

# Annual Report of Graduate Education and Research Activity

Office of the Associate Dean for  
Graduate Education and Research  
Fiscal Year 2022



**PennState**  
College of Earth  
and Mineral Sciences

Dear EMS community,

Happy Thanksgiving! I appreciate all your contributions in making the College of Earth and Mineral Sciences an exciting and stimulating place to belong.

In the next few slides, I summarize some key indicators of graduate education and research activities in the EMS. These indicators correspond with fiscal year 2022, except graduate enrollment which includes Fall 2022 data to date.

We have 943 talented graduate students, trained and mentored by world-class faculty and researchers working on a broad range of technical and societal challenges. We are experiencing a decline in graduate enrollment and proposals submitted, but those are contrasted with a big increase in research awards, as well as gains in expenditures and degrees conferred. Following a busy year writing and submitting proposals in 2021, our researchers are now turning their attention to \$55.6 million (+35.4%) in research awards. Direct faculty expenditures by assignment of credit sum \$44.1 million (+8.9%) and our total EMS research expenditures reached \$68.4 million (+6.6%). Congratulations on a very good year!

Wishing you a pleasant break and a successful end of semester,



**Zuleima Karpyn**

Associate Dean for Graduate Education and Research



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## EMS Graduate Education and Research at-a-glance, 2022

943

GRADUATE STUDENTS  
ENROLLED

69

PhD DEGREES  
CONFERRED

144

MS DEGREES  
CONFERRED

\$141.8M

PROPOSALS  
TOTAL (-23.0%)

\$55.6M

AWARDS  
TOTAL (+35.4%)

\$44.1M

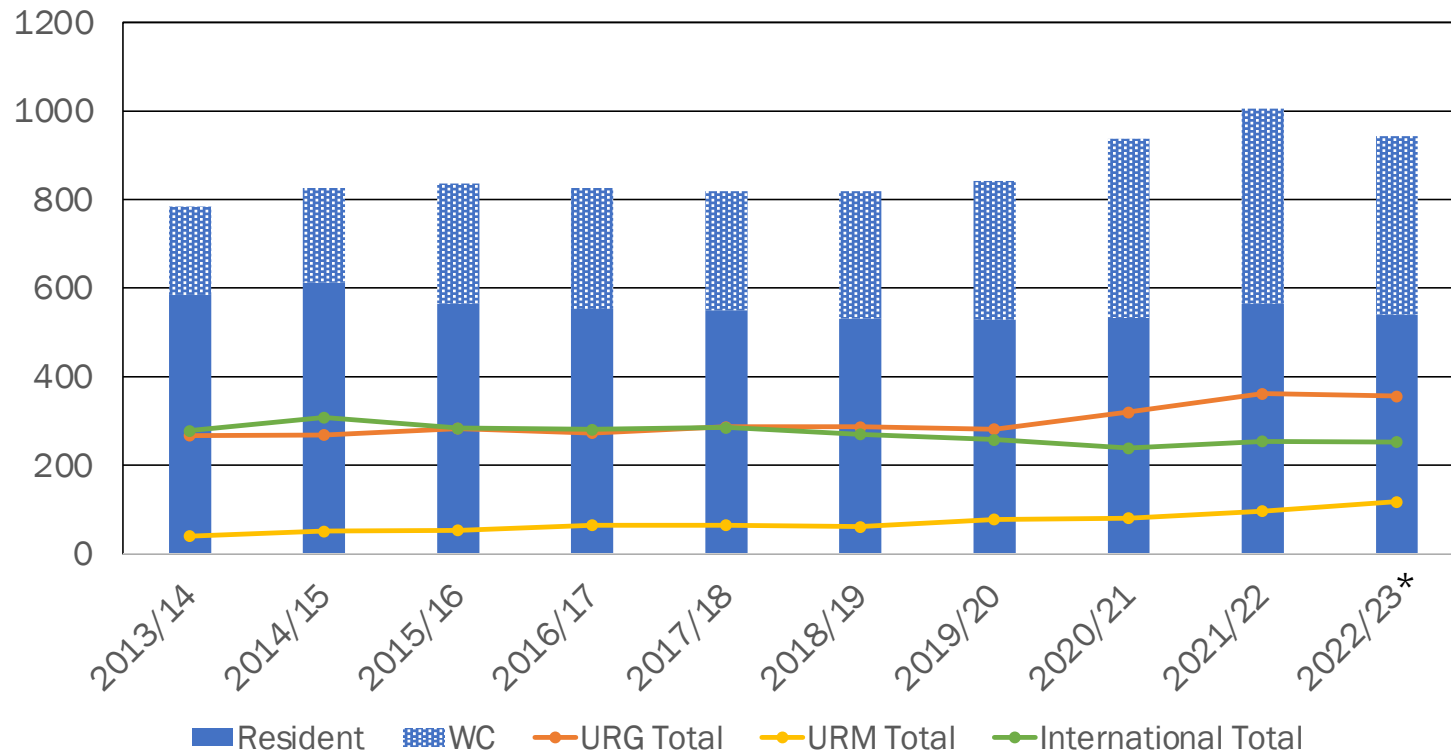
DIRECT FACULTY  
EXPENDITURES  
(+8.9%)



