

## Supplementary Material

### Mild preoxidation treatment of Pt/TiO<sub>2</sub> catalyst and its enhanced low temperature formaldehyde decomposition

Kangzhong Shi<sup>1,4</sup>, Lei Wang<sup>1,5</sup>, Long Li<sup>1</sup>, Xuejuan Zhao<sup>2</sup>, Yuanyuan Chen<sup>1</sup>, Zelin Hua<sup>1</sup>, Xiaobao Li<sup>1</sup>, Xiaoli Gu<sup>1</sup>, Licheng Li<sup>1, 3\*</sup>

<sup>1</sup> Jiangsu Key Lab for the Chemistry & Utilization of Agricultural and Forest Biomass, College of Chemical Engineering, Nanjing Forestry University, Nanjing 210037, P.R. China.

<sup>2</sup> School of Materials Science and Engineering, Nanjing Institute of Technology, Nanjing 211167, P.R. China.

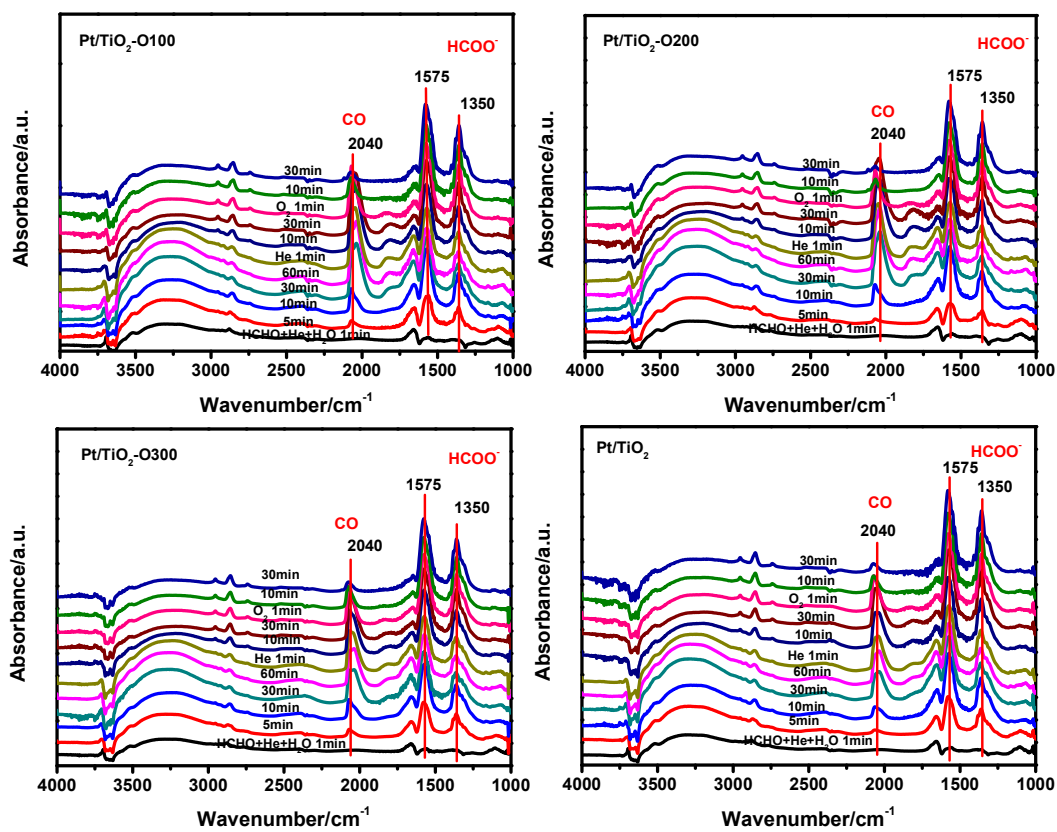
<sup>3</sup> State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing Tech University, Nanjing 210009, P.R. China.

<sup>4</sup> Eastman Shuangwei Fibers Company Limited, Hefei 230601, P.R. China

<sup>5</sup> Research Institute of Wison Advanced, Wison (China) Holding Company, Shanghai 201210, P.R. China

\* Corresponding author.

Email address: llc0024@yahoo.com



**Figure S1** Dynamic changes of in situ DRIFTS of various preoxidized Pt/TiO<sub>2</sub> catalysts and pristine Pt/TiO<sub>2</sub> catalyst