



Department: School of Chemical Engineering  
 Professional field: Chemical Engineering and Technology  
 E-mail: dhliu@ecust.edu.cn

## Profile

- 1.Bachelor of science in Organic Chemical Engineering, master of science in Chemical Technology, Ph. D. in chemical technology, East China University of Science and Technology,
- 2.1993.7-Assistant professor, lecturer, associate professor, East China University of Science and Technology Professor
- 3.2011.8-2012.8 Visiting scholar, Princeton University, USA
- 4.2006.12-2016.12 Director, East China University of Science and Technology
- 5.2016.12-Associate Dean of Chemical Engineering

## Research Field

Clean Energy, catalyst engineering, systems engineering, reactor design

## Research results and selected published papers

1. Li MZ, Jiao LK, Nawaz M Asif, Cheng L, Meng C, Yang T, Tariq M, Liu DH\*. A one-step synthesis method of durene directly from syngas using integrated catalyst of Cu/ZnO/Al<sub>2</sub>O<sub>3</sub> and Co-Nb/HZSM-5. *Chemical Engineering Science*. 2019, 200(8): 103-112.
2. Li N, Meng C, Liu DH\*. Deactivation kinetics with activity coefficient of the methanol to aromatics process over modified ZSM-5. *Fuel*. 2018, 233: 283-290.
3. Cheng L, Meng C, Yang T, Li N, Liu DH\*. One-Step Synthesis of Aromatics from Syngas over K-Modified FeMnO/MoNi-ZSM-5. *Energy & Fuels*. 2018, 32 (9): 9756-9762.
4. Chen Y, Liu DH\*. Reductive carbonylation of methanol for ethanol production in Rh-Ru-dppp-methyl iodide catalytic system under mild conditions – The effect of lithium salts and catalyst composition. *Fuel Processing Technology*, 2018, 171:301-307.
5. Yang T, Cheng L, Li N, Liu DH\*. Effect of Metal Active Sites on the Product Distribution over Composite Catalysts in the Direct Synthesis of Aromatics from Syngas. *Industrial & Engineering Chemistry Research*, 2017, 56(41):11763-11772.
6. Zhang JQ, Fang DY, Liu DH\*. Evaluation of Zr-Alumina in Production of Polyoxymethylene Dimethyl Ethers from Methanol and Formaldehyde: Performance Tests and Kinetic Investigations. *Industrial & Engineering Chemistry Research*. 2014, 53 (35): 13589-13597.
7. Chen Y, Liu DH, Yu Y. Insights into the ligand effects of rhodium catalysts toward reductive carbonylation of methanol to ethanol. *Rsc Advances*, 2017, 7(79):49875-49882.
8. Zhuang Z, Zhang J, Liu X, et al. Liquid–liquid equilibria for ternary systems polyoxymethylene dimethyl ethers + para-xylene + water[J]. *Journal of Chemical Thermodynamics*, 2016, 101:190-198.
9. 刘殿华；房鼎业；韩金平；贾景科；贾云；冯成海；高有智；延建军. 醋酸乙烯的制备方法，2014.03.26-2032.09.19, 中国, CN201210355557.8 (发明专利)
10. 刘殿华；房鼎业；罗万明；刘宏伟；王军峰；李铖；张荣；赵光；施敏浩. 一种由甲醇和甲醛制备聚甲氧基二甲醚的方法，2014.01.15-2032.06.15, 中国, CN201210199266.4 (发明专利)
11. 刘殿华；房鼎业；张建强；唐斌. 改性酸性阳离子交换树脂及其用途  
2014.01.15-2032.06.15, 中国, CN201210199242.9 (专利)
12. 刘殿华；房鼎业；应卫勇；曹发海；丁百全；李涛；张海涛；马宏方. 适用于气相放热反应的反应器，2011.07.27-2030.01.21, 中国, CN201010110624.0 (专利)
13. 刘殿华；房鼎业；陈大胜；李彩云；姚春峰；张建强. 甲醇脱水制备二甲醚的方法，2012.11.14-2029.10.30, 中国, ZL200910197923.X (专利)