

## Institute for Mineral Resources

### Factsheet

- Science Foundation Arizona has brought together a consortium of cutting-edge, strategic research groups, academic and industry partners and other stakeholders to create the Institute for Mineral Resources (IMR) to address regional, national and global issues related to the responsible discovery, production, and sustainable development of mineral resources.
- This collaboration is important and will integrate research between the universities and the mining industry giving Arizona a significant competitive advantage. IMR is focused on internationally competitive R&D innovations in mining technologies related to exploration, production, process efficiency, safety and health, and education and builds upon the important work that has been already been done by mining companies and academia.
- The work done at the Institute for Mineral Resources will ultimately have an impact on the entire state, but it will initially impact Maricopa, Pima, Gila, Graham, Greenlee, Pinal, Cochise, Yavapai, Coconino and Navajo counties.
- The Institute for Mineral Resources will pursue research projects that address ongoing challenges in reducing the environmental footprint of mines including:
  - Reducing water and energy consumption.
  - Innovating new methods and programs to ensure the safety and health of the workforce and communities near the mines.
  - Increasing the understanding of critical mineral resources and their locations.
- The Science Foundation Arizona research partner is the University of Arizona (UA) Department of Mining and Geological Engineering along with UA's Department of Geosciences, and the College of Public Health. Other university participants include Northern Arizona University and Arizona State University. The initial community college participant is

Eastern Arizona College and the collaborations will expand to other community colleges across the state.

- Industry partners Freeport-McMoRan Copper & Gold and Resolution Copper Mining recognize the importance of responsible environmental stewardship, sustainable practices, and STEM (Science Technology Engineering and Math) education. Freeport is the primary supporter of the new STEMAz center at Science Foundation Arizona and Resolution Copper Mining is offering scholarships for secondary students in Superior, Globe and Miami, Arizona and additional education outreach programs.
- The Institute for Mineral Resources includes a “Two Plus Two” education pathway that will help local community colleges attract interested and qualified students to complete a 2-year preparatory program, and then encourage them to complete a mining engineering degree at an Arizona state university.
- The SFAz grant is \$8.7 million and has leveraged an additional \$8.8 million in matching funds from 15 mining industry partners.
- Nearly every object we come into contact with on a daily basis originates from materials produced from the earth. This makes it critical to advance the understanding of mineral resource distribution, safety, environmental and production technologies. The IMR will be a leading global center for this necessary work.
- **About Science Foundation Arizona**  
With the mission of helping spur new innovation in Arizona and developing a diversified, robust knowledge driven research and education infrastructure, Science Foundation Arizona, a 501 (C) (3) public/private partnership, has to date awarded \$33.6 million in 59 innovation investments in communications technology, sustainable systems including renewable energies and biomedicine. In just one year, these investments have demonstrated clear strategic advantages to Arizona by attracting an additional \$43.8 million in outside research dollars, seeding the development of eight new companies, and fostering science, engineering and math skills in over 10,800 students statewide.