

Examining different methods of oxidizing bulk polycrystalline cobalt sample to prepare CoO_x surface, examine thermal stability of prepared layers by XPS & TDS, comparison to mixed $\text{CeO}_x/\text{CoO}_x$ oxide thin films. Chemical reactivity - adsorption of isotopically labeled CO on $\text{CeO}_x/\text{Co}_3\text{O}_4$, methanol oxidation on CeO_x/CoO under UHV conditions characterized by QMS.