



EuroMinSci Programme - An overview

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Major advances in the use of physics-based experimental techniques (nuclear magnetic resonance spectroscopy, synchrotron radiation, neutron scattering, phonon spectroscopy, laser-ablation based techniques, etc.) and atomistic computer simulation make it possible to study mineral properties and behaviour. At the same time, measurements of many minerals properties in situ at extreme conditions of temperature and pressure corresponding to those existing in the earth's interior are now feasible (e.g., the recent, experimental and theoretical determination of the temperature at the inner core – outer core boundary and the study of the Earth's core chemistry).

The EUROCORES Programme EuroMinSci draws together the experimental and computational activities, and the different experimental techniques, into integrated research projects. Sometimes it calls for separate 'computer experiments' while at other times computer simulation is needed even to interpret the experimental data uniquely. It also addresses the need for young researchers with an academic background in earth sciences to be trained more in the physics-based techniques, where the methods are very different from traditional earth sciences. A "bottom-up" approach is adopted, in

which participating scientists propose their own research projects within the broad context of EuroMinSci Programme. The presentation highlights on behalf of the EuroMinSci Community the latest activities and few key achievements within this Programme.

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