Special Issue

Supercritical Fluid in Industrial Applications

Message from the Guest Editors

Supercritical fluid is defined as the fluid under the supercritical state, i.e., both the pressure and temperature above the critical points, such as Pc=7.39 MPa and Tc=31.3 °C for carbon dioxide and Pc=22.1 MPa and Tc=374 °C for water. Certain processes can highlight the unique and advantageous physicochemical properties of supercritical fluid, including those that make them solvent-free, energy-conserving, and high-efficiency, as well as their homogeneous reaction environment. In past few decades, supercritical fluid has been widely investigated and applied in various industrial fields, including in energy and fuels, the environment, chemicals, analysis, materials, dyeing, etc. To develop a more comprehensive understanding of supercritical fluids and to further promote their industrialization, this Special Issue, titled “Supercritical Fluid in Industrial Applications”, has been created.

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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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