

Special Issue

New Materials for Chemical Engineering and Sustainable Energy Solutions

Message from the Guest Editor

We are currently facing great challenges related to climate change, this means the need to develop new solutions in the industry and in the field of energy production. Most often, new methods of production in the chemical and energy industries are based on known methods of organization of processes, but they consist in the use of new materials. In the case of the chemical and energy industries, research on new materials focuses on catalytic processes that allow the use of alternative raw materials, including biological ones. It is also important to develop new ways of obtaining universal products, such as biohydrogen, which can be the starting point to produce polymers, fertilizers, chemical energy storage or alternative fuels. The new materials can also be used to organize processes in chemical reactors, as fillers in fluidized bed reactors or in mass exchange devices. I invite all scientists whose research concerns new materials that may be applicable to the organization of production processes or to obtain energy in a sustainable manner to publish their results in this Special Issue of the journal *Materials*.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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