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Proposal, Awards and Expenditures follow assignment of credit by faculty home unit for all research activities across the university

# Graduate Student Enrollment, 2013-2022



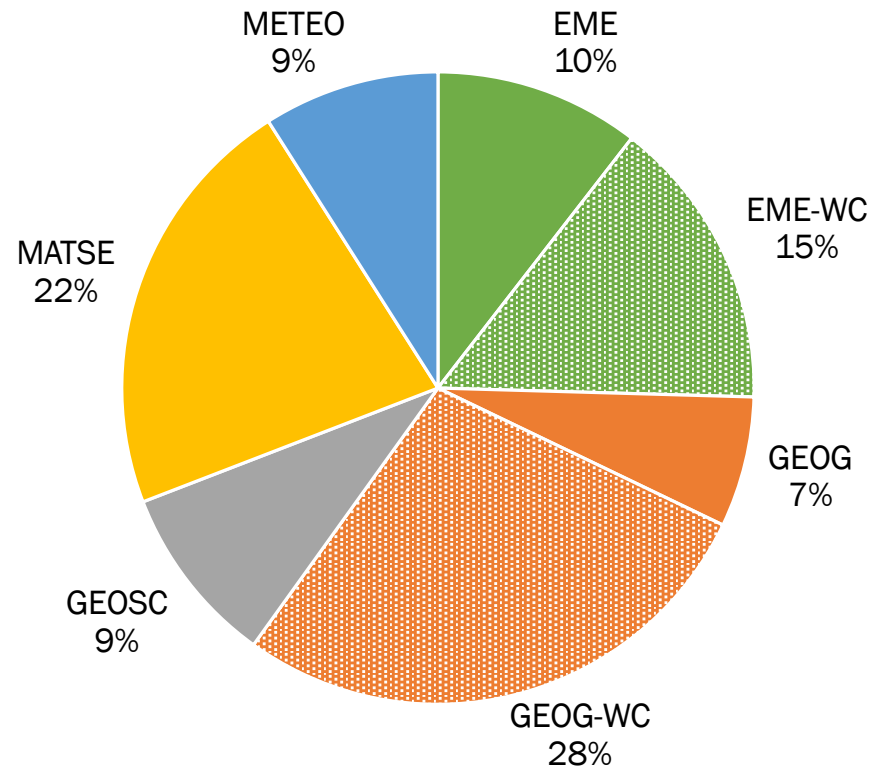
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URG: Underrepresented Gender  
URM: Underrepresented Minority  
WC: World Campus (Online)

