Special Issue

Tunable Thermal and Surface Properties of Magnetic Fluids

Message from the Guest Editor

Dear colleagues, Magnetic fluids are stable colloids that respond to an applied magnetic field due to their dispersed phase—the magnetic nanoparticles, being known also as ferrofluids and, in the last decade, as magnetic nanofluids. The research and development of several types of applications of magnetic fluids-from lubrication and sealing to medical use in cancer therapies by hyperthermia or, more recently, cooling and insulation of power transformers and other novel heat transfer applications—showed that each requires a specially tailored type of magnetic fluid with magnetic, rheological, thermal and surface properties that have to respond to its use. This Special Issue is dedicated to recent advances in the measurement and modeling of the tunable thermal and surface properties of magnetic fluids and their related applications.

Guest Editor

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Message from the Editor-in-Chief

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