

Chemistry and biology at extreme high pressures: the role of SOLEIL+

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Amphithéâtre SOLEIL

Understanding the effects of high pressure on chemical and biological systems represent frontier areas of research that will lead to new insights into fundamental processes and control over reaction pathways and functioning. The new technical capacities of the upgraded synchrotron must play a leading role in the development of these emerging areas, while requiring us to think about and design experiments in ways that make best use of the instrument capabilities. Sub micro-scale mapping and tomography using diffraction and spectroscopic imaging will help chart the course of chemical reactions and the evolution of functionally active forms. Time resolution on the order of 10 ps will access key ranges for chemical and biological reaction dynamics, and kinetic studies of cooperative phenomena including phase change and conformation changes, in bulk and nanoconfined materials. This presentation will suggest how some classes of problems in high pressure chemistry and biology can be addressed, along with some ideas about how new questions might be posed, based on and around the new instrumental capabilities.



Ce séminaire sera suivi d'une pause café

SEMINAIRE

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

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