

Electronic structure studies of rare-earth intermetallics using Indus synchrotron source

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Abstract

The ground state properties of rare-earth intermetallics depend on the nature of *f-electrons* and the strength of hybridization of the *f-electrons* with the delocalized band states present in the system. To understand the origin of various properties in these systems it is extremely important to probe the density of *f-electrons* experimentally. We have used the valence band photoelectron spectroscopy with a widely tunable photon energy to obtain the information about the density of *f-electrons* in the correlated systems like CeAg₂Ge₂ and EuCu₂Ge₂. I shall discuss some of these results in this talk.