

An optimization of aging conditions on  
CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> catalyst for the low  
temperature water-gas shift reaction

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The low temperature water-gas shift (LT-WGS) reaction has been carried out at gas hourly space velocity (GHSV) of 8,001 h<sup>-1</sup> over CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> catalyst. The aging temperature and time were systematically varied to optimize the aging conditions of CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> catalyst for the low temperature water-gas shift reaction. The effect of aging condition on catalytic activity of CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> catalysts has been interpreted through various characterization techniques and related to catalytic activity results in the LT-WGS reaction.