

## COMPUTATIONAL METHODS AND NUMERICAL INVESTIGATION IN FLUID-STRUCTURE INTERACTION

(1500)

**PROF. DR. HONGJUN ZHU\***

\* State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation, Southwest Petroleum University  
Chengdu, Sichuan 610500, China  
zhuhj@swpu.edu.cn

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### ABSTRACT

Fluid-structure interaction (FSI) problem is widely encountered in most engineering applications such as machine design, aerospace engineering, coastal engineering, offshore engineering and petroleum engineering (to name a few). Numerical solution methods, experimental tests and simulations are applied to analyse this problem.

Numerical solution methods and simulations have been commonly applied to investigate the fluid-structure interaction and have made great progress in the past decades. This mini-symposium is dedicated to the discussion of fluid-structure interaction problem using computational methods.

The authors are invited to submit original research articles to stimulate the continuing efforts in numerical approximation of fluid-structure interaction problems and related theories. This mini-symposium aims to provide a forum for specialists in numerical methods and simulations of fluid-structure interaction to discuss the novel discoveries, new analysis and numerical methods and exchange ideas for new developments in theory and applications. We hope that the mini-symposium will make a contribution to the understanding and improvement in this field.

This mini-symposium welcomes all researchers, academicians, practitioners, as well as students interested in relevant research in this field.

For more details, see the site of the conference <http://https://www.wccm-eccomas2020.org/>

Specific topics include (but are not limited to):

- Offshore mechanics, hydrodynamics and Computational Fluid Dynamics (CFD).
- Vortex induced vibration (VIV) and vortex induced motion (VIM)
- Vortex induced vibration suppression.
- Multi-phase fluid flow and flow induced vibration (FIV).
- Fluid-structure interaction (FSI) and flow control.