



## The Applications of Supercritical Carbon Dioxide

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)**

### Message from the Guest Editor

Dear Colleagues,

The use of supercritical CO<sub>2</sub> (T<sub>c</sub> = 31 °C, P<sub>c</sub> = 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 CO<sub>2</sub>, 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*





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)