

EPOS-WP16: A Coherent and Collaborative Network of Solid Earth Multi-scale Laboratories



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WHO WE ARE

A consortium of 11 partners, representing experimental laboratory infrastructures ranging from high pressure-temperature rock and fault mechanics and rock physics facilities, to electron microscopy, micro-beam analysis, analogue modelling and paleomagnetic laboratories.



HPT Experimental Laboratories Analogue modelling laboratories

Paleomagnetic Laboratories

Analytical Laboratories

CNRS, ETH, INGV, LMU, NERC, UU CNR, CNRS, CSIC, GFZ, LMU, ROMA3, UU

CNRS, CSIC, INGV, ROMA3, UU

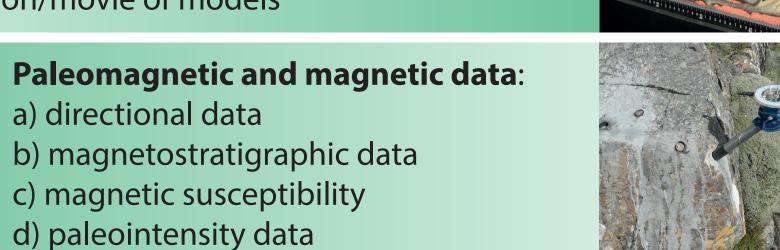
CNR, CSIC, INGV, NERC, UBI

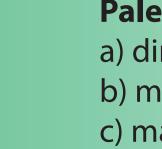
FIND AND SHARE DATA



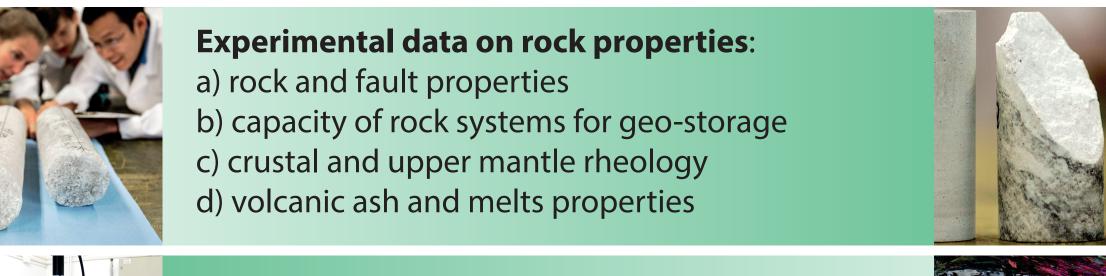
Analogue models of tectonic processes:

a) analogue models of geological processes b) analogue material properties c) visualizing and data analysis tools d) animation/movie of models





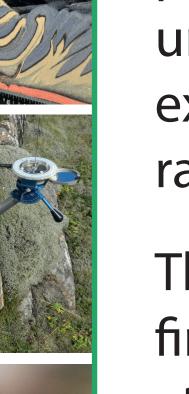
b) magnetostratigraphic data c) magnetic susceptibility





Analytical data on rock properties: a) major elements composition b) isotope geochemistry

c) geochronology d) mineral composition



from MACRO- to MICRO- and NANO- SCALES

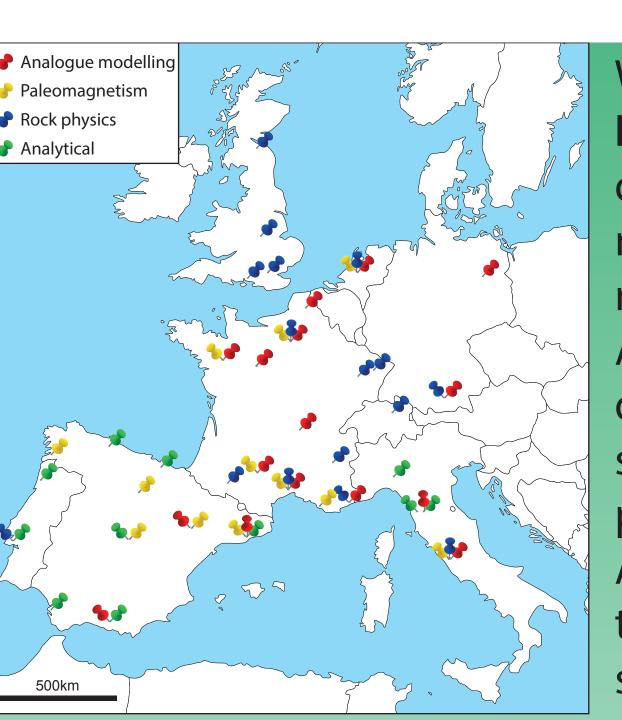
OUR CHALLENGE

Understanding the processes that operate in the Earth's interior, and how these control phenomena ranging from earthquakes and volcanic eruptions to the formation of natural resources requires a research approach that combines a vast range of spatial and temporal scales. This multi-scale nature of the processes that operate Earth is reflected in a huge diversity of methods and infrastructures employed in Earth science research laboratories. Data produced within these laboratories are of crucial importance for understanding how Earth works and has evolved, for locating and safely exploiting of geo-resources, and for evaluating and protecting against the full range of geo-hazards that the Solid Earth can throw at us.

The EPOS Thematic Core Service (TCS) Multi-scale Laboratories, will, for the first time, structure and harmonize the available and emerging laboratory data at all relevant scales, to create efficient, organized services that support lab-based research on solid Earth processes and make the vast amount of data produced in Europe available to all Earth scientists, to industry and to society, in usable form.

Major solid Earth Science laboratory centres and specialists will form a coherent and organized network fostering new collaborations, new synergies, innovation and exchange for better research.

ACCESS THE LABS



We are developing a TRANS-NATIONAL ACCESS POLICY defining harmonized and optimized access rules to European multi-scale laboratory centres. An open search will be conducted on a regular basis to select hosting facilities and applicants for Trans-national Access activities on the basis of their scientific records and research proposals.

The calls will be advertised in the EPOS website Find the newest and most advanced laboratory in the EPOS Portal!



Take advantage of the opportunity to be selected to perform your experiments at key EPOS Multiscale laboratory centres

NEW OPPORTUNITIES

Get in touch to discuss your research proposal!

Synergy, collaboration and innovation

CONTACT US





www.epos-ip.org/tcs/multi-scale-laboratories

MULTI-SCALE LABS @EGU

Visit our poster X 3.49 for more info on data services

WP16 Splinter Meeting, Tue 25th, 13:30-15, room O.15, Yellow level

WP16 Demonstrator, Wed 26th, 10:00-12:00, EPOS booth #112 and #113, Green Level





