Special Issue

The Applications of Supercritical Carbon Dioxide

Message from the Guest Editor

The use of supercritical CO2 (Tc = 31 °C, Pc = 74 bar) as an extraction solvent for natural products is the oldest and most established process on an industrial scale, with notable applications in the food industry. Supercritical-fluid-based developments include extraction, impregnation, formulation, particle formation, sterilization, cleaning, chemical reactions, energy, and waste treatment, among others. In all circumstances, the supercritical fluid is used as an alternative to traditional organic liquid solvents, and, in many processes, with the use of supercritical CO2, it is possible to significantly eliminate or decrease solvent residues, contributing to environmentally-friendly chemical routes and technical innovations to achieve green chemical processes. Prof. JoseAugusto Paixao Coelho

Guest Editor

Dr. José P. Coelho

Instituto Superior de Engenharia de Lisboa, Instituto Politécnico de Lisboa, Rua Conselheiro Emídio Navarro, 1, 1959-007 Lisboa, Portugal

Deadline for manuscript submissions

closed (30 September 2017)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/8121

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

