

Supplementary Information

In-depth understanding of the bimetallic effects and coked carbon species on an active bimetallic Ni(Co)/Al₂O₃ dry reforming catalyst

Xin Liao,^{a,b} Rihards Gerdtis,^a Stewart F. Parker^c, Lina Chi,^{a,d} Yongxiang Zhao^b, Martyn Hill^a, Junqiu Guo^a, Martin O. Jones^{c,e*}, Zheng Jiang^{a,b*}

a. Faculty of Engineering and the Environment, University of Southampton, Highfield, Southampton, SO17 1BJ, U.K.

b. Department of Chemistry and Chemical Engineering, Shanxi University, Taiyuan, 030006, China

c. ISIS Facility, STFC Rutherford Appleton Laboratory, Chilton, Didcot, OX11 0QX, UK

d. School of Environmental Science and Engineering, Shanghai Jiao Tong University, 200240, China

e School of Chemistry, North Haugh, St Andrews, Fife, KY16 9ST, Scotland, United Kingdom

*Corresponding author: z.jiang@soton.ac.uk (ZJ) & martin-owen.jones@stfc.ac.uk (MOJ)

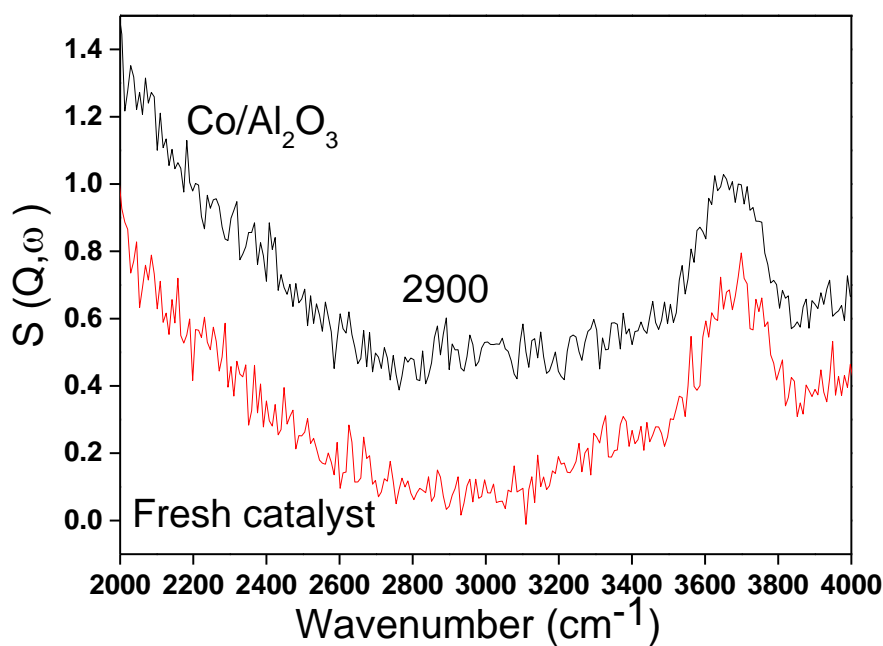


Fig.S1 INS spectra of fresh and spent Co/Al₂O₃ catalyst using the MAPS spectrometer operating an incident neutron energy of 4840 cm⁻¹