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Citation for final published version:

Chow, Ying Kit, Dummer, Nicholas, Carter, James, Meyer, Randall, Armstrong, Robert, Williams, Christopher, Shaw, Greg, Jacobs, Sara, Bhasin, Madan, Willock, David, Taylor, Stuart and Hutchings, Graham John 2018. A kinetic study of methane partial oxidation over FeZSM-5 using N₂O as an oxidant. *ChemPhysChem* 19 (4) , pp. 402-411. 10.1002/cphc.201701202 filefile

Publishers page: <http://dx.doi.org/10.1002/cphc.201701202>
<<http://dx.doi.org/10.1002/cphc.201701202>>

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Supplemental info

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

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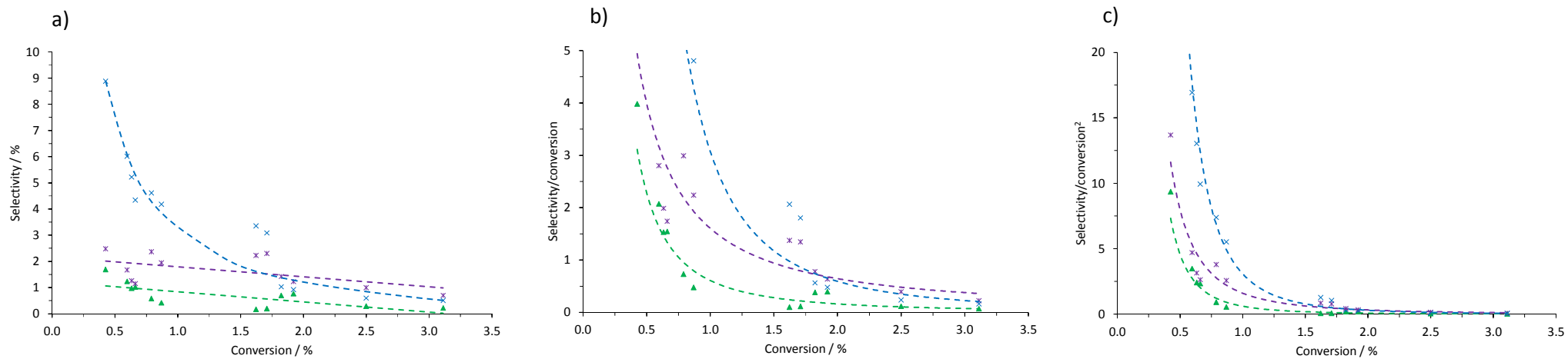


Fig. S1. First rank (a), second rank (b) and third rank (c) delplots of minor products taken from data collected over a series of experiments using different masses of 2 % Fe-ZSM-5 at 300 °C; (▲) CH₃OH, (*) C₂H₆ and (×) C₂H₄.

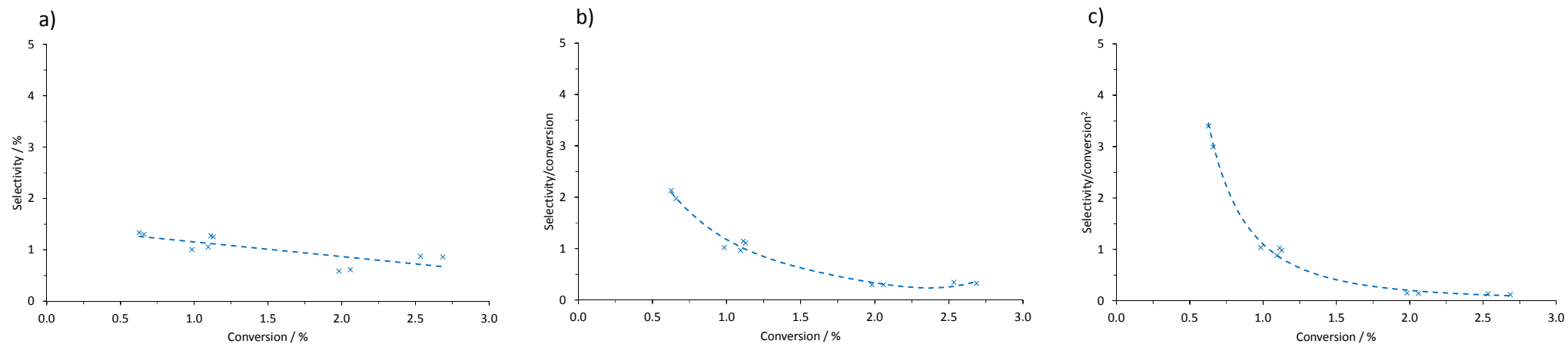


Fig S2. First rank (a), second rank (b) and third rank (c) delplots of minor products taken from data collected over a series of experiments using different masses of 2 % Fe-ZSM-5 at 300 °C with water in the feed; (X) C₂H₄.

