

## Adsorption of Pd Deposited on Ag (100) Surface

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**Abstract :** PdAg(100) ordered surface alloys have been prepared by e-beam evaporation technique *in-situ* in UHV and were investigated using normal incidence *x*-ray standing wave method with wiggler radiation. The Pd deposited preferably occupies 4 fold hollow site on Ag(100) surface. Ordered alloys could be prepared upto about 25% Pd composition and for the alloys of higher Pd concentrations, long range order disappears due to the strong disorder induced by Pd in Ag (100) crystal. In the ordered alloys a short range ordered phase of Ag c(2X2) develops for Pd coverages above 1.5 ML.

**Keywords:** X-ray Standing Waves, adsorption, Coherent fraction and position, surface structure

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