# Highly selective synthesis of propylene from methanol on HZSM-5 catalysts

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The catalytic conversion of methanol to propylene over HZSM-5 was investigated. The reaction was carried out in a fixed bed reactor at atmospheric pressure with different reaction temperature. The catalysts with varying SiO2/Al2O3 ratios were synthesized and characterized by XRD, SEM and BET. The acid properties of catalysts were measured by temperature programmed desorption(TPD) of ammonia. It was found that propylene selectivity was improved in the case of low acidity and high reaction temperature.