\* Fall 2022 data to date/in progress

# Graduate Enrollment by Academic Department

**943**  
GRADUATE  
STUDENTS  
IN 2022 \*



\*



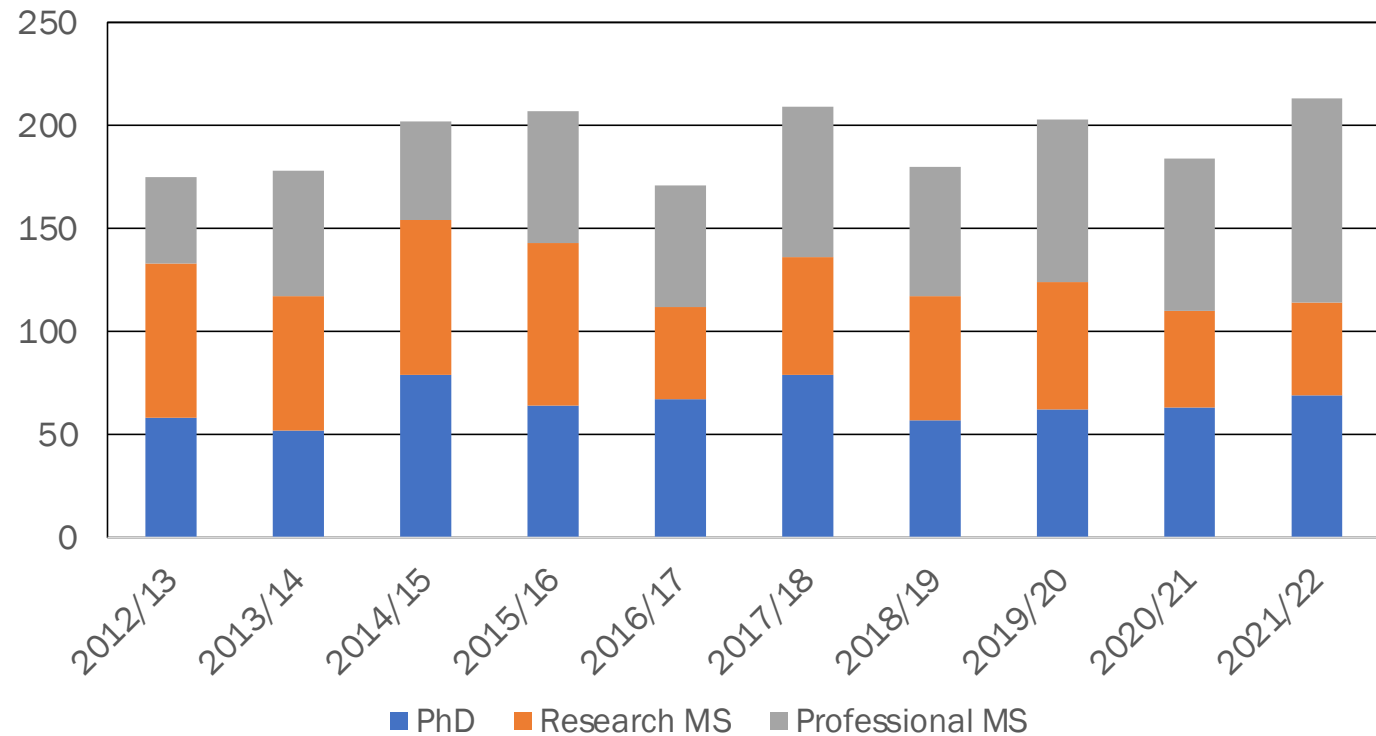
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WC: online graduate degree programs  
offered through Penn State World Campus

