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➤ 科研及工作经历

2020.10 – 至今	天津工业大学	副教授
2019.11 – 2020.10	天津工业大学	讲师
2017.9 – 2019.11	天津工业大学	博士后
2015.10 – 2016.10	美国佐治亚理工学院	国家公派留学

主要从事膜法水处理技术研究，包括高性能分离膜制备、膜过程解析、污水资源化与能源化利用等。入选第五届中国科协“青年人才托举工程”，主持国家自然科学基金 1 项，主持完成中国博士后科学基金 1 项，参与国家自然科学基金重点项目、面上项目各 1 项，申请发明专利 5 项。近年来，在 *Water Research*、*Journal of Membrane Science* 等行业高水平期刊发表文章十余篇，获省部级科技进步奖 2 项。

➤ 发表文章

[1] **Y. Zhang**, L. Ye, W. Zhao, L. Chen, M. Zhang, G. Yang, H. Zhang*, Antifouling mechanism of the additive-free β -PVDF membrane in water purification process: Relating the surface electron donor monopolarity to membrane-foulant interactions, *Journal of Membrane Science*, 601 (2020) 117873. (SCI 一区, IF: 7.183)

[2] **Y. Zhang**, L. Ye, B. Zhang, Y. Chen, W. Zhao, G. Yang, J. Wang*, H. Zhang*, Characteristics and performance of PVDF membrane prepared by using NaCl coagulation bath: Relationship between membrane polymorphous structure and organic fouling, *Journal of Membrane Science*, 579 (2019) 22-32. (SCI 一区, IF: 7.183)

[3] **Y. Zhang**, X. Tong, B. Zhang, C. Zhang, H. Zhang*, Y. Chen*, Enhanced permeation and antifouling performance of polyvinyl chloride (PVC) blend Pluronic F127 ultrafiltration membrane by using salt coagulation bath (SCB), *Journal of Membrane Science*, 548 (2018) 32-41. (SCI 一区, IF: 7.183)

- [4] **Y. Zhang**, J. Wang, F. Gao, Y. Chen*, H. Zhang*, A comparison study: The different impacts of sodium hypochlorite on PVDF and PSF ultrafiltration (UF) membranes, *Water Research*, 109 (2017) 227-236. (SCI 一区, IF: 9.13)
- [5] **Y. Zhang**, J. Wang, F. Gao, H. Tao, Y. Chen*, H. Zhang*, Impact of sodium hypochlorite (NaClO) on polysulfone (PSF) ultrafiltration membranes: The evolution of membrane performance and fouling behavior, *Separation and Purification Technology*, 175 (2017) 238-247. (SCI 一区, IF: 5.77)
- [6] L. Chen¹, **Y. Zhang¹**, R. Li, H. Zhang, M. Zhang*, H. Zhang, Light sheet fluorescence microscopy applied for in situ membrane fouling characterization: The microscopic events of hydrophilic membrane in resisting DEX fouling, *Water Research*, 185 (2020) 116240.
- [7] S. Zhou, **Y. Zhang***, L. Ni, Y. Pei, H. Zhang, H. Zhang, Applied the organic-inorganic nanocomposite of PLA-TiO₂ for preparing polysulfone membrane: structure, performance and UV-assisted cleaning strategy, *Water Science and Technology*, (2020).
- [8] **Y. Zhang**, C. Yin*, Y. Zhang, H.J.B. Wu, Synthesis and characterization of cellulose carbamate from wood pulp, assisted by supercritical carbon dioxide, *Bioresources*, 8 (2013) 1398-1408.
- [9] G. Yang, J. Wang*, H. Zhang, H. Jia, **Y. Zhang**, F. Gao, Applying bio-electric field of microbial fuel cell-upflow anaerobic sludge blanket reactor catalyzed blast furnace dusting ash for promoting anaerobic digestion, *Water Research*, 149 (2019) 215-224.
- [10] F. Gao, J. Wang*, H. Zhang*, **Y. Zhang**, M.A. Hang, Effects of sodium hypochlorite on structural/surface characteristics, filtration performance and fouling behaviors of PVDF membranes, *Journal of Membrane Science*, 519 (2016) 22-31.

➤ 承担课题

中国科协青年人才托举工程, 2019QNRC001, 分离膜制备及应用, 2019-01至2021-12, 45万元, 在研, 主持

国家自然科学基金青年项目, 51808388, 净水工艺中超滤膜氧化行为对其分离传质性能影响机理研究, 2019-01至2021-12, 23万元, 在研, 主持

中国博士后科学基金, 2018M641657, 面向净水工艺的 PVDF 超滤膜极性特征构建及传质机理研究, 2018-11 至 2019-11, 5 万元, 结题, 主持

国家自然科学基金重点项目, 51638011, 膜法饮用水处理介观尺度调控原理, 2017-01 至 2021-12, 300 万元, 在研, 参加

国家自然科学基金面上项目, 51578374, 饮用水净化过程中膜材料与膜工艺的稳定性及安全性机理研究, 2016-01 至 2020-12, 64 万元, 结题, 参加