

SPECTROSCOPY AND DYNAMICS OF CLUSTER ANIONS

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Spectroscopic studies of mass selected negative ion clusters have provided a wealth of new information concerning the structure, dynamics and energetics of small negative ions and solvated ions. Both bound-bound and bound-free spectroscopies have been employed to give new information on radicals, reactive intermediates and transition states. In this lecture, we discuss new measurements in both the time and frequency domains, emphasizing the very close interplay between theory and experiment that has characterized so much of the advance in the understanding of larger clusters. Particular emphasis will be placed on the structure of solvent about a chromophore, energy transfer from a photodissociated ionic chromophore to the solvent, and the role of electron transfer in the caging process.