Tsinghua SIGS iEE Applicable Supervisors List

Name	Title	Study Area	Contact information
Zuo Jian'e	Professor	1. Anaerobic biotechnology for organic wastewater and solid waste treatment and biogas recovery; 2. Rain water collection and pollution control & Sewer system evaluation and maintenance 3. Evaluation for pharmaceutical wastewater treatment technologies and BAT confirmation	Email: jiane.zuo@tsinghua.edu.cn
Guan Yuntao	Research Professor	1. Restoration of water environment 2. Wastewater treatment theory and technology 3. Soil remediation	Tel: 0755-26036702 Email: guanyt@tsinghua.edu.cn
Zhang Xihui	Professor	1. Membrane and Nano-technology Configuration of nanoreactors within ceramic and carbon membranes. Kinetics of oxidation process within nanoreactors on the basis of reactive membranes including ceramic and carbon membranes. Integrated treatment processes based on ceramic and carbon membrane modules for the treatment of micro-polluted drinking water, heavy-metal-containing wastewater, toxic–organics wastewater and reclaimed water. 2. Restoration of polluted rivers and lakes Quick deletion theory and technology for odor matters removal from heavy polluted rivers and lakes In-situ remediation theory and technology for heavily contaminated sediment in rivers and lakes Early-warning theory and technology for restoration of rivers and lakes In-situ control theory and technology of algal blooming in lakes. Reconstruction of ecological vegetation belts in deal with nonpoint pollution source.	Tel: 0755-26036707 Email: zhangxh@sz.tsinghua.edu.cn

Li Xiaoyan	Professor	Prof. Li is mainly engaged in the development of wastewater and sludge treatment technologies, including water reuse, sludge reduction, resource recovery from wastewater and the application of nanomaterials in wastewater treatment. His research interests include particle dynamics and interfacial phenomena, membrane technologies, membrane bioreactors, aerobic granular sludge, and electrochemical wastewater treatment, etc. He has developed theories and models for particle flocculation in water, membrane fouling, and sediment nutrient flux. Particularly, he used Fractal theory to modify the traditional dynamic model of condensation and precipitation. He is the first scholar who established the mathematical model of sludge granulation process, and at the same time, proposed the quorum sensing effect of aerobic granular sludge and its characterization method. He is also the first expert who proposed the high value sludge conversion technology based on fungal fermentation, which has been used to recover high value-added products such as mycelium fiber and yeast protein from sludge.	Email: lixiaoyan@sz.tsinghua.edu.cn
Li Huan	Associate Professor	Organic waste treatment and utilization; municipal solid waste management and planning	Tel: 0755-26036105 Email: li.huan@sz.tsinghua.edu.cn
Wu Qianyuan	Associate Professor	Chemical oxidation technology for Water Reuse Toxicity evaluation and control technology	Tel: 0755-26036701 Email: wu.qianyuan@sz.tsinghua.edu.cn
Tao Yi	Associate Professor	- In situ remediation of contaminated sediment - Monitoring, control and management of harmful algal blooms - Microalgae-based advanced wastewater treatment for reuse and carbon bio fixation - Assessment and restoration of aquatic ecosystem	Tel: 0755-26033067 Email: tao.yi@sz.tsinghua.edu.cn
Li Bing	Associate Professor	1.Environmental microbiology and microbial ecology; 2. Fates and control of antibiotic resistant bacteria and antibiotic resistance genes; 3. Biodegradation pathway and mechanisms of emerging pollutants (antibiotics, PPCPs, and EDCs); 4. Big data analysis of microbiome in water environment;	Tel: 0755-26036757 Email: bingli@sz.tsinghua.edu.cn

