



Qibin Chen

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Profile

Qibin Chen is a full professor in the Department of Chemistry of East China University of Science and Technology (ECUST), Shanghai, China. He received his B.Sc. in Chemical Engineering and M.Sc. in Applied Chemistry at Xi'an Petroleum University and Ph.D. in Chemical Engineering at ECUST under the supervision of Prof. Ying Hu. He joined the Department of Chemistry at ECUST as a lecturer in 2004 and was then promoted to be a professor in 2015. He spent more than one year from 2013 to 2014 at the Department of Chemistry, Lehigh University, USA, as a visiting scholar in the group Prof. Steven L. Regen. He was selected as the tenth editorial member of China Surfactant Detergent & Cosmetics and Detergent & Cosmetics in October 2011 and the editorial member of Scientific Reports in September 2015.

Research Field

- 1) separating chiral compounds and substances with similar properties using graphene oxide based membranes and hypercrosslinked porous polymers;
- 2) developing new functional epoxy resin and curing agent and its applications;
- 3) oilfield chemistry related to surfactants, polymers and colloids and the application in the oil recovery, e.g. fracturing, tertiary oil recovery, emulsion and emulsion, etc.;
- 4) designing and synthesizing new types of anticorrosion inhibitors for metals.

Research results and main published thesis

- (1) Jingjing Zhang, Nan Liu, Huixue Gong, Qibin Chen*, Honglai Liu. Hydroxyl-functionalized hypercrosslinked polymers with ultrafast adsorption rate as an efficient adsorbent for phenol removal. *Micropor. Mesopor. Mat.*, 2022, 336: 111836.
- (2) Huixue Gong, Shaoze Zhang, Nan Liu, Jingjing Zhang, Qibin Chen*, Honglai Liu. Retarded transport properties of graphene oxide based chiral separation membranes modified with dipeptide. *Sep. Purif. Technol.*, 2022, 288: 120642.
- (3) Juantao Zhang, Minjian Kong, Jiangtao Feng*, Chengxian Yin, Danping Li, Lei Fan, Qibin Chen*, Honglai Liu. Dimeric imidazolium ionic liquid connected by bipyridiyl as a corrosion inhibitor for N80 carbon steel in HCl. *J. Mol. Liq.*, 2021, 344: 117962.
- (4) Minjian Kong, Yan Meng, Lei Fan, Chengxian Yin, Qibin Chen*, Honglai Liu. Poly(1-carboxamide-3-vinylimidazolium bromide) as an corrosion inhibitor for N80 Carbon Steel in 1.0 mol•L⁻¹ HCl. *Chemistryselect*, 2021, 6: 5203-5210.
- (5) Xiaoxiao Li, Qibin Chen*, Xuefeng Tong, Shaoze Zhang* and Honglai Liu, Chiral separation of β -cyclodextrin modified graphene oxide membranes with a complete enantioseparation performance. *J. Membr. Sci.*, 2021, 634: 119350.
- (6) Chenchen Meng, Shaoze Zhang, Qibin Chen*, Xiaoxiao Li and Honglai Liu*. Influence of Host-Guest Interaction between Chiral Selectors and Probes on the Enantioseparation Properties of Graphene Oxide Membranes. *ACS Appl. Mater. Inter.*, 2020, 12: 10893-10901.
- (7) Huiling Tan, Tingting Chen, Qibin Chen*, Zishuai Wei, Honglai Liu*. CO₂/CH₄ separation using bifunctional and flexible microporous organic polymers with expansion/shrinkage transformations during adsorption/desorption processes. *Chem. Eng. J.*, 2020, 391: 123521.
- (8) Tingting Chen, Huiling Tan, Qibin Chen*, Zishuai Wei, Honglai Liu*. Towards the High-efficient Chiral Separation Using Hierarchically Porous HROP@silica-gel-sheet Composite. *ACS Appl. Mater. Inter.*, 2019, 11: 48402-48411.
- (9) Huiling Tan, Qibin Chen*, Tingting Chen, Honglai Liu*. Effects of Rigid Conjugated Groups: towards Improving Enantioseparation Performances of Chiral Porous Organic Polymers. *ACS Appl. Mater. Inter.*, 2019, 11: 37156-37162.
- (10) Chenchen Meng, Qibin Chen*, Xiaoxiao Li and Honglai Liu. Controlled covalent functionalization of graphene oxide membranes to improve enantioseparations performances, *J. Membr. Sci.*, 2019, 582: 83-90.
- (11) Huiling Tan, Qibin Chen*, Tingting Chen, Honglai Liu*. Selective Adsorption and Separation of Xylene Isomers and Benzene/Cyclohexane with Microporous Organic Polymers POP-1. *ACS Appl. Mater. Inter.*, 2018, 10: 32717-32725.
- (12) Chenchen Meng, Qibin Chen*, Huiling Tan, Yujie Sheng, Honglai Liu*. Role of Filled PLGA in Improving Enantioselectivity of Glu-GO/PLGA Composite Membranes. *J. Membr. Sci.* 2018, 555: 398-406.
- (13) Chenchen Meng, Yujie Sheng, Qibin Chen*, Huiling Tan and Honglai Liu*. Exceptional Chiral Separation of Amino Acid Modified Graphene Oxide Membranes with high-flux. *J. Membr. Sci.* 2017, 526, 25-31.
- (14) Yujie Sheng, Qibin Chen*, Junyao Yao, Yunxiang Lu, Honglai Liu*, and Sheng Dai*. Guest-induced Breathing Effect in a Flexible Molecular Crystal. *Guest-induced Breathing Effect in a Flexible Molecular Crystal*, *Angew. Chem. Int. Edit.*, 2016, 55, 3378-3381.
- (15) Shanshan Liu, Qibin Chen*, Yujie Sheng, Jincheng Shen, Peng Chang Jun and Honglai Liu. Unraveling the Forming Mechanism of Hierarchical Helices via Self-assembly of an Achiral Supramolecular Polymer Brush. *Polym. Chem.*, 2015, 6: 3926-3933.
- (16) Shanshan Liu, Qibin Chen*, Yu Chen*, Bin Zhang, Honglai Liu, Changjun Peng, Ying Hu. Self-Assembled Superhelical Structure of Poly(N-vinylcarbazole)-based Donor-Acceptor Polymer at the Air-Water Interface. *Macromolecules*, 2014, 47: 373-378.