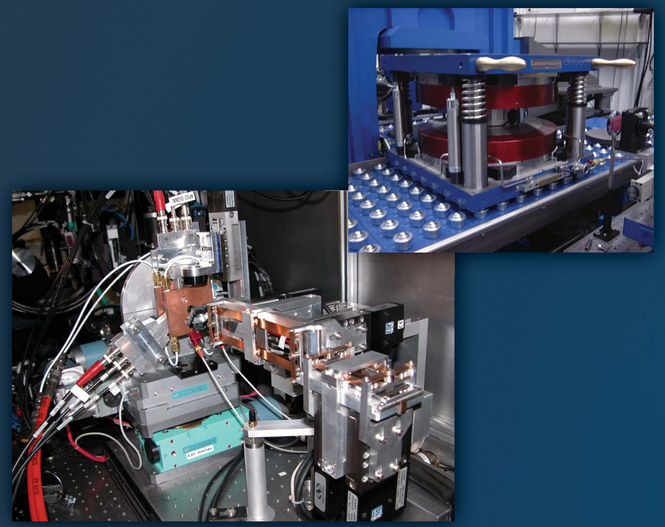
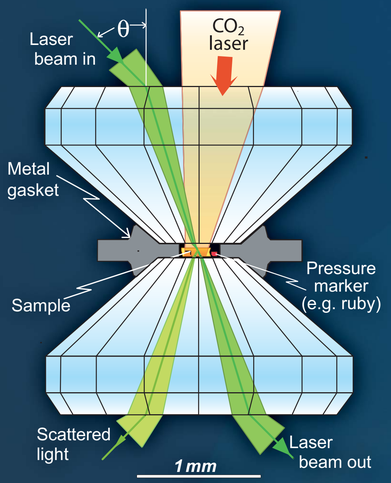
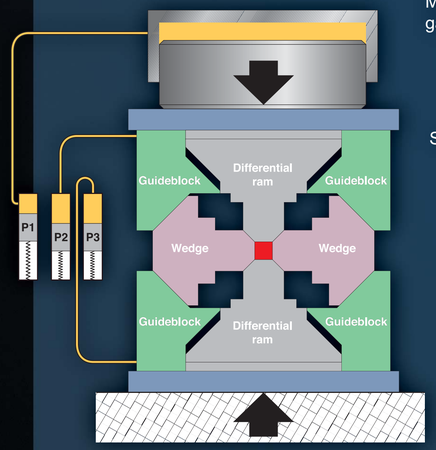




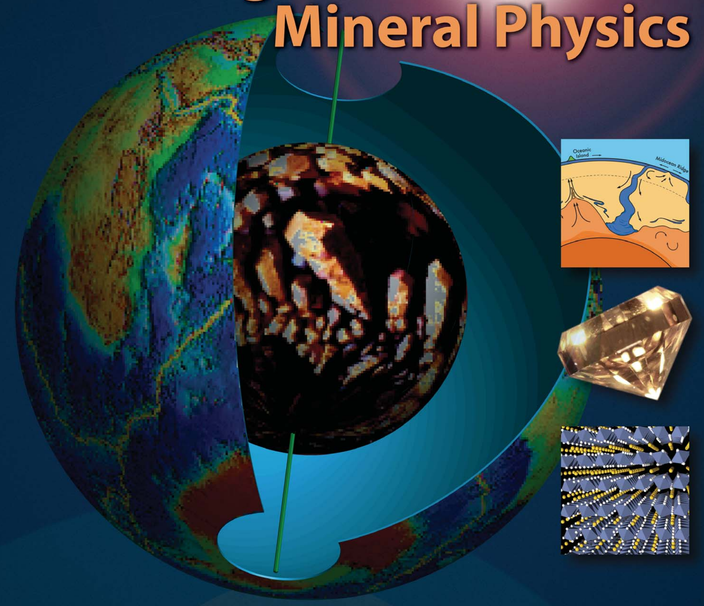


Technology

Inventing new tools to understand Earth and the deep interiors of other planetary bodies.

Current and Future Research Directions in

High-Pressure Mineral Physics



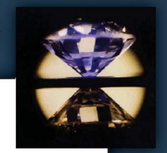
The field of high-pressure mineral physics is highly interdisciplinary, encompassing the full range of chemical and physical (even biological) processes that take place at high pressures beneath the surfaces of planets. These processes span the range of conditions within Earth's interior, from generation of the magnetism in Earth's core at pressures of over 1.3 million atmospheres, to methane production by microbes at modest pressures in ocean sediments.

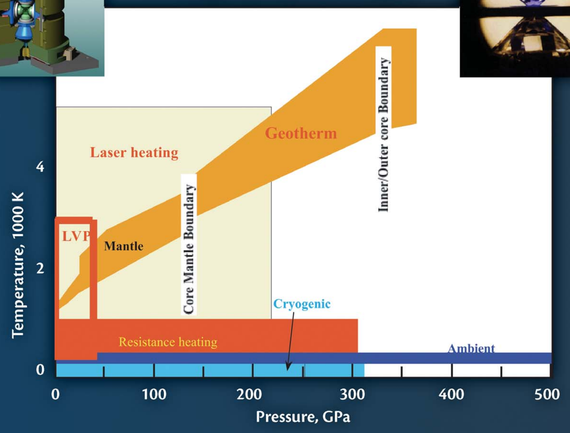
COMPRES

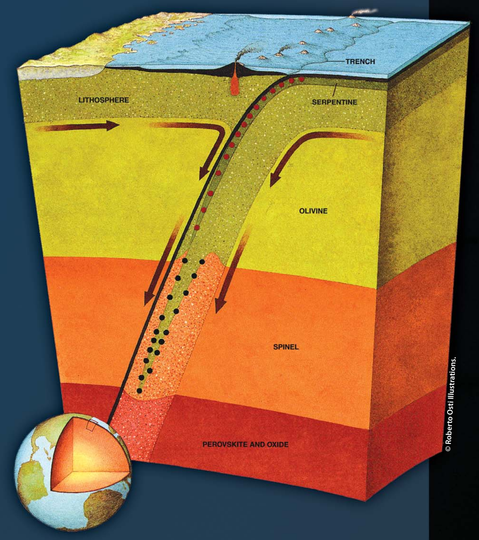
Consortium for Materials Properties Research in Earth Sciences

A community-based organization to promote and facilitate high-pressure research in the science of Earth and planetary materials. COMPRES operates high-pressure beamlines for Earth sciences at national synchrotron and neutron facilities and supports the development of new technologies for high-pressure research. COMPRES is funded by the National Science Foundation Division of Earth Sciences. Copies of the report, "Current and Future Directions in High-Pressure Mineral Physics," are available at wwww.compres.us.

A geotherm together with accessible *P-T* ranges by static techniques







Science

Understanding how planetary systems operate and their evolution over time.