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个人简介

教育背景:

1999/09-2003/04	华东理工大学	化学工程	工学博士
1996/09-1999/07	华东理工大学	化学工程	工学硕士
1990/09-1993/07	江南大学	化学工程	大专

工作经历:

2021/09- 至今	华东理工大学	化工学院	教授
2008/01-2021/08	华东理工大学	化工学院	副研究员
2007/01-2007/12	以色列理工	化工系	访问学者
2005/09-2006/12	华东理工大学	化工学院	副研究员
2003/05-2005/08	华东理工大学	化工学院	讲师
1993/09-1996/07	无锡橡胶厂	平胶带分厂	技术员

研究方向

- 1、超临界流体
2、重油改质和加工
3、量化计算和分子模拟

研究成果及主要发表文章

1.Hong-Jun Lu, Dong-Hao Yuan, Chang Gao, Bi-Cheng Li, Zi-Bin Huang, Jing-Yi Yang, Pei-Qing Yuan*. Roles of decalin as hydrogen donor in visbreaking of heavy oil. Journal of Analytical and Applied Pyrolysis, 2023, 175, 106169.

2.Rui Peng, Dong-Hao Yuan, Li-Shun Dai, Zhi-Cai Shao, Jing-Yi Yang, Zi-Bin Huang, Liang Zhan, Jian-Hong Gong*, Pei-Qing Yuan*. Strategies for Adding Tetralin in Thermal Processing of Heavy Oil. Journal of Analytical and Applied Pyrolysis, 2023, 170, 105885.

3.Dong-Hao Yuan, Xue-Feng Chen, Lei Ding, Jing-Yi Yang, Zi-Bin Huang, Pei-Qing Yuan*. A Molecular Dynamics Simulation on Dissolution of Subcritical Water in Heavy Oil: (I) Effect of Polycyclic Aromatic Hydrocarbons. Journal of Petroleum Science and Engineering. 2022, 217, 110934.

4.Yun-Fei Sun, Xue-Feng Chen, Jin-Yi Yang, Zi-Bin Huang, Pei-Qing Yuan*. A Molecular Dynamics Simulation on Dissolution of Subcritical Water in Heavy Oil: (II) Effect of Heterocyclic Aromatic Hydrocarbons. Journal of Petroleum Science and Engineering. 2022, 217, 110893.

5.Rong Wang, Li-Tao Wang, Lu-Hai Wang, Yin-Dong Liu, Jing-Yi Yang, Zi-Bin Huang*, Pei-Qing Yuan*. Initiator-introduced heavy oil visbreaking in supercritical benzene. Journal of Analytical and Applied Pyrolysis, 2022, 165, 105573.

6.Ying-Jie Xu, Yun-Fei Sun, Jing-Yi Yang, Zi-Bin Huang, Pei-Qing Yuan*, Continuous Visbreaking of Heavy Oil in the Presence of Hot Compressed Water, Industrial & Engineering Chemistry Research, 2022, 61, 5129-5140.

7.Li-Tao Wang, Yu-Yang Hu, Lu-Hai Wang, Ya-Kun Zhu, Hua-Jie Zhang, Zi-Bin Huang, Pei-Qing Yuan*, Visbreaking of Heavy Oil with High Metal and Asphaltene Content, Journal of Analytical and Applied Pyrolysis, 2021, 159, 105336.

8.Hua-Jie Zhang, Yu-Yang Hu, Li-Tao Wang, Ya-Kun Zhu, Zi-Bin Huang, Pei-Qing Yuan*. Reaction Kinetics Analysis of Heavy Oil Visbreaking with Reduced Diffusion Limitation. Journal of Analytical and Applied Pyrolysis, 2021, 159, 105296.

9.Hao Ling, Yu-Yang Hu, Ya-Kun Zhu, Hua-Jie Zhang, Zhi-Cai Shao, Li-Shun Dai, Zi-Bin Huang, and Pei-Qing Yuan, Visbreaking of Heavy Oil in a Mixed Solvent of Subcritical Water and Light Aromatics, Industrial & Engineering Chemistry Research, 2021, 60, 9059-906.

10.Yu-Hui Wang, Li-Tao Wang, Zhi-Zhen Yao, Jun-Jian Yin, Zi-Bin Huang, Pei-Qing Yuan*, Wei-Kang Yuan, Hydrogen abstraction of alkyl radicals from polycyclic aromatic hydrocarbons and heterocyclic aromatic hydrocarbons, Chemical Engineering Science, 2021, 232, 116342.

11.Xue-Feng Chen, Zhi-Jian Da, Jian-Hong Gong, Hua-Jie Zhang, Ya-Kun Zhu, Jing-Yi Yang, Pei-Qing Yuan*, Wei-Kang Yuan. Demetallization of Heavy Oil through Pyrolysis: A Reaction Kinetics Analysis. AIChE Journal. 2021, 67, e17086.

