

PhD Positions in the Computational and Theoretical Multiphysics Laboratory Florida State University

Direct Link: https://www.AcademicKeys.com/r?job=261959

Downloaded On: Oct. 21, 2025 12:39am Posted Sep. 3, 2025, set to expire Jan. 2, 2026

Job Title PhD Positions in the Computational and Theoretical

Multiphysics Laboratory

Department Mechanical and Aerospace Engineering

https://eng.famu.fsu.edu/

Institution Florida State University

Tallahassee, Florida

Date Posted Sep. 3, 2025

Application Deadline Open until filled

Position Start Date Available immediately

Job Categories Graduate Student

Academic Field(s) Robotics

Ocean Engineering

Naval Architecture & Marine Engineering

Mechanical Engineering

Biomedical Engineering & Bioengineering Aerospace/Aeronautical/Astronautics

Engineering - Other

Job Website https://www.cfd-

online.com/Jobs/showjob.php?record_id=19790

Apply By Email

Job Description

Multiple PhD positions are available immediately in the <u>Computational and Theoretical Multiphysics</u> <u>Laboratory</u> in the Department of Mechanical and Aerospace Engineering at Florida State University (https://eng.famu.fsu.edu/me



PhD Positions in the Computational and Theoretical Multiphysics Laboratory Florida State University

Direct Link: https://www.AcademicKeys.com/r?job=261959
Downloaded On: Oct. 21, 2025 12:39am
Posted Sep. 3, 2025, set to expire Jan. 2, 2026

).

Research Areas Include:

- **Multiphase Flow:** Computational and theoretical studies of multiphase systems, including phase change, bubble dynamics, and interface-resolving simulations.
- Turbulent Boundary Layers and Fluid-Structure Interaction (FSI): Investigating turbulent flows, flow-induced vibrations, and fluid-structure interactions using high-fidelity simulations and reduced-order modeling.
- Gust-Airfoil Interaction: Developing data-driven models to predict unsteady aerodynamic responses of airfoils under gusts, including short-time predictions and flow control strategies.
- **Biolocomotion:** Dynamics of microswimmers, nonlinear low-Reynolds-number flows, and bioinspired locomotion studied through advanced computational and theoretical modeling.

Relevant Skills/Interests:

- Creativity and interest in interdisciplinary research
- BSc/MSc degree in mechanical, aerospace, civil engineering, applied mathematics, computational physics, or related fields
- Experience in CFD, multiphase flow simulations, unsteady aerodynamics, or biolocomotion
- Programming skills (Python, MATLAB, C++, Fortran)
- Familiarity with machine learning (TensorFlow, PyTorch) is a plus for ML-focused projects
- Strong oral and written communication skills

Start Date:

The start date is as soon as January 2026.

Application Materials:

Please submit the following to **Dr. Kourosh Shoele (kshoele_at_fsu_dot_edu)**:

- A short statement of research interests and background
- CV
- Unofficial transcripts



PhD Positions in the Computational and Theoretical Multiphysics Laboratory Florida State University

Direct Link: https://www.AcademicKeys.com/r?job=261959
Downloaded On: Oct. 21, 2025 12:39am
Posted Sep. 3, 2025, set to expire Jan. 2, 2026

• Names and contact information of three references

Include the phrase "PhD applicant – [preferred research area]" in the subject line of your email (e.g., "PhD applicant – Multiphase Flow").

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact Kourosh Shoele

Mechanical and Aerospace Engineering FAMU-FSU College of Engineering

2003 Levy Avenue

Tallahassee, FL 32310