Réunions scientifiques

Séminaires

Séminaire SOLEIL

The many uses of High Pressure FTIR spectroscopy

Wren B. MONTGOMERY

(Department of Earth Sciences and Engineering, Royal School of Mines Building, Imperial College London, United Kingdom)

Invitée par Paul DUMAS

Lundi 23 avril à 14h00
Grand Amphi SOLEIL

In recent years, the technique of in-situ high-pressure high-temperature (0-50GPa, 300-650K) FTIR spectroscopy has been refined and used at synchrotron facilities including SMIS at SOLEIL. A diamond anvil cell is used to reach these thermodynamic conditions and the high spatial resolution of the synchrotron beam is used to probe the sample (typically <100 micron in diameter), taking advantage of the synchrotron's power and precision to accquire high-quality data not available in similar lab-based systems. With this technique, intra-molecular bonds of organics and minerals can be directly observed at geological pressures and temperatures. Completed experiments range from phase transformations of clays and other hydrous minerals to organic reactions which may take place within the Earth and during its formation. This talk will discuss both the techniques required for measuring and maintaining the pressures and temperatures during experiments, the challenges of data interpretation, and the experiments themselves.

Formalités d'entrée *: accès libre dans l'amphi du Pavillon d'Accueil. Si la manifestation a lieu dans le Grand Amphi SOLEIL du Bâtiment Central, merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).*

SYNCHROTRON SOLEIL
Division Expériences - L'Orme des merisiers - Saint-Aubin - BP 48 – 91192 GIF S/YVETTE Cedex
http://www.synchrotron-soleil.fr/portal/page/portal/Soleil/ToutesActualites
Secrétariat Division Expériences : sandrine.vasseur@synchrotron-soleil.fr