\* Fall 2022 data to date/in progress

# Graduate Degrees Conferred, 2013-2022

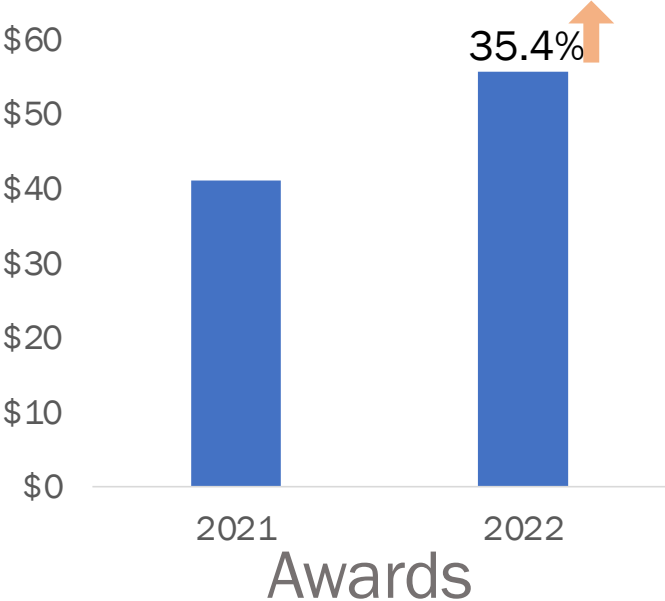
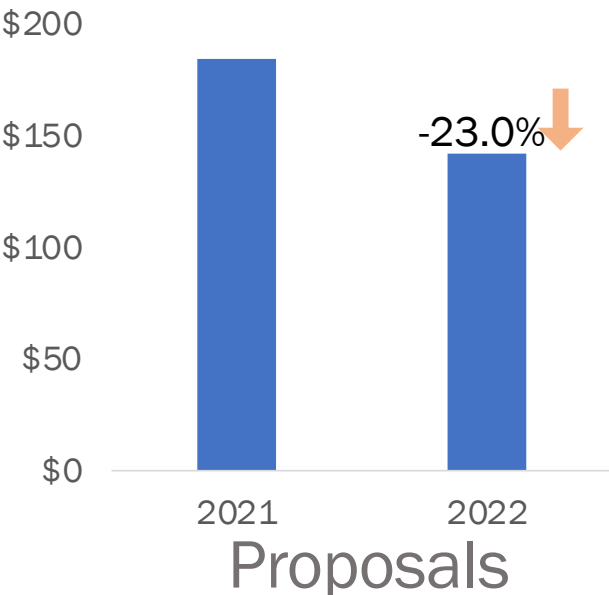
**213**  
GRADUATE  
DEGREES  
IN 2022



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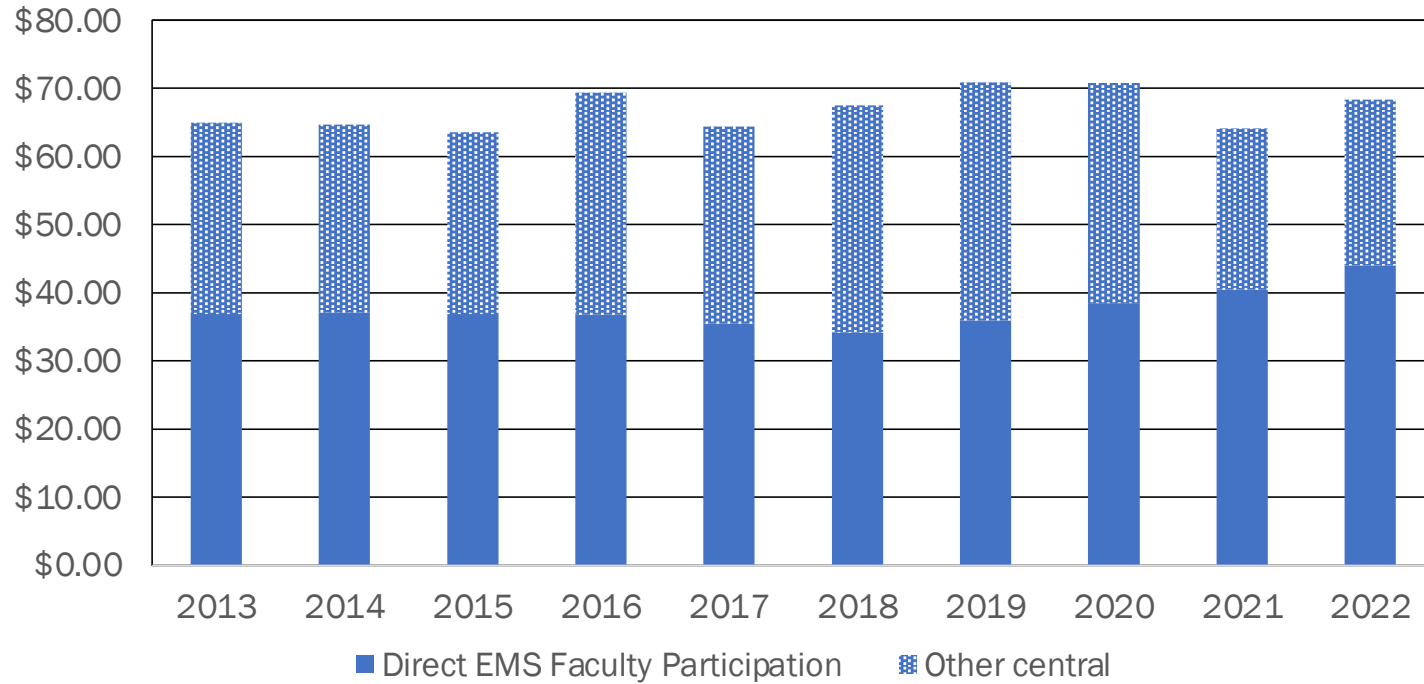
# Total Research Proposals and Awards

