



Profile

Education:

2000-2003: doctor, municipal engineering, Harbin Institute of Technology,
1998-2000: master, environment engineering, Harbin Institute of Technology,
1994-1998: bachelor, environment engineering, Harbin University of Civil Engineering and Architecture

Experience:

2017-present: professor, East China University of Science and Technology
2010-2011: visiting scholar, University of Liverpool, U.K.
2006-2016, Associate Professor, School of Resources and Environmental Engineering, East China University of Science and Technology
2005-2006: lecture, School of Resources and Environmental Engineering, East China University of Science and Technology
2003-2005: postdoctoral, Tongji University

Research Field

Formation mechanism and removal of organic toxicity of biological sludge;
Recycle of biological sludge as resource to land;
Advanced treatment technology of wastewater;

Research results and selected published papers

books:

1. Participation in book “wastewater pollution control engineering” (ISBN978-7-122-01477-1), Chemical Industry Press, 2008.2;
2. The first translator of book “Operation of Municipal Wastewater Treatment Plants (Volume 2)” (ISBN978-7-112-13658-2), Construction industry press, 2012.11;
3. The third translator of book “Operation of Municipal Wastewater Treatment Plants (Volume 1)” (ISBN978-7-112-14038-1), Construction industry press, 2013.11

publications:

1. Xiurong Chen*, Jianguo Zhao, Jun Zhao, Na Yang, Fei Zhang, Zijian Jiang. The influence of SBR parameters on the sludge toxicity of synthetic wastewater containing Bisphenol A. Environmental Science and Pollution Research, 2014, 21: 9287-9296.
2. Zhao J, Chen X*, Bao L, et al. Correlation between microbial diversity and toxicity of sludge treating synthetic wastewater containing 4-chlorophenol in sequencing batch reactors. Chemosphere, 2016, 153:138-145.
3. Wang L, Chen X*, Wang H, et al. Chlorella vulgaris cultivation in sludge extracts from 2,4,6-TCP wastewater treatment for toxicity removal and utilization.[J]. Journal of Environmental Management, 2016, 187:146.
4. Jianguo Zhao, Xiurong Chen*, Jun Zhao, Fengkai Lin, Zheng Bao, Yixuan He, Lu Wang, Zhengdong Shi. Toxicity in different molecular-weight fractions of sludge treating synthetic wastewater containing 4-chlorophenol. International Biodeterioration & Biodegradation, 2015, 104: 251-257.
5. Xiurong Chen, Jianguo Zhao, Jun Zhao, Yixuan He, Lu Wang, Zheng Bao. Contrasting sludge toxicity under various starting modes (shocking or acclimating) and original organics (with or without N, N-dimethylformamide (DMF)). International Biodeterioration & Biodegradation, 2015, 104: 435-442.
6. Na Yang, Xiurong Chen*, Fengkai Lin, Yi Ding, Jianguo Zhao, Shanjia Chen. Toxicity formation and distribution in activated sludge during treatment of N,N-dimethylformamide (DMF) wastewater. Journal of Hazardous Materials, 2014, 264: 278-285.
7. Jianguo Zhao, Xiurong Chen*, Fengkai Lin, Na Yang, Hua Huang, Jun Zhao. Mechanism of toxicity formation and spatial distribution in activated sludge treating synthetic effluent containing bisphenol A (BPA). Chemical Engineering Journal, 2014, 250: 91-98.
8. Xiurong Chen*, Jianguo Zhao, Linlin Bao, Lu Wang, Yuying Zhang. The investigation of different pollutants and operation processes on sludge toxicity in sequencing batch bioreactors. Environmental Technology. 2016, 37(16):1-34
8. Zheng Bao, Xiurong Chen*, Jianguo Zhao, Fengkai Lin, Jiahui Li, Yuying Zhang. Exploring the relationship between the EPS property and the toxicity of sludge for treating 4-chlorophenol synthetic wastewater in a sequencing batch reactor. International Biodeterioration & Biodegradation. 2016, 110:24-31
10. Lu Wang, Xiurong Chen*, Hualin Wang, Yuying Zhang, Qingjie Tang, Jiahui Li. Chlorella vulgaris cultivation in sludge extracts from 2,4,6-TCP wastewater treatment for toxicity removal and utilization. Journal of Environmental Management. 2017,187:146-153
11. Chen X*, Zhou T, Wang X, Xu P, Yang C, Sun X, Lu Q, Wang S. Cultivation of Chlorella vulgaris in sludge extract from resorcinol - rich wastewater: the removal and inhibitory effect of sludge toxicity[J]. Journal of Chemical Technology & Biotechnology, 2018, 94:1240-1248
12. Chen X*, Sun X, Wang X, Xu P, Yang C, Lu Q, Wang S. Two-stage air stripping combined with hydrolysis acidification process for coal gasification wastewater pretreatment [J]. Water Science & Technology, 2019,79 (11):2185-2194

Patents (China):

1. A wastewater treatment method for deep nitrogen and phosphorus removal through biofilm, authorization number: ZL2010101449397, 2013.3;
2. A wastewater treatment method for deep denitrification through a combined biofilm process, authorization number: ZL2012102025042, 2014.2;
3. The utility model relates to a subsurface flow wetland suitable for non-toxic green algae culture, authorization number: ZL2014104183162, 2015.11;
4. The utility model relates to an environmentally friendly sludge dewatering conditioning agent and its application, authorization number: ZL2014100703401, 2015.7;
5. The utility model relates to a composite conditioning agent for deep dewatering of sludge and its application, authorization number: ZL2014100693382, 2015.11;
6. According to the nitrogen content of the secondary effluent, the appropriate amount of nitrogen and phosphorus is removed, and the authorization number is ZL2014104178766,2016.4;
7. The method of biological denitrification of low temperature and low carbon / nitrogen ratio wastewater is authorized number: ZL2015100810658, 2017.2;
8. Treatment method of biological enhanced denitrification of refractory high concentration organic industrial wastewater, authorization number: ZL201510081216X, 2015.5;
9. Comprehensive treatment process of Refinery Wastewater, ZL201510830375.5
10. A pretreatment method of coal chemical wastewater based on hydrolytic acidizing and ammonia nitrogen stripping ZL201610420763.0, 2016.6;
11. The invention relates to a two-stage enhanced coagulation and oil removal pretreatment method for coal chemical wastewater ZL201610414926.4, 2016.6;
12. A method for enriching non-toxic green algae in surface flow wetlands controlled by water quality ZL201610414915.6, 2016.6;
13. The method of biological denitrification of low temperature and low carbon/nitrogen ratio wastewater ZL201510081065.8, 2015.2.