Spectroscopy and dynamics of atoms in and on helium droplets below and above the ionization limit

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The spectroscopy and dynamics of excited atoms and ions in helium nanodroplets have been investigated by a variety of spectroscopic techniques such as time-of-flight mass-spectrometry, velocity map ion imaging, and photoelectron and ZEKE spectroscopy. Here I will give an overview of the various processes that have been observed and presentsome of the general trends that have emerged from these studies.