

Faculty and Postdoctoral Positions in Environmental Studies School of Environment, Tsinghua University



About School of Environment, Tsinghua University

The School of Environment (SOE) at Tsinghua University, as a fast-growing institution, was ranked 8th in the QS World University Rankings by the Subject of Environmental Sciences in 2021. SOE has become a major national teaching base and a scientific research center in



making on some most critical environmental issues in China. SOE will stand firmly with the two principles of combining and interconnecting engineering and sciences, technology and management,

top school in environmental sciences and engineering.

Centenary SOE, a place where talents are cherished, is looking forward to your joining!



Details of Job Opportunity

We are looking for distinguished and young faculties in various (inter-)disciplines in environmental studies, especially Cross-media composite pollution and emerging pollution, Environment-climate synergies, Biological risks and environmental health, System Ecology, Sustainable Cities, Key technologies for Carbon Neutrality, etc.

Faculty Positions:

Open Position 1

Regional water pollution control

Conducting researches on the identification and transformation of prioritized pollutants in the regional water environment, novel water pollution control theories and technologies for synergistic prevention of pollution and ecological risks.

Open Position 2

Interactions and regulation of water quality and aquatic ecology

Conducting researches in the areas of the variation and adaption of

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watershed-scale water environments and aquatic ecosystems towards global climate change and anthropogenic activities; the response of aquatic ecological systems to water quality change and regulation principles; the ecotoxicological effects and ecological risk assessment in the exposure of complex micropollutants; risk management and regulation of aquatic ecosystems health under different environmental stress.

Open Position 3

Drinking water safety and health risk control

Conducting researches in the areas of the evaluation methods on the synergistic toxic effects of complex pollutants in drinking water; the innovative technologies on the removal of micropollutants in drinking water; the principles and technologies on drinking water purification and health risk control with regards to achieving standards requirement and controlling toxic effects.

Open Position 4

Construction and operation of sustainable urban water infrastructure

Conducting researches on the construction and operation of sustainable urban water infrastructure, and mainly conduct researches about theory, methods and techniques of low carbon water and wastewater treatment, efficient collection and distribution of wastewater and drinking water, synergy of treatment plant and network, and urban water infrastructure safety management.

Open Position 5

Green environmental materials for long-term remediation of contaminated soil and groundwater

Conducting researches on the theories and methods for the design, synthesis, modification and characterization of remediation materials; the development of green and sustainable materials for long-term immobilization of soil metals, and evaluation methods for the long-term effectiveness of remediation processes etc. Innovative achievements in the development and practical applications of materials for soil and groundwater remediation are expected.



Open Position 6

Interface mass-transfer process simulation for soil and groundwater contamination

Conducting researches on the theories and technologies for the modeling of interface mass-transfer process for contaminants in the vadose zone and the groundwater aquifers. A variety of contamination and remediation processes will be studied by modeling approaches. Key achievements in terms of both mechanisms and dynamic modeling of the interface mass-transfer process are expected.

Open Position 7

Simulation and cooperative control of multi-type, cross media environmental contamination of soil and groundwater

Conducting researches on the theories and technologies for the simulation and cooperative control of cross media environmental pollution by various contaminants from multiple sources, and field-scale demonstrations based on large environmental simulation facilities. Innovative achievements in the setup and applications of the process analysis and cooperative governance systems of environmental contamination at the regional scale are expected.

Open Position 8

Interactions and coordinated controls of air pollution and climate change

Conducting researches in the areas of chemical processes, formation mechanisms, and source apportionment of complex air pollution; the physicochemical processes and mechanisms controlling the interactions between air pollution and climate, especially the aerosol-cloud-radiation interactions; numerical models for the formation, evolution of air pollutants as well as their interactions with climate; the principles for coordinated controls of air pollution and climate change.

Open Position 9

Health-impact assessment and risk control of air pollutions

Conducting researches in areas of the influence of aerosol physical-chemical properties on their health effects; health effects of ultrafine particles; atmospheric chemical processes of air pollutants under conditions of complex air pollutions, and the influence on their health impact; the trans-media, trans-regional and trans-sectoral migration and



conversion patterns of air pollutants, and their health-impact assessment and risk control policies etc.

Open Position 10

Organic solid waste management and urban mining

Conducting researches on the innovative theories and technologies of material metabolism in the processes of organic solid waste low-carbon and efficient conversion, and recycling of urban wastes, to provide technological and decision-making support for development of urban mining, circular economy and ecological industry in China.

Open Position 11

Informatics and prediction for environmental microbiology

Establishing a multidisciplinary research platform to study and predict the ecological and function evolution of environmental microorganisms, and their impacts on pollution control and ecological safety based on cutting-edge bioinformatics technologies and methods.

Open Position 12

Analytical methods and pollution characteristic in multiple environment of emerging contaminants

Conducting researches on the analytical methods and rapid screening tools of emerging contaminants, such as persistent organic pollutants, pharmaceutical and personal care products, nano-materials and micro-plastics etc. in environmental media and organism; illustrating the concentration level, occurrence states, transform pathway and fate in regional multiple environment.

Open Position 13

Bacterial pathogens and environmental health

Developing epidemiology investigation methods, genetic analysis and mathematical modeling technologies to investigate source, transmission and controlling strategy of human pathogens in environment.

Open Position 14

Big data and environmental system modeling

Using big data to investigate multi-systems coupling mechanisms; big data mining and application in urban energy system, watershed water system, industrial adaptive system; conducting researches on theories and

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北京 清华大学环境学院

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• Applicants for Shuimu Tsinghua Scholar Program must fulfill the following requirements: be under 35 years old, and have obtained their PhD degree within the last three years (recent graduates are given priority in consideration).

Benefits

SOE remuneration and benefits package includes:

- Remuneration: competitive salary;
- Start-