

### Removal of Dimethyl Sulfide on Activated Carbons Impregnated with Transition Metals

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The adsorption capacity of activated carbon for the natural gas contaminant dimethyl sulfide (DMS) was improved by impregnating it with a transition metal to influence surface modification. The adsorption features of DMS on modified activated carbons were investigated by using a dynamic adsorption method in a fixed-bed. The impregnation of transition metal on the activated carbon significantly improved the adsorption capacity of DMS. Among several samples, copper-impregnated activated carbon showed the highest DMS capacity. Moreover, the effects of copper loading on the DMS adsorption capacity were also considered.

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