



Department: School of Chemical Engineering
Professional field: Chemical Engineering and Technology
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Profile

Education

2005: PhD, Chemical Engineering, East China University of Science and Technology, China.

2002: MS, Chemical Engineering, East China University of Science and Technology, China.

1996: BS, Chemical Engineering, East China University of Science and Technology, China.

Academic Experience

2008-present: Associate professor, School of Chemical Engineering, ECUST, China.

2010-2011: Postdoctoral Research, Chemical Engineering Department, Ben-Gurion University, Israel.

2005-2008: Lecturer, School of Chemical Engineering, ECUST, China.

Non-academic Experience

1996-1999: Technician, Yantai Fertilizer factory, China

Research Field

1. Catalytic chemical kinetics: Micro and macro chemical kinetics modeling and its applications in industrial reaction processes, in situ transient kinetic techniques
2. Catalyst Engineering: Development of catalysts for dehydrogenation of propane, preparation of noble metals and Monatomic metal catalysts
3. Catalytic Reaction Engineering: Simulation of industrial reactors

Research results and selected published papers

1. Yu-Ling Shan, Zhi-Jun Sui, Yi-An Zhu, Jing-Hong Zhou, Xing-Gui Zhou, De Chen. Boosting size-selective hydrogen combustion in presence of propene using controllable metal clusters encapsulated in zeolite. *Angewandte Chemie International Edition*, 2018, 10.1002/anie.201805150.
2. Hai-Zhi Wang, Li-Li Sun, Zhi-Jun Sui, Yi-An Zhu, Guang-Hua Ye, De Chen, Xing-Gui Zhou, and Wei-Kang Yuan. Coke Formation on Pt-Sn/Al₂O₃ Catalyst for Propane Dehydrogenation. *Industrial & Engineering Chemistry Research*. 2018, 57 (26), 8647-8654
3. Zhu, Yi-An; Wang, Zi-Jun; Cheng, Hong-Ye; Yang, Qin-Min; Sui, Zhi-Jun; Zhou, Xing-Gui; Chen, De, Decoding structural complexity in conical carbon nanofibers, *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 2017, 19(22): 14555~14565.
4. Cao, Yueqiang; Sui, Zhijun; Zhu, Yian; Zhou, Xinggui; Chen, De, Selective Hydrogenation of Acetylene over Pd-In/Al₂O₃ Catalyst: Promotional Effect of Indium and Composition-Dependent Performance, *ACS CATALYSIS*, 2017, 7(11): 7835~7846.
5. Shan, Yu-Ling; Wang, Ting; Sui, Zhi-Jun; Zhu, Yi-An; Zhou, Xing-Gui, Hierarchical MgAl₂O₄ supported Pt-Sn as a highly thermostable catalyst for propane dehydrogenation, *Catalysis Communications*, 2016, 84: 85~88.
6. Zhang, Jian; Sui, Zhijun; Zhu, Yi-An; Chen, De; Zhou, Xinggui; Yuan, Weikang, Composition of the Green Oil in Hydrogenation of Acetylene over a Commercial Pd-Ag/Al₂O₃ Catalyst, *Chemical Engineering & Technology*, 2016, 39(5): 865~873.
7. Shan, Yu-Ling; Zhu, Yi-An; Sui, Zhi-Jun; Chen, De; Zhou, Xing-Gui, Insights into the effects of steam on propane dehydrogenation over a Pt/Al₂O₃ catalyst, *Catalysis Science & Technology*, 2015, 5(8): 3991~4000.
8. Shan, Yuling; Sui, Zhijun; Zhu, Yian; Chen, De; Zhou, Xinggui, Effect of steam addition on the structure and activity of Pt-Sn catalysts in propane dehydrogenation, *Chemical Engineering Journal*, 2015, 278: 240~248.