Synthesis and characterization of porous CuO–ZnO composite and its catalytic application for CO oxidation

<u>황성희</u>, 박중남, 김명실, 손정국, 김지만^{*} 성균관대학교 (jimankim@skku.edu^{*})

A porous CuO-ZnO composite with sphere type was prepared by sol-gel method. The morphology, phase structure, surface area and reactivity for CO oxidation of the CuO-ZnO composite were characterized by SEM, XRD, BET, TGA and H2-TPR. Effect of pretreatment condition on catalytic performance over porous CuO-ZnO composite has investigated in a fixed bed reactor. CuO-ZnO composite catalyst exhibits higher activity at low temperature than the control catalyst, compositionally identical CuO/ZnO synthesized by CuO impregnation of ZnO (made by sol-gel method).