

Minisymposium Title

Electromagnetic Functional Fluids

Description

An electromagnetic functional fluid is a functional fluid that responds to an electric and/or magnetic field. Its importance arises from scientific, industrial, and commercial applications such as electromagnetic fluidic pumps, actuators, seals, bearings, valves, tunable dampers, heat exchangers, diagnostics in medicine, etc. The main objective of this minisymposium is to exchange the research findings in the field of electromagnetic functional fluids regarding their chemistry, physical and electromagnetic properties, fluid dynamics, heat and mass transfer and surface phenomena in the contact of academic as well as industry oriented engineering and biomedical applications. Potential topics of interest include, but are not limited to:

- Heat and Mass Transfer
- Hydrodynamics and Interface Phenomena of Magnetic Fluids
- Properties and Rheology
- Technical Application of Magnetic Fluids
- Biological and Medical Application
- Synthesis and Structure of Nanoparticles

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