Energetics of the Ligand and Solvent Coordination of Catalytically Important Organometallic Complexes

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Using the recently constructed imaging Photoelectron Photoion Coincidence (iPEPICO) experiment of the VUV beamline of the SLS synchrotron, we have continued working on projects to determine highly accurate bond energies in the gas phase, with special emphasis on metal-ligand bonds. In the second funding cycle, we have collected more experimental data on a number of small and medium-size systems and have published a number of papers on the PEPICO experiments of smaller molecules as well as organometallics. Very recently, we have also built and published a new, double-imaging PEPICO (i²PEPICO) experiment to study dissociative photoionization dynamics.