		5. Transformation and fate of emerging pollutants in chlorination, UV and AOPs processes	
Zhang Zhenghua	Associate Professor	1. Membrane-based Water Treatment (membrane fabrication, process, fouling control and cleaning); 2. Advanced Oxidation Processes (electrochemistry, Fenton-like, and nanoconfinement catalysis); 3. Functional Materials-based Water Treatment (nanofiber-based, CQDs, polymers).	Tel: 0755-86954021 Email: zhenghua.zhang@sz.tsinghua.edu.cn
Matteo Convertino	Associate Professor	Biocomplexity (Network/Pattern Analysis and Inference, Collective Dynamics), Ecosystem Dynamics (Biodiversity, Species Interactions, Eco-Environmental Flows), Land Use/Land Cover Change and Habitat Eco-geomorphological Modeling, Ecohydrological Extremes & Climate Impacts, Blue Carbon (Biogeochemical Dynamics), Environmental Microbiome, Aquatic Ecosystems (Riverine and Marine), Ecosystem Health, Multiscale Predictions and Forecasting, Ecosystem Indicators and Critical Transitions, Ecosystem Monitoring and Data Science, Portfolio Ecosystem Management, Ecological Engineering and Ecosystem Design	Email: matteo@sz.tsinghua.edu.cn
Huang Yuxiong	Associate Professor	- Environmental Nanotechnology, the environmental applications and implications of engineered nanomaterials- Fate and transport, exposure and risk assessment of pollutants in environment- Pollution control and water treatment technologies	Tel: 0755-26403079 Email: huang_yuxiong@sz.tsinghua.edu.cn
Wang Wenlong	Assistant Professor	Dr. Wang's research focuses on fields of water pollution control, wastewater advanced treatments and water reuse. Research directions include water quality conversion and research methods, water risk assessment, advanced physical and chemical treatment technology (advanced oxidation technology, etc.), pollutant conversion and risk reduction, and water cycling.	Tel: 0755-26036127 Email: wwl20@sz.tsinghua.edu.cn
Lin Lin	Assistant Professor	- Advanced Wastewater Treatment （ANAMMOX, Microbial fuel cells, etc.） - Environmental Electrochemistry（Electro-catalysis, Capacitive deionization, etc.） - Organic Solid Waste Treatment and Resource Recovery (Phosphorus recovery, etc.)	Tel: 0755-26910448 Email: linlin00@sz.tsinghua.edu.cn

Fu Xiao	Assistant Professor	Atmospheric chemistry modeling, emission inventory, air pollution formation and control, reactive nitrogen cycle, reactive halogen cycle, atmosphere-land-water interactions	Tel: 0755-26914152 Email: fu.xiao@sz.tsinghua.edu.cn
Zheng Bo	Assistant Professor	Atmospheric carbon cycle, sources and sinks of greenhouse gases, and air pollution and climate change mitigation policies	Tel: 0755-86728541 Email: bozheng@sz.tsinghua.edu.cn
Hong Chaopeng	Assistant Professor	Coupled human-environment systems and sustainable systems analysis, especially topics of climate change, air quality, agriculture, energy and water systems	Tel: 0755-86524881 Email: hongcp@sz.tsinghua.edu.cn
Yu Longfei	Assistant Professor	Nitrogen Biogeochemical Cycles，Greenhouse Gas emissions and Atmospheric Monitoring，Applications of Stable Isotope Techniques	Email: longfei.yu@sz.tsinghua.edu.cn
Chen Si	Assistant Professor	Biomass-feedstocks to commodity chemicals and fuels via heterogeneous catalysis; Solar-driven conversion of organic waste for value-added chemicals and hydrogen production; Advanced materials (e.g., carbon-based catalysts, complex metal oxides) for green catalysis in energy and environmental applications	Email: season.chen@sz.tsinghua.edu.cn
Jong Mui Choo, Florence	Assistant Professor	Sustainable biological wastewater treatment for applications in suburban and rural locations, fate and transport of waterborne emerging contaminants in the aquatic environment (spanning the wastewater treatment systems, river, estuary, and coastal areas), which entails antimicrobial resistance (AMR), horizontal gene transfer of antibiotic resistant genes within microbial biofilm, microplastics, its environmental transformation and associated ecotoxicity towards keystone marine.	Email: florencejong402@gmail.com