Title: Insight into the efficient oxidation of methyl-ethyl-ketone over hierarchically micro-mesostructured Pt/K-(Al)SiO_2 nanorod catalysts: Structure-activity relationships and mechanism

Authors: Zeyu Jiang, Chi He, Nicholas F. Dummer, Jianwen Shi, Mingjiao Tian, Chunyan Ma, Zhengping Hao, Stuart H. Taylor, Mudi Ma, Zhenxing Shen

PII: S0926-3373(17)31156-6
DOI: https://doi.org/10.1016/j.apcatb.2017.12.007
Reference: APCATB 16242

To appear in: *Applied Catalysis B: Environmental*

Received date: 25-8-2017
Revised date: 30-11-2017
Accepted date: 4-12-2017

Please cite this article as: Zeyu Jiang, Chi He, Nicholas F.Dummer, Jianwen Shi, Mingjiao Tian, Chunyan Ma, Zhengping Hao, Stuart H.Taylor, Mudi Ma, Zhenxing Shen, Insight into the efficient oxidation of methyl-ethyl-ketone over hierarchically micro-mesostructured Pt/K-(Al)SiO2 nanorod catalysts: Structure-activity relationships and mechanism, Applied Catalysis B, Environmental https://doi.org/10.1016/j.apcatb.2017.12.007

Insight into the efficient oxidation of methyl-ethyl-ketone over hierarchically micro-mesostructured Pt/K-(Al)SiO_2 nanorod catalysts: Structure-activity relationships and mechanism

Zeyu Jiang[1], Chi He[1,2,*], Nicholas F. Dummer[2], Jianwen Shi[3], Mingjiao Tian[1], Chunyan Ma[4], Zhengping Hao[4], Stuart H. Taylor[2], Mudi Ma[1], Zhenxing Shen[1]

[1]*Department of Environmental Science and Engineering, State Key Laboratory of Multiphase Flow in Power Engineering, School of Energy and Power Engineering, Xi'an Jiaotong University, Xi'an 710049, Shaanxi, P.R. China*

[2]*Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Main Building, Park Place, Cardiff, CF10 3AT, UK*

[3]*Center of Nanomaterials for Renewable Energy, State Key Laboratory of Electrical Insulation and Power Equipment, School of Electrical Engineering, Xi'an Jiaotong University, Xi'an 710049, Shaanxi, China*

[4]*Department of Environmental Nano-materials, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, P.R. China*

[*]To whom correspondence should be addressed:

Tel./Fax: +86 29 8266 3857

E-mail: chi_he@xjtu.edu.cn (C. He)