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## Charge Redistribution of Pt-based Alloys

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We studied the charge redistribution in the Pt-M (M=Cu, Co) alloys by X-ray Absorption Near Edge Spectroscopy(XANES) and X-ray Photoelectron Spectroscopy(XPS). These analysis tools provide us information about the charge transfer in the valence band of intermetallic bonding. The samples were prepared by arc-melting method. After annealing this samples in vacuum for several hours, we could get the ordered samples, which were confirmed with XRD analysis.

The core and valence level energy shift in these system were investigated by Mg K  $\alpha$  (1253.6 eV) x-ray source for Pt-Co alloys and monochromatized Al K  $\alpha$  (1486.6 eV) for Pt-Cu alloys.

Pt L<sub>2</sub>, L<sub>3</sub>-edge, and Cu, Co K-edge XANES spectra were measured with the total electron-yield mode detector at the 3C1 beam line of the PLS (Pohang light source).

From the changes of White line(WL) area and the core level shifts of the each metal sites, we can obtain the information about the electrons participating in the intermetallic bonding of the Pt-Cu and Pt-Co alloys.

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