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Professional field: Chemical Engineering and Technology  
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## Profile

### Education

2007: PhD, Chemical Technology, ECUST, China.  
2002: BS, Chemical Engineering and Technology, ECUST, China.

### Academic Experience

2010-present: Associate Professor, School of Chemical Engineering, ECUST, China.  
2014-2015: Visiting Scholar, Chemical & Biological Engineering, University of British Columbia (UBC), Canada  
2007-2009: lecturer, School of Chemical Engineering, ECUST, China.

### Non-academic Experience

2009-2010: Deputy party secretary (Temporary post, for one year) of the Zhoushi town in Kunshan City.

## Research Field

1. Environmental friendly catalyst and its process development
2. High-value utilization of low-value resources

## Research results and selected published papers

1. Rongjie Wang, Benxian Shen,\* Hui Sun, Jigang Zhao\*. Measurement and Correlation of the Solubilities of Sulfur S8 in 10 Solvents[J]. J. Chem. Eng. Data, 2018, 63 (3): 553-558
2. Sun, H; Lei, XX; Tan, JL; Sun, ZW ; Han, X; Liu, JC; Zhao, JG ; Shen, BX ; Zhang, XH ; Guo, XF; Wu, D. Tuning the Catalytic Activity and Stability of Al-Ti Bimetallic Species Immobilized on MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> for 1-Decene Oligomerization[J]. INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, 2018, 57(19): 6664-6672
1. Jigang Zhao, yang shu, rongjie wang & benxian shen, A novel and easy way to improve the thermal stability of insoluble sulfur by curing process[J]. Phosphorus, Sulfur, and Silicon and the Related Elements, 2017, 192(4): 431-436  
ID: 1247842 DOI:10.1080/10426507.2016.1247842
2. Yifeng Liu, Benxian Shen, Zhipeng Pi, Hua Chen, Jigang Zhao\*. A comparative investigation of SO<sub>2</sub> oxidative transfer over CuO with a CeO<sub>2</sub> surface[J].Applied Surface Science, 2017, 402: 261-270
3. Lei Wang, Benxian Shen, Jigang Zhao, Xiaotao Bi. Trimetallic Au-Cu-K for acetylene hydrochlorination[J]. The Canadian Journal of chemical engineering, 2017, 95(6): 1069-1075
4. Jigang Zhao, Chunwei Yuan & Xing Yao (2017) A simple method to evaluate solvent for lubricating oil by solubility parameter, Petroleum Science and Technology, 35:14, 1445-1450
5. Qin Zhang, Jigang Zhao, Rong Guo, Jin Sun & Benxian Shen (2017) Analysis for surface coke deposition in used Mo-Co/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub> catalyst for diesel hydrodesulfurization, Petroleum Science and Technology, 35:13, 1408-1414
6. Zhipeng Pi, Benxian Shen, Jichang Liu, Yifeng Liu & Jigang Zhao\*. Reduction of NO<sub>x</sub> in Fluid Catalytic Cracking Flue Gas over Mg-Al Spinel Modified with Transition Metal Oxides[J]. Petroleum Science and Technology, 2016, 34(24): 1958-1963
7. Jigang ZHAO\*, Junjian ZENG, Xiaoguang CHENG, Lei WANG, Henghua YANG, Benxian SHEN. The Au-Cu bimetal catalyst by renewable  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> as support for acetylene hydrochlorination [J]. RSC Adv., 2015, 5: 16727-16734
8. X.-M. Zhang, B.-X. Shen, X.-M. Hou & J.-G. Zhao\*. Research on Reactive Adsorption Desulfurization Over Metal Oxides Adsorbent[J]. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2015, 37(2): 209-216
9. A.-M. Ning, B.-X. Shen, J. Long & J.-G. Zhao\*. Comparison of the Physical Properties and Chemical Structures of the Tahe Asphalt Before and After Oxidative Aging[J]. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2015, 37(14): 1495-1504
10. Ling-tao Kong , Ben-xian Shen\*, Zhang Jiang, Ji-gang Zhao, Ji-chang Liu. Synthesis of SAPO-34 with the presence of additives and their catalytic performance in the transformation of chloromethane to olefin[J]. Reac Kinet Mech Cat (2015) 114:697-710
11. WANG LEI, SHEN BENXIAN, REN RUOFAN, XIAO WEIGUO, and ZHAO JIGANG\*. Mercury-free catalyst preparation for acetylene hydrochlorination and its catalytic performance on a single-tube pilot unit compared with HgCl<sub>2</sub> catalyst[J]. Asian Journal of Chemistry, 2015, 27(12): 4537-4540
12. MA JIAN, ZHAO JIGANG\*, WANG RONGJIE, SHEN BENXIAN. Theoretical Study on Structure of Polymeric Sulfur [J]. Asian Journal of Chemistry, 2015, 27(12): 4583-4586
13. Zhipeng Pi, Benxian Shen\*, Jigang Zhao, and Jichang Liu\*. CuO, CeO<sub>2</sub> Modified Mg-Al Spinel for Removal of SO<sub>2</sub> from Fluid Catalytic Cracking Flue Gas[J]. Ind. Eng. Chem. Res., 2015, 54 (43): 10622-10628
14. Zhang Jiang, Ben-xian Shen\*, Ji-gang Zhao, Lei Wang, Ling-tao Kong, Wei-guo Xiao. Enhancement of Catalytic Performances for the Conversion of Chloromethane to Light Olefins over SAPO-34 by Modification with Metal Chloride[J]. Ind. Eng. Chem. Res., 2015, 54 (49): 12293-12302