



PhD Opportunity in Environmental Fluid Dynamics – University of Missouri

The Environmental Fluid Dynamics Laboratory at the University of Missouri is seeking a motivated PhD student to join an NSF-funded project on bubble dynamics and multiphase flows. Preferred start term is Spring 2026. **The position offers a stipend of \$2,500 per month, with full tuition and health insurance coverage.** Applications will be reviewed on a rolling basis until the position is filled, with the application deadline of **November 1, 2025**.

We welcome applications from students with a strong background in fluid mechanics, with interests spanning both experimental and computational approaches. The successful candidate will conduct image-based data acquisition and analysis, including particle image velocimetry (PIV), particle tracking velocimetry (PTV), turbulence characterization, and advanced techniques for processing laboratory-generated data.

The successful candidate will also have the opportunity to collaborate with interdisciplinary teams on applied research projects related to bubble dynamics, including investigations of marine hydrocarbon seeps, the design of engineered bubble curtains, and studies in underwater optics and acoustics.

Applicants should have strong programming and data-processing skills (MATLAB or Python) for both spatial and temporal analysis. Experience with computational fluid dynamics (CFD) is highly desirable.

Requirements:

- A degree in engineering, physics, or a related field
- Solid foundation in fluid mechanics, demonstrated through advanced coursework and/or research experience

About the Principal Investigator:

Dr. Binbin Wang is William Andrew Davidson Professor in Civil Engineering at the University of Missouri. His research focuses on fundamental fluid flows and their impact on natural and engineered aquatic environments, with applications spanning environmental hydraulics, aquatic ecosystems, geophysics, and environmental health. Dr. Wang's research is funded by the National Science Foundation, U.S. Geological Survey, U.S. Environmental Protection Agency, Office of Naval Research, Gulf of Mexico Research Initiative, and other agencies. He was selected for the 2022 Early-Career Research Fellowship of the National Academy of Sciences' Gulf Research Program and serves as an associate editor for the *Coastal Engineering Journal*. He is actively involved in professional organizations (ASCE-EMI, ASCE-EWRI, IAHR), creating strong professional networks for trainees.

How to Apply

Please send an email to wangbinb@missouri.edu with the subject line "**PhD – Bubble dynamics and bubble plume**". In the body of the email, briefly describe your experience in experimental fluid mechanics and/or CFD and list your relevant fluid mechanics coursework (course titles; include level and grades if available). Attach the following as a single PDF:

- CV
- 1–2 paragraph statement of research interests and fit
- Unofficial transcripts
- Names and contact information for 2–3 references