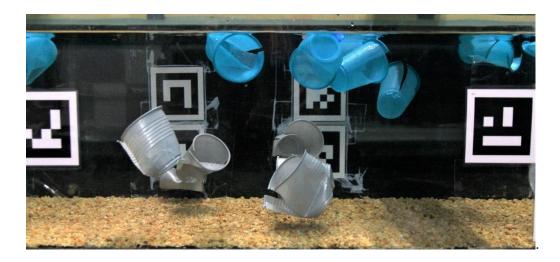


PhD post in Fluid Mechanics

Experimental modelling of plastic transport in floods

Applications are open for a PhD scholarship at Imperial College London to start by October 2024 (flexible). The PhD project will tackle the transport of plastic (and other litter) during extreme flood conditions. For that purpose, the successful candidate will develop experimental models in the Hydrodynamics Laboratory at the Department of Civil and Environmental Engineering. This research will involve the use of multiple-camera systems and computer vision techniques, among other state-of-theart technologies, and the development of fluid mechanics / hydraulic theories for the prediction of plastic transport in highly turbulent flows. The student will benefit from world-class facilities, and a world-leading and friendly research environment.



Requirements:

- A first-class degree (or internationally equivalent) in engineering (civil, environmental, mechanical), physics, or other closely related disciplines.
- A master's level degree qualification, preferably with a focus on fluid mechanics, hydraulics or water science.
- Excellent English writing and communication skills (e.g., IELTS 6.5 overall, minimum 6.0 in all components or TOEFL 92 overall and minimum 20 in all elements).
- Programming and data analysis skills (Python, Julia, MATLAB or similar).

In addition, a competitive candidate would benefit from the following desirable (<u>non-essential</u>) qualifications:

- Experience in a fluid mechanics / hydraulics laboratory.
- Related research experience.

The successful candidate is expected to have the following soft skills:

- Strong analytical and critical thinking abilities.
- Organizational skills and the capacity to manage multiple tasks concurrently and independently.

Funding and Eligibility: The studentship will provide funding for 3.5 years including tuition fees and a tax-free stipend at the standard UKRI London rate (£20, 622 2023/2024 rate). Full funding is only available to Home (UK) students. The funding can also be used to partly support an international student.

How to apply: by sending the following documents to Dr Daniel Valero (d.valero@imperial.ac.uk)

- CV, including average grades and research experience (if any).
- Cover letter, explaining their motivation and suitability for this PhD project as well as availability to start.
 - Contact details of two academic referees.

Application via the Imperial College Registry is not necessary at this stage. Review of applications will begin immediately and continue until the position is filled.

For further details, informal discussions and information about the project please contact Dr Daniel Valero (d.valero@imperial.ac.uk).