

Penn State Department of Materials Science and Engineering

The department is an international leader in materials education and research. As a top-ranked program, the department thrives on a rich collaboration between faculty, staff, students, and researchers to promote a well-rounded academic experience and innovative research opportunities. In addition, our highly ranked undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET).

matse.psu.edu

#10/#12

Rankings for Undergraduates and Graduates Respectively (US News and World Report)

Penn State is the largest materials research institution in the United States. Its faculty and research centers are world renowned for contributing breakthrough research in their respective fields. Anchored by the renovation of its state-of-the-art Steidle Building, the department includes laboratories devoted to computational research, material processing, and characterization, in addition to outstanding spaces for meetings, group work and information interactions. One of the premier research facilities in the nation, the Millennium Science Complex (MSC) houses one of the University's top research organizations—the Materials Research Institute. Completed in 2011, this amazing research space features 40,000 square feet of quiet labs shielded from vibration and electromagnetism, 10,000 square feet of Class 1000/100 clean rooms for nano/micro-fabrication, and nearly 4,000 square feet of collaborative space to encourage the exchange of knowledge and ideas across colleges and departments.



Tenured or tenure-track faculty in the department

>300

Research projects being conducted by our faculty and students

>195,000

Papers published by our department community have been cited



Department of Materials Science and Engineering





Steidle Building

Research to Transform Industry

Our centers and institutes connect our MatSE community, with top researchers from sponsoring organizations, and faculty from other institutions to share knowledge and address critical research challenges.

- 2D Crystal Consortium NSF Materials Innovation Platform
- Battery and Energy Storage Technology Center
- Center for 2-Dimensional and Layered Materials
- Center for Atomically Thin Multifunctional Coatings
- Center for Dielectrics and Piezoelectrics
- Center for Energy Harvesting Materials and Systems
- Center for Innovative Materials Processing Through Direct Digital Deposition
- Center for Innovative Sintered Products
- Center for Nanomedicine and Materials
- Center for Nanoscale Science Materials Research Science and Engineering
- Center for Research on Advanced Fiber Technologies
- Center for Solar Nanomaterials
- Center for the Study of Polymeric Systems
- Electrochemical Engine Center
- Electrochemical Technologies Program
- International Center for Actuators and Transducers
- Membrane Science, Engineering, and Technology Center

\$16.3M (MatSE, 2018)

Total department research expenditures

\$862M (2018)

Penn State total research expenditures



370 Total Undergraduate Enrollment for Fall Semester 2018

202 Total Graduate Enrollment for Fall Semester 2018

>70 Total Undergraduate degrees awarded per year

90% Undergradu rate by Gra 60% Undergraduates

Undergraduate placement



>\$253,000

need-based scholarships are awarded annually

Friends of MatSE

(minimum annually Jan. - Dec.)

- Online access to student resume books (students opt in)
- Space for interviews
- Brand awareness and elevation during Material Days
- Corporate logo on the department website.
- Engagement opportunities with top-tier students and faculty
- Corporate classroom engagement
- Corporate named student award in the Material Science department to be presented to top tier student

Cost for companies with corporate employee numbers of:

Less than 5,000 » \$ 2,500 Between 5,000 and 10,000 » \$ 5,000 Over 10,000 » \$10,000



A Message from our Department Head

Companies like yours are competing for the next generation workforce that has the skills, background, and experiences necessary to meet your needs in a highly competitive and dynamic environment. The Department of Materials Science and Engineering at Penn State consists of faculty that are advancing the field in multiple domains and who by working closely with our B.S., M.S., and Ph.D. students, produce a substantial fraction of the workforce of the future in materials science and engineering.

The Friends of MatSE program provides a mechanism to strengthen involvement between companies like yours and the Department of Materials Science and Engineering at Penn State. Supporting MatSE through this program will provide students with even more hands-on experience with state-of-the-art materials processing, characterization, and simulation methods and enable them to work on cutting-edge research problems. Together we will enhance the educational experience while ensuring that students are informed of your companie's capabilities, priorities, and future goals.

I look forward to working with you as we create a meaningful partnership.

Susan B. Sinnott, Department Head and Professor of Materials Science and Engineering Contact Information: sinnott@matse.psu.edu and (814) 863-3117