

Editorial

Engineering Fluid Dynamics

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Over the last few decades, the use of computational fluid dynamics (CFD) and experimental fluid dynamics (EFD) methods has penetrated into all fields of engineering. CFD is now becoming a routine analysis tool for design in some fields (e.g., aerodynamics of vehicles), and its implementation in other fields (e.g., chemical and marine applications) is being quickly adopted. Additionally, in the last decade, open source software has had a tremendous impact in the use of CFD. Laser-based methods have also made significant improvements in methods to obtain data for the validation of the CFD codes.

This book contains the successful submissions [1–12] to a Special Issue of *Energies* on the subject area of “Engineering Fluid Dynamics”. The topic of engineering fluid dynamics includes both experimental as well as computational studies. Of special interest were submissions from the fields of mechanical, chemical, marine, safety, and energy engineering. We welcomed both original research articles as well as review articles. After one year, 22 papers were submitted and 12 were accepted for publication. The average processing time was 65.2 days. The authors had the following geographical distribution: China (four); Italy (two); Korea (one); Germany (one); UK (one); Ireland (one); Australia (one); Sweden (one); Japan (one); Spain (one); Norway (one).

Papers covered topics such as heat transfer in shell and helically coiled tube heat exchangers [1], the multiphase modeling of sprays [2], flashing flows [4], as well as mixing in a bubbling fluidized bed [8]. Two papers related to heating ventilation and air condition (HVAC) are included, namely evaporation and condensation in the underfloor space of detached houses [9] and air distribution in a railway vehicle [10]. Three papers dealt with various aspects of pumps and turbines: a performance prediction method for pumps as turbines [3]; noise radiation in a centrifugal pump [5]; periodic fluctuations in energy efficiency in centrifugal pumps [7]; and study of a high-pressure external gear pump [11]. One paper used both laser doppler velocimetry (LDV) and CFD in the study of flow behind a semi-circular step cylinder [6]. Finally, a paper investigated the influence of the equivalence ratio (ER) and feedstock particle size on birch wood gasification [12].

I found the task of editing and selecting papers for this collection to be both stimulating and rewarding. I would also like to thank the staff and reviewers for their efforts and input.

Conflicts of Interest: The author declares no conflict of interest.

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