fluids

an Open Access Journal by MDPI

IMPACT FACTOR 1.8

CITESCORE 3.4

Recent Advances in Hydrodynamics and Magnetised Fluids

Guest Editor:

Prof. Dr. Ahmed Rashad
Department of Mathematics, Aswan University, Faculty of Science, 81528 Aswan, Egypt

Deadline for manuscript submissions:
closed (20 December 2022)

Message from the Guest Editor

Magnetic fluids are well known to be a colloidal suspension of various delicate particles of a solid ferromagnetic material in a transporter fluid, such as hydrocarbon, water, ester, and fluorocarbon. A most significant characteristic is that the fluid that can respond to the magnetic field. This feature is an outcome from the magnetic body strength occurring in magnetic field. It is the presence of these synthetic substances that produces the exploration of magnetic fluid dynamics possible. There are two obvious ways to create a magnetic fluid: size diminishing of chemical precipitation of small particles, coarse material. Size decrease has been achieved by electrolysis, sparkle evaporation–condensation, and grinding. The fluid dynamics of magneto-fluids vary from common fluids in that strains of magnetic principles manifest and, unlike in magnetohydrodynamics, the requirement is not electrical currents. Magnetic fluid motives the nonmagnetic fluid in the existence of tangential applied field.

fluids

IMPACT FACTOR 1.8

CITESCORE 3.4

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. D. Andrew S. Rees
Department of Mechanical Engineering, University of Bath, Bath BA2 7AY, UK

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.

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*)

Contact Us

Fluids Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/fluids
fluids@mdpi.com
𝕏@FluidsMdpi