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# Nanofluids for Energy and Medicine

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**closed (30 September 2021)**

## Message from the Guest Editor

Thermo-physical properties and, in particular, the heat transfer and rheology of base fluids can be modified significantly by introducing nanoparticles. It is also well known that the thermal conductivity and viscosity of some nanofluids are considerably altered by adding nanoparticles. Theoretical and experimental works have been devoted to the subject. Recently, much attention has been paid to some particular heat transfer and rheological mechanisms in nanofluids, such as the formation of a nano-liquid-layer around the nanoparticles (liquid layering), particles clustering and particle–fluid interaction. Other fundamental aspects deal with the ballistic transport of phonons or even the particles themselves. The Special Issue focuses on these subjects and also deals with various applications of nanofluids, such as for cooling, in nanomedicine, and for energetic purposes. Nanofluids are also important in self-assembly building blocks, where their properties are important for successful material design. Finally, this Special Issue discusses the challenges and solutions related to the applications.

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## Message from the Editor-in-Chief

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