12.Jing-Cao Pu, Moumouni Doka Dari, Xu-Quan Tang, Pei-Qing Yuan*. Diffusion of Benzene through Water Film Confined in Silica Mesopores: Effect of Competitive Adsorption of Solvent. Chemical Engineering Science, 2020, 224, 115793.

13.Xu-Quan Tang, Jing-Cao Pu, Hong-Bing Zheng, Xu-De Yu, Xue-Feng Chen*, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan. Demetallization of Heavy Oils of High Metal Content through Pyrolysis under Supercritical Water Environment. Energy & Fuels, 2020, 34, 2861-2869.

14.Xue-Qin Liu, Hao Qu, Jing-Yi Yang, Pei-Qing Yuan*, Wei-Kang Yuan, Visbreaking of Heavy Oil in Supercritical Benzene, Energy & Fuels, 2019, 33, 1074-1082.

15.Hao Qu, Jian-Hong Gong, Xue-Cai Tan, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Dissolution of polycyclic aromatic hydrocarbons in subcritical and supercritical water: A molecular dynamics simulation study, Chemical Engineering Science, 2019, 195, 958-967.

16.Yong Chen, Li-Tao Wang, Hao Qu, Jing-Yi Yang*, Pei-Qing Yuan*, Wei-Kang Yuan, Pour point reduction of waxy crude oil by pyrolysis in supercritical methanol, Industrial & Engineering Chemistry Research, 2018, 57, 11833-11841.

17.Xue-Lian Yu, Yan Li, Shuang-Mei Xin, Pei-Qing Yuan*, Wei-Kang Yuan, Partial hydrogenation of benzene to cyclohexene on Ru@XO2 (X=Ti, Zr or Si), Industrial & Engineering Chemistry Research, 2018, 57, 1961-1967.

18.Jun Liu, Yu Xing, Yi-Xiao Chen, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Visbreaking of Heavy Oil under Supercritical Water Environment, Industrial & Engineering Chemistry Research, 2018, 57, 867-875.

19.Kai Wang, Liu-Yi Bao, Yu Xing, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Demetalization of Heavy oil Based on the Preferential Self-assembly of Heavy Aromatics in Supercritical Water, Industrial & Engineering Chemistry Research, 2017, 56, 12920-12926.

20.Qing-Kun Liu, Yan Xu, Xue-Cai Tan, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Pyrolysis of Asphaltenes in Subcritical and Supercritical Water: Influence of H-Donation from Hydrocarbon Surroundings, Energy & Fuels, 2017, 31, 3620-3628.

21.Yi Chen, Kai Wang, Jing-Yi Yang, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Dealkylation of Aromatics in Subcritical and Supercritical Water: Involvement of Carbonium Mechanism, Industrial & Engineering Chemistry Research, 2016, 55, 9578-9585.

22.Shuang-Mei Xin, Qing-Kun Liu, Kai Wang, Yi Chen, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Solvation of Asphaltenes in Supercritical Water: A Molecular Dynamics Study, Chemical Engineering Science, 2016, 146, 115-125.

23.Qing-Kun Liu, Dao-Qi Zhu, Xue-Cai Tan, Jing-Yi Yang, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Lumped reaction kinetic models for pyrolysis of heavy oil in the presence of supercritical water, AIChE Journal, 2016, 62, 207-216.

24.Dao-Qi Zhu, Qing-Kun Liu, Xue-Cai Tan, Jing-Yi Yang, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Structural Characteristics of Asphaltenes Derived from Condensation of Maltenes in Supercritical Water, Energy & Fuels, 2015, 29, 7807-7815.

25.Xue-Cai Tan, Qing-Kun Liu, Dao-Qi Zhu, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Pyrolysis of heavy oil in the presence of supercritical water: The reaction kinetics in different phases, AIChE Journal, 2015, 61, 857-866.

26.Xue-Cai Tan, Chun-Chun Zhu, Qing-Kun Liu, Tian-Yi Ma, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Co-pyrolysis of heavy oil and low density polyethylene in the presence of supercritical water: The suppression of coke formation, Fuel Processing Technology, 2014, 118, 49-54.

27.Chun-Chun Zhu, Chong Ren, Xue-Cai Tan, Gong Chen, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Initiated pyrolysis of heavy oil in the presence of near-critical water, Fuel Processing Technology, 2013, 111, 111-117.

28.Ying Liu, Fan Bai, Chun-Chun Zhu, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Upgrading of residual oil in sub- and supercritical water: An experimental study, Fuel Processing Technology, 2013, 106, 281-288.

29.Fan Bai, Chun-Chun Zhu, Yin Liu, Pei-Qing Yuan*, Zhen-Min Cheng, Wei-Kang Yuan, Co-pyrolysis of residual oil and polyethylene in sub- and supercritical water, Fuel Processing Technology, 2013, 106, 267-274.

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33.Pei-Qing Yuan, Yue-Ming Ma, Xiao-ke Li, Bing-Qiang Wang, Zhen-Min Cheng, Wei-Kang Yuan, Hydrophilic property of Ru(0001) with or without H adatoms, Journal of Molecular Structure: THEOCHEM, 2010, 942, 77-82.