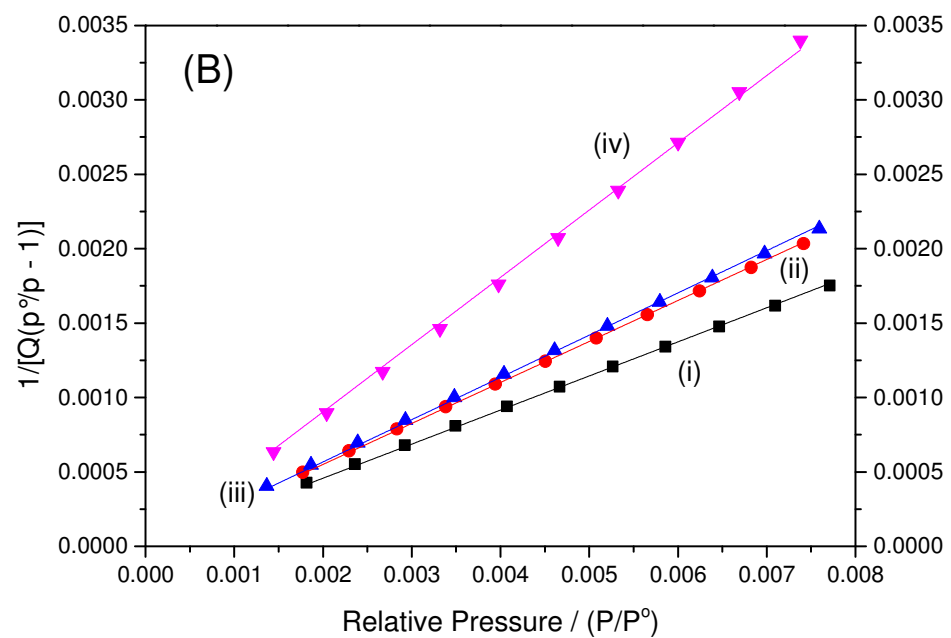
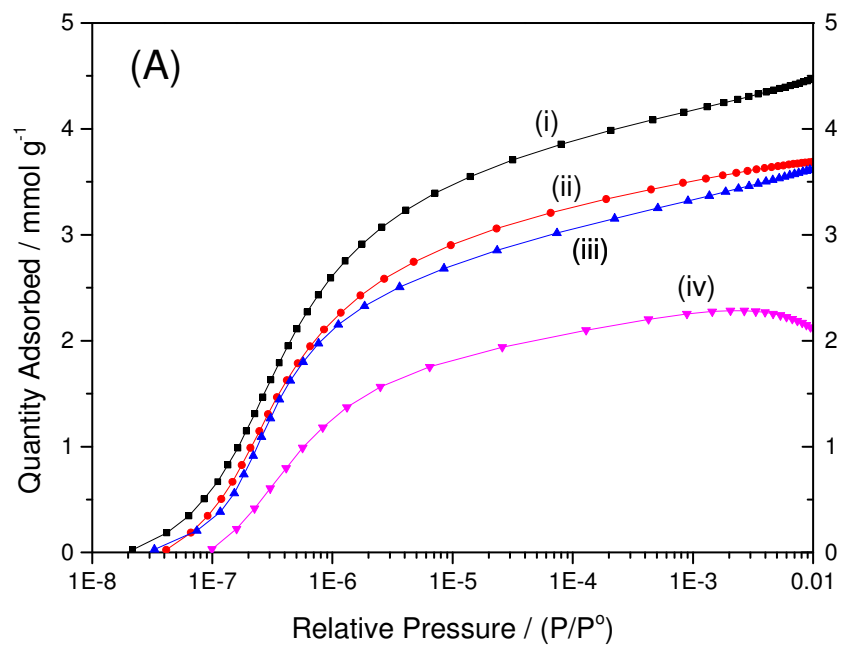


Fig. S3 N₂ adsorption isotherms (A) and BET surface area plots (B) for: (i) H-ZSM-5, (ii) Fe-ZSM-5, (iii) Fe-ZSM-5-20% and (iv) Fe-ZSM-5-0% following testing at 300 °C for 3 h.