

# Study on the Reaction Mechanism of SO<sub>2</sub> Hydrogenation over Mo-based Catalyst

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## Abstract

Mo-based catalysts are widely used for the SO<sub>2</sub> hydrogenation process. However, the detailed reaction mechanism is still unclear and some details should be further supplemented. In this paper, the SO<sub>2</sub> hydrogenation processes over the Mo-based catalyst were systematically studied. Several technologies including temperature-programmed experiments, isotope-tracing experiment, FTIR spectra and switching experiment were adopted to investigate the reaction steps. The results indicated that during the SO<sub>2</sub> hydrogenation

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