

Professor Graham Hutchings: Publications

Refereed research papers

1. G.J. Hutchings, B.E.C. Banks, M. Mruzek, J.H. Ridd and C.A. Vernon. 'Mechanisms of hydrolysis of adenosine-5'-triphosphate, adenosine-5'-diphosphate, and Inorganic Pyrophosphate in Aqueous Perchloric Acid', *Biochem.*, **20** (1981) 5809-5816.
2. G.J. Hutchings, 'Factors affecting the adsorption of mercury (II) chloride onto carbon', *S. Afr. J. Chem.*, **38** (1985) 25-30.
3. G.J. Hutchings, 'An electron microscopy study of catalysts for the production of hydrogen cyanide by the ammoxidation of methane', *S. Afr. J. Chem.*, **38** (1985) 44-48.
4. G.J. Hutchings and D.T. Grady, 'Effect of drying conditions on carbon supported mercuric chloride catalysts', *Appl. Catal.*, **16** (1985) 411-415.
5. R.G. Copperthwaite, G.J. Hutchings, S.W. Orchard and P. Johnston, 'Ozone reactivation of a synthetic zeolite catalyst for methanol conversion', *J. Chem. Soc., Chem Commun.*, (1985) 644-645.
6. G.J. Hutchings and D.T. Grady, 'Hydrochlorination of acetylene: The effect of mercuric chloride concentration on catalyst lifetime', *Appl. Catal.*, **17** (1985) 155-160.
7. G.J. Hutchings and R.E. Espinoza, 'Comments on the classification of Fischer-Tropsch synthesis product distributions', *Can. J. Chem. Eng.*, **63** (1985) 695-697.
8. R. Hunter and G.J. Hutchings, 'LiAl(OⁱPr)₄ as a model compound for the conjugate base of the zeolite catalyst H-ZSM-5 and its reaction with various methylating agents', *J. Chem. Soc., Chem. Commun.*, (1985) 886-887.
9. G.J. Hutchings, 'Vapour phase hydrochlorination of acetylene: Correlation of catalytic activity of supported metal chloride catalysts', *J. Catal.*, **96** (1985) 292-295
10. G.J. Hutchings and G. Fraser-Bell, 'Purification and utilisation of iron contaminated sulphuric acid', *J. Chem. Tech. Biotech.*, **35A**, (1985) 403-406.
11. R. Hunter and G.J. Hutchings, 'Hydrocarbon formation from methylating agents over the zeolite catalyst H-ZSM-5 and its conjugate base: Evidence against the trimethyloxonium ion-ylide mechanism', *J. Chem. Soc., Chem. Commun.*, (1985) 1643-1645.
12. R.G. Copperthwaite, H. Hack, G.J. Hutchings and J.P.F. Sellschop, 'X-ray photoelectron spectroscopic evidence for iron enrichment on doped manganese oxide surfaces', *Surface Science*, **164** (1985) L827-L830.
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14. R.G. Copperthwaite, G.J. Hutchings and M. van der Reit, 'Preparation and evaluation of a synthetic zeolite catalyst', *J. Chem. Educ.*, **63** (1986) 632-634.
15. R.G. Copperthwaite, G.J. Hutchings, P. Johnston and S.W. Orchard, 'Methanol conversion to hydrocarbons using zeolite catalysts', *J. Chem. Educ.*, **63** (1986) 634-637
16. R.G. Copperthwaite, G.J. Hutchings, P. Johnston and S.W. Orchard, 'Reactivation of zeolite catalysts using ozone and oxygen', *J. Chem. Soc., Farad. Trans. 1.*, **82** (1986) 1007-1017.
17. G.J. Hutchings, R.G. Copperthwaite, 'Production of liquid fuels using zeolites', *S. Afr. J. Sci.*, **81** (1985) 537-540.
18. G.J. Hutchings, 'Catalyst crushing strength as a diagnostic test', *J. Chem. Tech. Biotech.*, **36** (1986) 255-258.
19. P. Johnston, G.J. Hutchings and M.J. Coville, 'Site selectivity studies on metal dimer complexes: The substitution reaction of [(η^5 -C₅H₅)Fe(CO)₂Mn(CO)₅]', *Inorg. Chem. Acta.*, **117** (1986) L11-L12.
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Reviews and Invited Feature Articles

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