[**Materials Science Institute**](https://materialscience.uoregon.edu/)

The Materials Science Institute (MSI), an interdisciplinary center founded in 1985 to study the structure and properties, has contributed to the prosperity of the State of Oregon through collaborations with more than 25 companies. The institute hosts over 35 affiliated faculty from the Physics and Chemistry & Biochemistry Departments, supported by over $18 million in research funding and more than $25 million in advanced research equipment. The primary sources for external research funding are the National Science Foundation, the National Institutes of Health, the Department of Defense, and the US Department of Energy, with significant funding also coming from the M. J. Murdock Charitable Trust, the Gordon and Betty Moore Foundation, the Simons Foundation, and various industrial partners. Among our faculty are a combined seven endowed chair recipients, a cluster of excellence in Energy and Sustainable Materials, and numerous national and international award recipients, including 4 current NSF CAREER Awardees and 7 Sloan Research Fellows.

The research taking place in in MSI are divided into five thematic areas. The Biology Interface theme includes research in biophysics, biochemistry and bioinformatics. The Enhanced Technologytheme focuses on computing, communications, and sensors (quantum and classical). The Medical and Health theme explores on toxicity, nanosafety, and human implants. The Novel Materials and Properties theme examines the materials genome and novel fundamental science. Finally, the Sustainability theme includes research on energy (electrical, solar, thermal), green chemistry, water, the environment, and geophysics.

MSI plays a central role in the development of shared equipment facilities at UO. The Lokey Laboratories are embedded in hollowed-out vault bedrock 17 feet underground to shelter the lab’s high-performance equipment, which creates a unique environment to produce and manipulate nanomaterials. The Signature Research Shared Facilities, located in the Lokey Laboratories and now expanded to UO’s new Knight Campus, allow private businesses to conduct materials research. These laboratories are also associated with the [Oregon Nanonscience and Microtechnologies Institute (ONAMI)](https://onami.us/), a venture between government and word-class nanoscience and microtechnology industries in the Northwest. The [CAMCOR](http://camcor.uoregon.edu/) facility provides a full-service, comprehensive materials characterization with equipment for microanalysis, surface analysis, electron microscopy and semiconductor device fabrication. The partner [SuNRISE](http://camcor.uoregon.edu/labs/sunrise-facility/) facility has a comprehensive suite of tools for the characterization of solar cells and solar cell materials including the [UO Solar Radiation Monitoring Laboratory](http://solardat.uoregon.edu/index.html). This facility is used by [VertueLab](https://vertuelab.org/), formerly the Oregon Built Environment & Sustainable Technologies Center, an independent nonprofit established by the Oregon State Legislature. MSI and our faculty also served as the original home and launch point for the Knight Campus’s Master’s Industrial Internship Program (<https://internship.uoregon.edu/>), several student networking and outreach groups (the Women in Graduate Sciences, the Community of Minorities in STEM, LGBT in STEM), and UO’s role in a Lens of the Market professional development program in innovation (<http://www.ecosvc.com/lens>).