The world is a complex place, and humanity faces major challenges. Climate change mitigation might be the most difficult, in large part because of the interdependency of living things and their ecosystems.

**NEW NSF CENTER INTERSECTS CHEMISTRY AND MECHANICS**

Scientists know the whys and whys of using light, heat and electricity to direct chemical reactions toward an end goal. What’s less well understood are effects mechanical force can have on chemistry.

Thanks to a three-year, $1.8 million National Science Foundation (NSF) grant, a team of researchers — including mechanical engineering Professor Ashlie Martini — are forming a new center for this emerging area of study.

**NEW ENGINEERING RESEARCH CENTER TO FOCUS ON AGRICULTURE TECHNOLOGY**

By 2050, the U.S. population is estimated to grow to 400 million, and the world population to 9.1 billion, requiring a 70 percent increase in global food production. UC Merced is one of four campuses across the country uniting to meet that challenge by harnessing the power of innovation and technology to develop precision agriculture for a sustainable future.
UC Merced, which just celebrated the 15th anniversary of its opening in 2005, is already recognized as one of the top universities for both its academic quality and its ability to transform the lives of its graduates. The university is highly ranked by several prestigious publications such as U.S. News & World Report, Washington Monthly, The Princeton Review, Money and others. It is increasingly being recognized for its outstanding academic programs and for its commitment to environmental sustainability.

**RECENT RANKINGS**

- **Top 100 | No. 40** among public universities (US News & World Report)
- **Top 100 | No. 56** among national universities (Washington Monthly’s 2020 College Guide & Rankings)
- **Top 100 | No. 65** globally among universities younger than 50 years (Times Higher Education Young University Rankings 2020)
- **Top 100 | No. 76** among national universities (Money’s 2020 Best Colleges)
- **Top 100 | No. 86** among colleges and universities for Hispanics (Hispanic Outlook on Education Magazine)
- **University of the Year** (Education Dive’s Dive Awards, 2018)
- **“Best 386 Colleges,”** two consecutive years (Princeton Review)
- **No. 1** among public universities in outperforming expected graduation rates (US News & World Report)
- **No. 3** in U.S. among universities younger than 50 years (Times Higher Education Young University Rankings 2020)
- **No. 5** among all universities in social mobility (US News & World Report)
- **No. 8** among all universities in economic diversity (US News & World Report)
- **No. 12** most transformative colleges (Money’s 2020 Best Colleges)
- **No. 13** among public universities for highest alumni giving rate (US News & World Report)
- **No. 19** for social mobility (Washington Monthly’s 2020 College Guide & Rankings)
- **No. 51** for least amount of debt incurred by graduates (US News & World Report)
- **No. 145** for undergraduate engineering (among Ph.D.-granting schools) (US News & World Report)
- **No. 171** for Best Value (US News & World Report)

**SOCIAL MOBILITY**

- **No. 1** in the nation for student outcomes (US News Best Colleges 2020)
- **No. 1** among public universities in outperforming expected graduation rates (US News Best Colleges 2021)
- **No. 5** in the nation for social mobility (US News Best Colleges 2021)
- **No. 8** in the nation for economic diversity (US News Best Colleges 2021)
- **No. 51** for least amount of debt incurred by graduates (US News Best Colleges 2021)
- **No. 19** for social mobility (Washington Monthly’s 2020 College Guide & Rankings)
- **No. 12** most transformative colleges (Money’s 2020 Best Colleges)
- **No. 8** in the nation for performance of students who receive Pell Grants (Washington Monthly’s 2019 College Guide & Rankings)
- **No. 8** in the nation for performance of first-generation students (Washington Monthly’s 2019 College Guide & Rankings)

**SUSTAINABILITY**

- Only university in the nation to have all buildings LEED certified
- **Highest marks** on “Green Rating” (Princeton Review’s Best Colleges Guide, 2021)
- **No. 1** in the nation for sustainable buildings (AASHE, 2020)
- **Tied for No. 1** in the nation for sustainable research (AASHE, 2020)
- **Tied for No. 5** in nation for sustainability investment and finance (AASHE, 2020)
- **No. 10** in the nation in sustainable waste operations (AASHE, 2020)
- **No. 6** overall among doctoral institutions (AASHE, 2020)
- **No. 5** in the nation for sustainability (Sierra Club’s Cool Schools, 2020)

*Official Numbers as Fall 2020

**TOP ACADEMIC PROGRAMS**

- **School of Engineering**
  - No. 129 in the nation among graduate schools (US News Best Graduate Schools 2021)
  - No. 145 among Ph.D.-granting schools for undergraduate engineering (US News Best Colleges 2021)

- **Bioengineering**
  - No. 117 in the nation (US News Best Graduate Schools 2021)

- **Computer Engineering**
  - No. 106 in the nation (US News Best Graduate Schools 2021)

- **Electrical Engineering**
  - No. 129 in the nation (US News Best Graduate Schools 2021)

- **Environmental Engineering**
  - No. 84 in the nation (US News Best Graduate Schools 2021)

- **Materials Engineering**
  - No. 98 in the nation (US News Best Graduate Schools 2021)

- **Mechanical Engineering**
  - No. 117 in the nation (US News Best Graduate Schools 2021)

- **Biology**
  - No. 175 in the nation (US News Best Graduate Schools 2019)

- **Chemistry**
  - No. 122 in the nation (US News Best Graduate Schools 2019)

- **Mathematics**
  - No. 144 in the nation (US News Best Graduate Schools 2019)

- **Physics**
  - No. 146 in the nation (US News Best Graduate Schools 2019)

- **Psychology**
  - No. 90 in the nation (US News Best Graduate Schools 2018)