



Advanced Applications of Magnetic Field-Responsive Fluid

Guest Editors:

Dr. Zhenkun Li

Dr. Yibiao Chen

Dr. Hongchao Cui

Dr. Juntian Qu

Deadline for manuscript
submissions:

closed (20 July 2023)

Message from the Guest Editors

Dear Colleagues,

Recent years have seen the development of a new class of smart materials, the so-called magnetic field-responsive fluids, which display dramatic changes in morphology when subject to an external magnetic field. Rheological characteristics and the anisotropic micro-structures of the fluid can be controlled by the direction and magnitude of the applied field.

Commonly recognized magnetic field-responsive fluids includes, but not limited to, ferrofluid, magnetorheological fluid, magnetic compound fluid, magnetic liquid crystals, magnetic biofluid etc. This special issue encourages authors to submit experimental or theoretical research on the keywords below, and works in the related fields will also be considered.

- Ferrofluid
- Magnetorheological fluid
- Magnetic compound fluid
- Magnetic liquid crystals
- Magnetic biofluid
- Soft robotics
- 3D and 4D printing
- Simulation
- Magnetic thixotropic property
- Ferromagnetic memory property

