

Séminaire SOLEIL

Spectroscopy and dynamics of core-excited free and adsorbed molecules

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Amphi Soleil – Bat. Central**

Core-excited molecules can undergo many phenomena on the femtosecond time scale of core-hole lifetime, including nuclear rearrangement and ultrafast dissociation. When an electron from a core orbital is promoted to an unoccupied orbital, the system relaxes on a very short time scale, typically some tens of fs, by ejecting an Auger electron. Depending on the kinetic energy of the emitted electron, one or more chemical bonds can break, or rearrangement reactions taking place on the same time scale as electron decay such as isomerization and proton transfer can occur. Several examples of nuclear dynamics for free molecules will be presented.

As for adsorbed species, attention has been recently devoted in the literature to the possibility of identifying circular dichroism effects in molecules oriented on a surface. Several examples of dichroic effects in adsorbates will be discussed, together with remaining problems and open questions.

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).

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