Colorado State University (CSU) is committed to providing employees with a strong and competitive benefits package that supports you, your health, and your family. Visit CSU's Human Resources website for detailed benefit plan information for permanent full-time and part-time faculty and administrative professional employees in the following University benefit areas: https://hr.colostate.edu/hr-community-and-supervisors/benefits/benefits-eligibility/ and https://hr.colostate.edu/prospective-employees/our-perks/.

Position Type                      Faculty
Work Hours/Week                    40

Description of Work Unit

As one of the nation's top public research universities, Colorado State University is a land-grant institution, with enrollment of more than 34,000 students. CSU offers 76 undergraduate degree programs, 114 graduate degree programs, 21 professional master's degree programs, and a Professional Veterinary Medicine program. CSU's world-class research and scholarship attract more than $370 million in research funding every year, ranking second nationally in federal research funding for universities without a medical school. Fort Collins is an attractive community of approximately 170,000 located along the Colorado Front Range at the base of the Rocky Mountains, 65 miles north of Denver. The city is routinely recognized as one of the most desirable places to live in the United States. It consistently ranks high on quality of life measures by numerous publications; see https://www.fgov.gov/visitor/awards for the complete list. The Front Range has developed into a high-tech hub with companies such as Woodward, Hewlett-Packard Enterprise, IBM, Intel, Keysight Technologies, Broadcom, AMD, Xilinx, Ball Aerospace, Lockheed Martin, Raytheon, and Northrop Grumman located in or near Fort Collins. The city offers a pleasant climate with excellent schools and abundant cultural and recreational opportunities nearby. For more information on Fort Collins, check out the City's website: www.visitftcollins.com.
The Department of Mechanical Engineering (ME) at Colorado State University (CSU) offers a curriculum that integrates exceptional classroom learning and in-depth engineering practice for an unparalleled educational experience. Made up of 46 faculty members, 13 staff members, 1,000 undergraduate students, and 150 graduate students, ME is one of the largest departments on CSU's campus. State-of-the-art labs provide unmatched, hands-on experience to help undergraduate students conceptualize industry environments, and $7.5M in annual research funding provide groundbreaking opportunities focusing on health, materials, and energy, for graduate students to enhance their educational concentrations. Award-winning faculty offer industry and academic perspective and equip each graduate with the tools needed to obtain leading positions in advanced technology fields. The Mechanical Engineering program at CSU includes majors in both Mechanical Engineering and Biomedical Engineering-Mechanical Engineering; both curricula combine classroom learning with engineering practice. Our goal is to give our graduates the engineering skills they need to obtain leading positions in advanced technology fields. Our students are integral members of our research groups and their thesis and dissertation topics focus on cutting-edge research. Further information about the Department can be found at www.engr.colostate.edu/me.

The critical nexus of energy research at CSU is the 100,000 sq ft Powerhouse Energy Campus, which includes the renown Engines and Energy Conversion Laboratory and the laboratories of more than 25 PIs across many disciplines. The Powerhouse serves as the headquarters of the CSU Energy Institute and is one of the most extensive free-standing energy facilities at any university. The campus is a collaborative ecosystem of researchers, faculty, staff, students, and companies. It receives local, national, and global recognition for its interdisciplinary approach, and groundbreaking work on engine technology, electric grids, biofuels, energy access in the developing world, and energy focused entrepreneurship. Further information about the Powerhouse Energy Campus can be found at https://energy.colostate.edu/powerhouse/.

### Tenure/Tenure Track?
Yes

### % Research
50%

### % Teaching
40%

### % Service
10%

### % Administration
0%

To ensure full consideration, applications must be received by 11:59pm (MT) on 11/19/2021

### Number of Vacancies
1

### Desired Start Date

### Position End Date

### Position Summary

The Department of Mechanical Engineering at Colorado State University is seeking a tenured / tenure-track faculty member at the level of an Assistant or Associate Professor. This faculty member will have expertise in energy research that is directly applicable to decarbonization of energy and is expected to synergistically strengthen current energy activities at CSU (see https://www.engr.colostate.edu/me/energy-research/ for current Energy research). This person will also be expected to support teaching and educational activities at both the undergraduate and graduate levels.

