

Supplemental info

A kinetic study of methane partial oxidation over FeZSM-5 using N₂O as an oxidant

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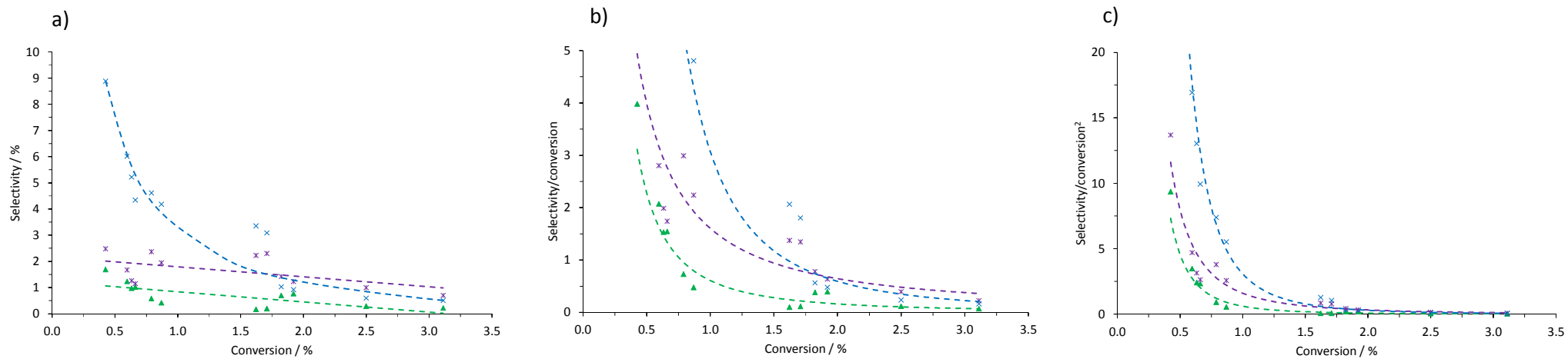


Fig. S1. First rank (a), second rank (b) and third rank (c) delplots of minor products taken from data collected over a series of experiments using different masses of 2 % Fe-ZSM-5 at 300 °C; (▲) CH₃OH, (✱) C₂H₆ and (✕) C₂H₄.

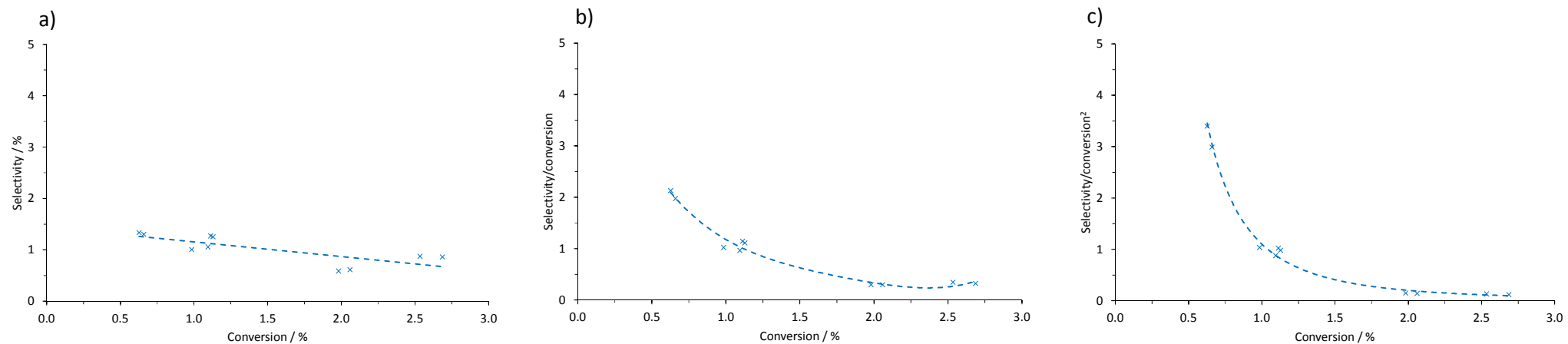


Fig S2. First rank (a), second rank (b) and third rank (c) delplots of minor products taken from data collected over a series of experiments using different masses of 2 % Fe-ZSM-5 at 300 °C with water in the feed; (X) C₂H₄.

