



Method for preventing air pollution: Methane oxidation by two types of catalysts

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Abstract Methane oxidation using different catalysts is an useful process for preventing air pollution. This study presents the methane oxidation by two types of catalysts: Pd-Sn/Al₂O₃ and spinel mixed oxide, CuFe₂O₄. The Pd-Sn/Al₂O₃ was successfully prepared by sol-gel method and CuFe₂O₄ by co-precipitation method. The catalysts obtained have been characterized structurally, morphologically and texturally by X-ray diffraction (XRD), scanning electron microscopy (SEM) and specific surface area (BET). The catalytic activity tests regarding methane oxidation were also performed.

Keywords: bimetallic material, copper ferrite, mixed oxides, catalytic activity tests
