

Study of potassium promoter effect for Ru/AC catalysts of ammonia synthesis

Bingyu Lin*, Kemei Wei, Xiaofeng Ma, Jianxin Lin, Jun Ni

National Engineering Research Center of Chemical Fertilizer Catalyst, Fuzhou University,
Fuzhou, Fujian 350002, PR China.

E-mail: bylin@fzu.edu.cn.

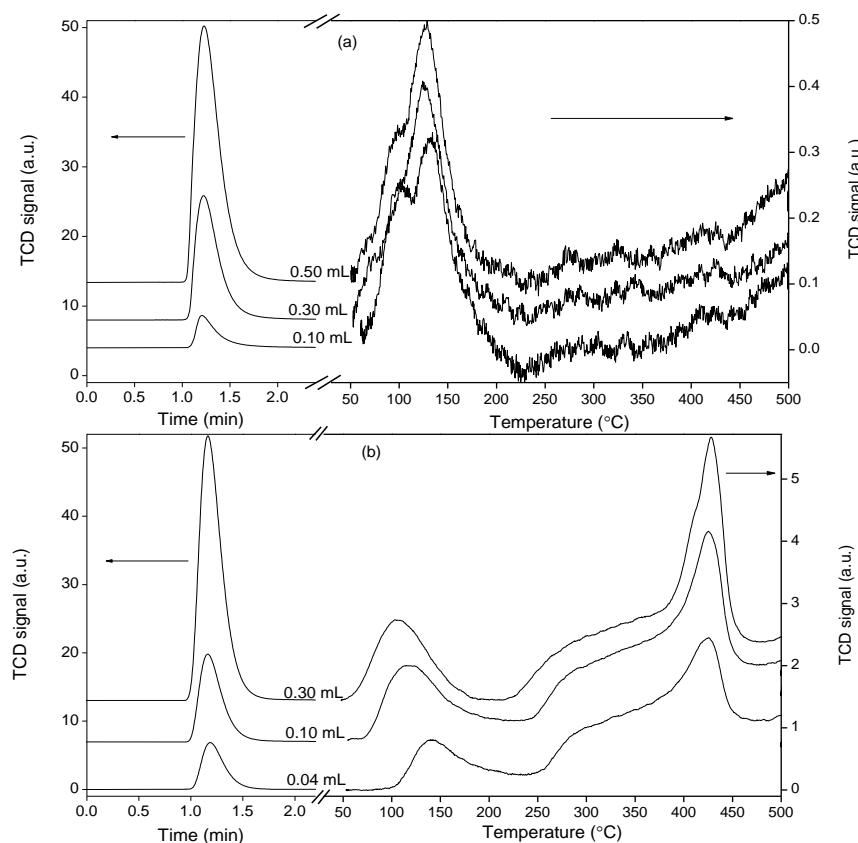


Fig. S1 The TPD profiles of (a) hydrogen and (b) nitrogen over 2K-Ru/AC adsorbed different amount of gas.

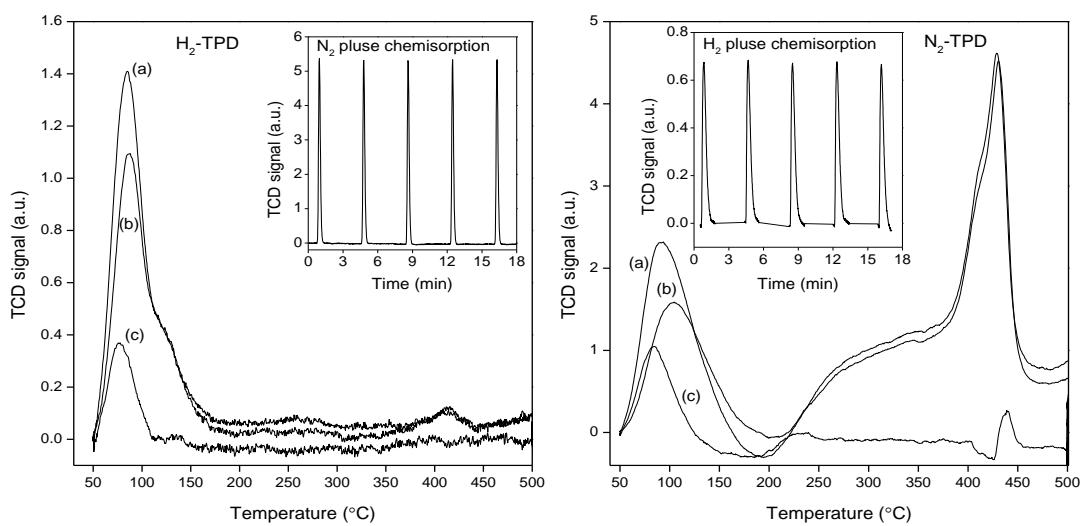


Fig. S2 (Left) The H₂-TPD profiles of 2K-Ru/AC a) adsorbed hydrogen for 1h, b) adsorbed hydrogen for 1h and subsequently inject nitrogen for 5 times (0.4976 mL every time) and c) subtract the curve (b) from (a). (Right) The N₂-TPD profiles of 2K-Ru/AC a) adsorbed nitrogen for 1h, b) adsorbed nitrogen for 1h and subsequently inject hydrogen for 5 times, and c) subtract the curve (b) from (a).