

## Assistant Professor (Research) Jiang Weiquan

Department of Environmental Science and Engineering  
Faculty of Innovation Engineering  
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### Academic Qualification:

**Ph.D. in , Department of Mechanics and Engineering Science, Peking University**

**B.Eng. in School of Energy and Power Engineering, Huazhong University of Science and Technology**

### Teaching Area

Environmental Hydraulics

### Research Area

Environmental fluid mechanics  
Hydrodynamic phenomena of active particles

### Working Experience

Assistant Professor, Macau University of Science and Technology (MUST) (Jan 2023–)  
Postdoc, Department of Hydraulic Engineering, Tsinghua University (Jan 2021–Jan 2023)

### Academic Publication ( selected )

Wu, Z.\* , **Jiang, W.\***, Zeng, L. & Fu, X.\*. Theoretical analysis for bedload particle deposition and hop statistics. *Journal of Fluid Mechanics* 954, A11 (2023)

**Jiang, W.**, Zeng, L., Fu, X.\* & Wu, Z.\*. Analytical solutions for reactive shear dispersion with boundary adsorption and desorption. *Journal of Fluid Mechanics* 947, A37 (2022)

**Jiang, W.** & Chen, G.\*. Transient dispersion process of active particles. *Journal of Fluid Mechanics* 927, A11 (2021)

**Jiang, W.** & Chen, G.\*. Dispersion of gyrotactic micro-organisms in pipe flows. *Journal of Fluid Mechanics* 889, A18 (2020)

Guo, J., **Jiang, W.** & Chen, G.\*. Transient solute dispersion in wetland flows with submerged vegetation: an analytical study in terms of time-dependent properties. *Water Resources Research* 56, e2019WR025586 (2020)

**Jiang, W.** & Chen, G.\*. Dispersion of active particles in confined unidirectional flows. *Journal of Fluid Mechanics* 877, 1–34 (2019)

**Jiang, W. Q.** & Chen, G. Q.\*. Solution of Gill's generalized dispersion model: solute transport in Poiseuille flow with wall absorption. *International Journal of Heat and Mass Transfer* 127, 24–42 (2019)

### Books

### Patents ( selected )

### Professional Certification and Awards

Shuimu Tsinghua Scholar Program, Tsinghua University (Jan 2021–Jan 2023)

Student Awards

Professional Society Membership