ID de Contribution: **167** Type: **Contribution orale**

Time-Resolved Observation of the Solvation Dynamics of a Rydberg Excited Molecule Deposited on an Argon Cluster

mardi 4 juillet 2023 10:12 (17 minutes)

The real-time dynamics of DABCO-argon clusters is investigated in a femtosecond pump-probe experiment where the pump excites DABCO to the S_1 state within the argon cluster. The probe operates by photoionization and documents the energy and angular distributions of the resulting photoelectrons. The dynamics is followed up to 500 ps. A multiscale dynamics is observed. It includes a short time dynamics where the molecule jump between two solvation sites (timescale 0.27 ps) followed by the relaxation of the solvation cage excess vibrational energy (timescale 14 ps) and then by that of DABCO (timescale >150 ps).

Affiliation de l'auteur principal

CNRS - ISMO

Auteurs principaux: AWALI, Slim; MESTDAGH, Jean-Michel; GAVEAU, Marc-André; BRIANT, Marc; SOEP, Benoît; POISSON, Lionel (ISMO)

Orateur: POISSON, Lionel (ISMO)

Classification de Session: Mini-colloques: MC05 Physico-chimie des environnements atomiques et moléculaires froids et ultra froids

Classification de thématique: MC5 Physico-chimie des environnements atomiques et moléculaires froids et ultra froids