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Research Progress on Hydraulic Fluid and Hydraulic Systems

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Message from the Guest Editors

Progress in the field of hydraulic drive and control technology is seen not only in the field of components and systems, but also in hydraulic fluids. At the forefront of the development of hydraulic components and systems are ever-higher operating pressures, tighter tolerances in components, demands for greater efficiency, new materials and higher energy density of components and systems. Hydraulic fluids with their material properties must also adapt to these trends and follow them.

The subject matter of this Special Issue relates to the latest developments in the field of hydraulic fluids and corresponding hydraulic systems. It covers a very wide area, from innovations and findings related to different types of liquids to their individual material properties and to testing and areas of application, and on the other hand, to the systems, which also have to be adopted for the new fluid types. It also addresses the field concerned with the energy suitability of the used liquid as well as issues of its environmental suitability.











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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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