

# Special Issue

## Free surface flows

### Message from the Guest Editor

Free surface flows are flows that involve a mobile interface between a liquid and the surrounding immiscible atmosphere. They arise in many different contexts ranging from industrial applications to the natural environment. A key challenge associated with modelling such flows is the presence of a mobile interface and potentially a wetting front, where the liquid, solid, and surrounding atmosphere meet. Over the recent past, our understanding of such flows has grown considerably in part owing to the rapid combined development of numerical methods and computational resources. The purpose of this Special Issue is to collect state-of-the-art, recent results related to:

- Modelling of free surface flows: numerical methods and applications
- Measurements in free surface flows
- Benchmarking free surface flows
- Capillary and wetting phenomena in free surface flows
- Drops and bubbles
- Geophysical free surface flows: rivers, glaciers, and ocean
- Sloshing dynamics
- Inverse problems in free surface flows
- Non-Newtonian effects in free surface flows
- Free surface slamming
- Thin liquid film

---

### Guest Editor

Prof. Dr. Mathieu Sellier  
Department of Mechanical Engineering, University of Canterbury,  
Christchurch 8041, New Zealand

---

### Deadline for manuscript submissions

closed (20 June 2019)



# Fluids

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.8  
CiteScore 4.0



[mdpi.com/si/15409](http://mdpi.com/si/15409)

*Fluids*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
fluids@mdpi.com

[mdpi.com/journal/  
fluids](http://mdpi.com/journal/fluids)





# Fluids

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.8  
CiteScore 4.0



[mdpi.com/journal/  
fluids](http://mdpi.com/journal/fluids)

## About the Journal

### Message from the Editor-in-Chief

*Fluids* (ISSN 2311-5521) is an international journal on all aspects of fluids in open access format: research articles, reviews and other contents are released on the internet immediately after acceptance. You are invited to contribute a research article or a comprehensive review for consideration and publication in *Fluids*. The scientific community and the general public have unlimited free access to the content as soon as it is published. Please consider *Fluids* as an exceptional, exciting enterprise ready to reward your trust, attention, and active participation.

---

### Editor-in-Chief

Prof. Dr. D. Andrew S. Rees

Department of Mechanical Engineering, University of Bath, Bath BA2 7AY, UK

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

CiteScore - Q2 (Mechanical Engineering)