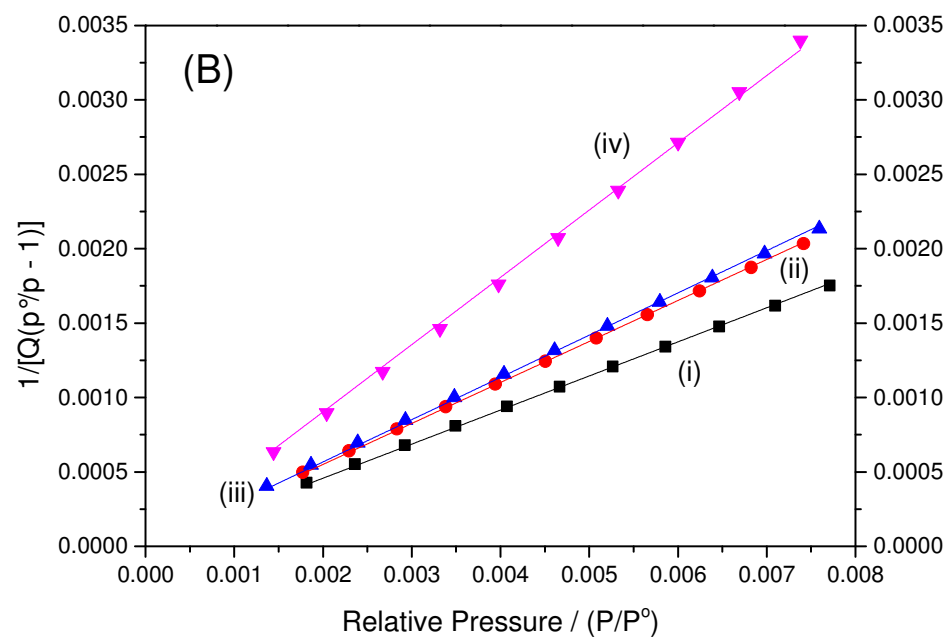
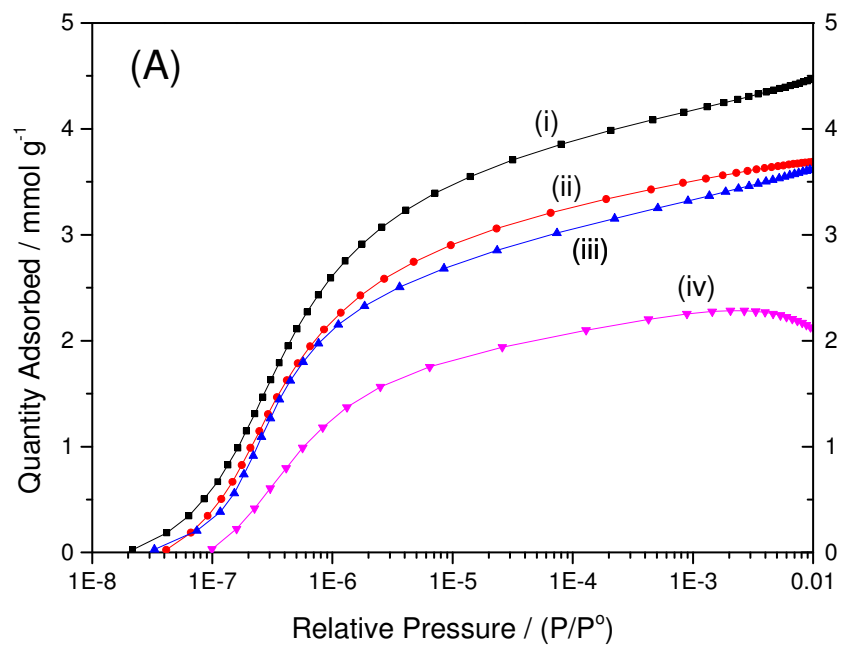


Fig. S3 N₂ adsorption isotherms (A) and BET surface area plots (B) for: (i) H-ZSM-5, (ii) Fe-ZSM-5, (iii) Fe-ZSM-5-20% and (iv) Fe-ZSM-5-0% following testing at 300 °C for 3 h.