



## Introduction

The School of Environmental Science and Engineering (SESE) was established in September, 1999. From then on, SESE has a thought of structuring public environment-friendly base aimed at improving our surroundings. The faculty, students and alumni of SESE have been always putting the effort on it. The discipline of Environment and Ecology was ranked among the top 1% globally since 2011. The discipline of Environmental Science has been ranked among the top 100 (from 51 to 100) by QS since 2012.

SESE has a high-level education and research team with a multi-disciplinary background of science, engineering, and management. All the faculty members hold doctorate degree and over 80% of current faculty members have at least one year overseas study experiences.

Tracing international frontiers and addressing the needs of China's national strategies, our academic research mainly focuses on water pollution treatment and control at the river basin level, regional air pollution control and treatment, solid wastes treatment and safe disposal and recovery, soil-underground water contamination repair and restoration, environmental functional materials, resource and environmental management and climate change policies, etc.

Meanwhile, with extensive international cooperation and exchange, SESE has carried forward strategic partnership with world top universities and institutes of different states.

# School of Environmental Science and Engineering

Subject Fields	Research Contents
Water Pollution Control and Environmental Modeling in River Basin	Lake and Reservoir Eutrophication Control; Migration, Transformation and Modeling of Emerging Contaminants in Water Environment; Point Source Pollution Control and Resource Utilization.
Air Pollution Control and Regional Air Quality Modeling	Platform for Simulation of Air Pollution Monitoring and Coordinating Control Technology; Composite Air Pollution and Climate Change, Innovate the Research Method of Air Quality Simulation, Evaluation and Early Warning System.
Solid Waste Treatment and Resource Recovery	E-waste Treatment and Recycling; Sludge Treatment and Disposal; Landfill Processing and Organic Waste Resources Recovery through Hydro-thermal Reaction.
Soil and Ground-water Contamination Reclamation	Soil and Groundwater Contamination Remediation; Modeling and Polluting Remediation of Groundwater; Biologically-based C Sequestration and its Eco-environmental Effect; Marine Environment Monitoring and Assessment.
Environmental Functional Materials	Photocatalytic and Photoelectrocatalytic Degradation of Organic Pollutants; Noise Pollution Control and Equipment Research; Electrocatalysis Pollution Control; Energy Technology and Functional Materials; Pollutants Separation Adsorption Material, Environment Conscious Materials.
Resource and Environmental Management and Climate Change Mitigation	Regional Circular Economy Model; Eco-industrial Park Design and Management; Regional Resource Accounting and Efficiency Evaluation; Waste Management; Regional Energy Management and Climate Change Mitigation Policies.
Clean and Renewable Energy	CO <sub>2</sub> Conversion, Conversion and Utilization of Biomass and Waste; Photocatalytic Materials Synthesis; Novel Solar Cell Preparation, Electrochemical Energy Storage Materials.
Environmental Health	Novel environmental contaminants identification; Sources identification and behaviors evaluation of environmental contaminants; Effects of environmental contaminants on human health; Environmental biotechnology; Environmental toxicology.

# Achievements



上海交通大学  
SHANGHAI JIAO TONG UNIVERSITY

SESE has been involved in many important environmental strategic decisions and events with significant achievements. Our research outcomes have made great contributions to protecting Erhai river basin, treating wastewater with higher organic concentrations, and recovering valuable metals from waste electronic and electric equipment. These achievements provide technological support to solve China's major environmental issues and promote the country's sustainable development, receiving national leaders' confirmation and appraisals. For instance, both President XI Jinping and Premier LI Keqiang highly commented our water project in Erhai.

In 2017, SESE has published 183 SCI papers in many leading journals, including Environmental Science & Technology, Journal of Hazardous Material, Water Research, Applied Energy, etc.

The collaboration on palm oil mill effluent zero discharge treatment system has been verified successfully and effectively, which was awarded Palm Oil Industry Award and Sustainable Technology Award by IChemE, and 2015 Frost & Sullivan Malaysia Excellence Awards by Malaysia, International Diamond Prize for Excellence in Quality 2015 by European Society for Quality Research. NRF CREATE (Campus for Research Excellence and Technological Enterprise) program, in collaboration with the National University of Singapore to work on Energy and Environmental Sustainability Solutions for Megacities (E2S2), makes incredible progress which contributes to SESE's fame.



## Platforms

Shanghai Key Laboratory of Environmental Protection Big Data & Intelligent Decision Making  
State Engineering Center for Environment Protection on Waste Electrical & Electronic Products Recycling and Disposal  
SJTU-Yunnan Research Institute  
STJU-Malaysia Palm Oil Bureau Joint R&D Collaboration Center  
SJTU-National University of Singapore Joint Research Centre for Environment and Water  
SJTU- Shanghai Xin Jinqiao Environmental Protection Co., Ltd. Industrial Waste Recycling Joint Research Center  
Shanghai E-Waste Recycling and Assessment Engineering Research Center  
SJTU-Jiangsu Utilization of Waste Household Appliances Research Center  
SJTU Environment Protection Equipment Collaborative Innovation Center  
SJTU Nano-Environmental Technology Research Center  
SJTU- Zhejiang Institute of Marine Aquaculture Joint Lab for Ecological Recovery and Blue Carbon in Littoral Zone  
Union of Safeguarding Safe Drinking Water in Shanghai  
SJTU-Shanghai Laogang Wastes Disposal Research and Education Base

## Renowned Professors

Cao Xinde	Shao Jiahui
Cheng Jinping	Shen Zhemin
Cheng Zhen	Sun Tonghua
Dong Huijuan	Wang Fu
Geng Yong	Wang Xinze
Huang Jungchen	Wu Deyi
He Yiliang	Xu Zhenming
He Shengbing	Yan Naiqiang
Jin Fangming	Yuan Tao
Jin Qiang	Zhao Yanbin
Jia Jinping	Zhang Kun
LI Liang	Zhong Heng
Li Jinhua	Zhao Yue
Long Mingce	Zhang Bo
Lou Ziyang	Zhao Yixin
Qiu Hao	Zhao Ling
Qian xufang	Zhou Baoxue
Qu Zan	Zhu Nanwen
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