

**Preparation of -SO_3^- -coated nano-promoters for methane hydrate formation:
effects of the existence pattern of -SO_3^- groups on the promotion efficiency**

*Fei Wang,^a Gang Guo,^a Sheng-Jun Luo,^{*a} and Rong-Bo Guo ^{*a}*

^a Shandong Industrial Engineering Laboratory of Biogas Production & Utilization, Key Laboratory of Biofuels, Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, Qingdao 266101, Shandong, China.

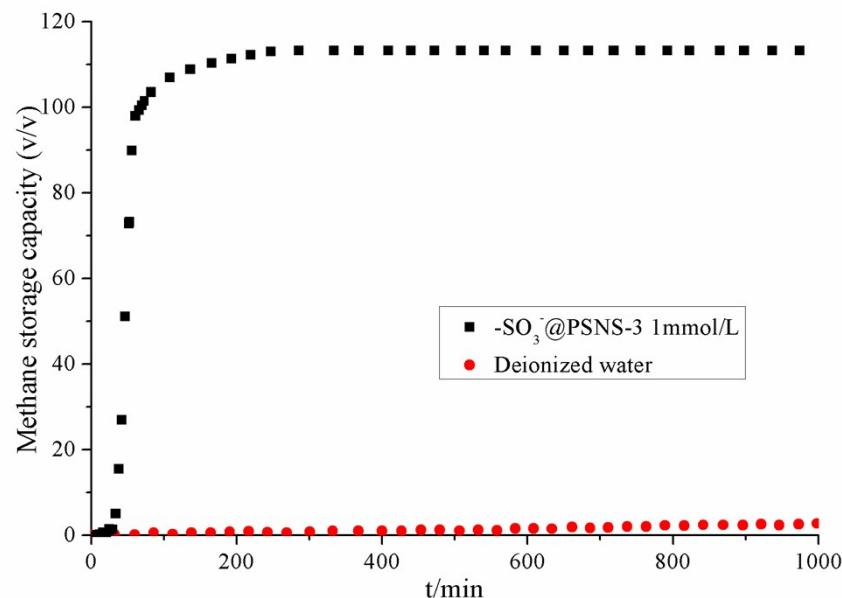


Fig. S1 Methane hydrate formation rate with -SO_3^- @PSNS-3 of 1 mmol/L and deionized water at static condition (the initial conditions were 6 MPa and 275.15 K)