Research areas of particular interest include: Decarbonization Strategies for Transportation, Electricity Generation, Industrial, Agriculture, Commercial, and Residential Sectors; Hydrogen and Carbon Neutral Fuels Production, Utilization, and Storage; Electrical, Electrochemical, or Thermal Energy Storage; Carbon Capture and Storage, including Carbon Mineralization, Carbon Recycling, and Direct Air Capture.
This faculty member will receive a full-time nine-month appointment. The individual will be expected to build and maintain a strong, internationally recognized research program supported through external funding to enhance the Department’s educational programs, and to provide service to the University and broader community.

A successful faculty member is expected to teach courses at the undergraduate and graduate levels, advise undergraduate and graduate students, and develop advanced courses in his/her area of expertise.

**Conditions of Employment**

- Pre-employment Criminal Background Check (required for new hires)

**Required Job Qualifications**

- PhD degree in mechanical engineering or a closely related field;
- Demonstrated scholarship in the areas described in the Position Summary;
- Ability to teach Mechanical Engineering courses; and
- Demonstrated personal and professional commitment to improving diversity, equity and inclusion in engineering.

**Preferred Job Qualifications**

Candidates will be considered at the Assistant or Associate Professor level depending on qualifications.

- Experience beyond doctoral training in an academic, government, or industrial setting;
- A documented record of high-quality research impact commensurate with experience;
- Potential to build a robust, extramurally-funded research program;
- Experience teaching courses in Mechanical Engineering; and
- Evidence of teaching effectiveness in higher education.

**Special Instructions to Applicants**

Interested applicants must submit a cover letter which addresses how education and professional experiences align with required and preferred qualifications of the position, a current curriculum vitae or resume, statement of research interests, statement of teaching interests and effectiveness, statement of commitment to diversity and inclusion, and the names, email addresses, and telephone numbers of three (3) professional references. References will not be contacted without prior notification of candidates.

**Background Check Policy Statement**

Colorado State University strives to provide a safe study, work, and living environment for its faculty, staff, volunteers and students. To support this environment and comply with applicable laws and regulations, CSU conducts background checks. The type of background check conducted varies by position and can include, but is not limited to, criminal history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will also be conducted when required by law or contract and when, in the discretion of the University, it is reasonable and prudent to do so.

**EEO Statement**

Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity/expression, or pregnancy in its employment, programs, services and activities, and admissions, and, in certain circumstances, marriage to a co-worker. The University will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. Colorado State University is an equal opportunity and equal access institution and affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services.

The Title IX Coordinator is the Director of the Office of Title IX Programs and Gender Equity, 123 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-1715, titleix@colostate.edu.

The Section 504 and ADA Coordinator is the Director of the Office of Equal Opportunity, 101 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-5836, oeo@colostate.edu.

The Coordinator for any other forms of misconduct prohibited by the University’s Policy on Discrimination and Harassment is the Vice President for Equity, Equal Opportunity and Title IX, 101 Student Services Building, Fort Collins, Co. 80523-0160, (970) 491-5836, oeo@colostate.edu.

Any person may report sex discrimination under Title IX to the Office of Civil Rights, Department of Education.
Diversity Statement

Ability to advance the department’s commitment to diversity and inclusion through research, teaching and outreach with relevant programs, goals and activities.
Todd Bandhauer, todd.bandhauer@colostate.edu

Job Duty Category
Teaching and Advising

Duty/Responsibility
• Prepare and deliver to undergraduate and graduate students up to three ME courses per year in curriculum closely associated with energy research, and
• Advise and mentor undergraduate and graduate students in preparation for career endeavors.

Percentage Of Time
40%

Job Duty Category
Conduct and Publish Research

Duty/Responsibility
• Develop proposals and secure grants from industrial and federal entities associated with energy decarbonization, and
• Design, analyze and publish theoretical or applied research results in peer-reviewed publications to the scientific community.

Percentage Of Time
50%

Job Duty Category
Service to Department, College, University and Discipline

Duty/Responsibility
• Serve on committees at departmental, college, and university levels, and
• Serve the discipline through activities such as committee membership on academic society committees and reviewing for journals and conferences.

Percentage Of Time
10%

Supplemental Questions

Required fields are indicated with an asterisk (*).

Applicant Documents

Required Documents
1. Cover Letter
2. Resume or CV
3. Statement of Research Interests
4. Statement of Teaching Interests
5. Statement of Commitment to Diversity and Inclusion

Optional Documents
### References Requested

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