



PhD positions at the University of Hong Kong – IRMPD Spectroscopy of Microhydrated Clusters

Two PhD positions are currently available at the Department of Earth Sciences, University of Hong Kong. The aim of these PhD projects is to understand the structure and stability of gas-phase molecular ions, and, in particular, to probe the hydrogen-bonding environment in the solvation shell around metal ions and the response of the molecular ion upon controlled microsolvation using FT mass spectrometry and infrared multiphoton dissociation (IRMPD) spectroscopy. The proposed project aims at exploring IRMPD spectra of mass-selected ions under FT-MS conditions spanning the mid-IR wavelength range. Currently initiated FT-MS IRMPD studies center on microsolvated di- and trinuclear metal clusters and make use of a custom-built OPO/OPA laser system with tunable output in the mid-IR range from 2100-3800 cm^{-1} ; future experiments will be able to make use of a new mid-IR wavelength extension that is currently being developed and will expand the wavelength output to 700 cm^{-1} . For additional information please contact Dr. Kono Lemke at kono@hku.hk or at +852 2241 5474, or visit here > (<http://www.earthsciences.hku.hk/people/academic-staff/dr-lemke-kono>) for more details; Closing date for applications is 31.10.2017.