In millions of dollars



# Total Research Expenditures, 2013-2022

In millions of dollars

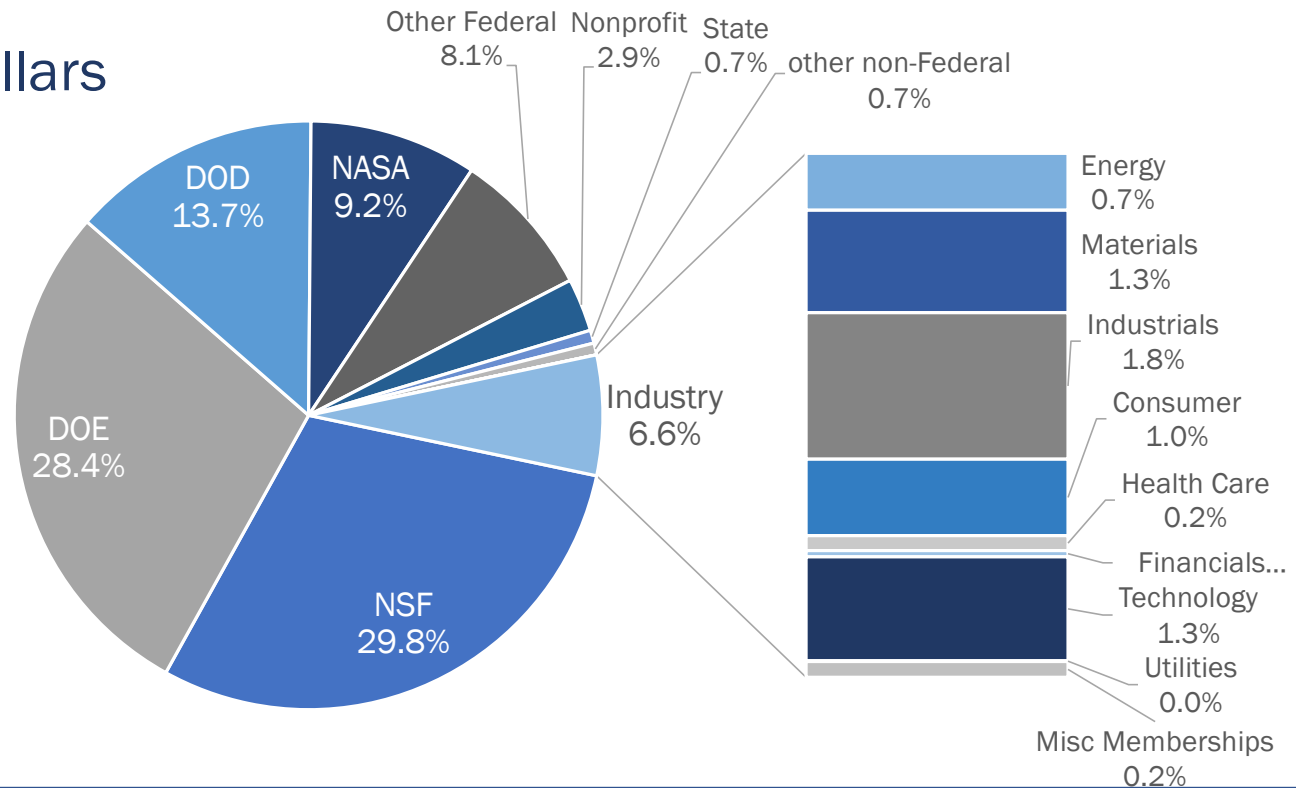




# Research Expenditures by Funding Source, FY2022

In millions of dollars

**\$44.1M**  
Direct faculty  
**EXPENDITURES**  
IN 2022



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Industry Sector classification follows Global Industry Classification Standard (GICS)