catalysts

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Environmentally Friendly Catalysts for Energy and Water Treatment Applications

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Message from the Guest Editors

Dear Colleagues,

After the first successful Special Issue focused on energy and pollution control applications as catalysts, available here, we propose a second edition in the same line, now focused on water with regard to the environment.

A great variety of catalytic materials, which include single metals as well as mixed metals (and their oxides), are currently being used, either supported over alumina, silica, titania, ceria, zirconia, activated carbons, and zeolites or directly attached to the reactor itself, allowing their continuous use and avoiding waste emissions. Similar cases are found in Fenton catalysis, converted into EFCs through heterogeneous Fenton-like variants. Moreover, the combined use of catalysts with UV/solar irradiation or in combination with O_3 and H_2O_2 will always be preferable to that of other oxidant agents (persulfates). Heterogeneous catalysts are also used as electrodes for energy and environmental applications. Indeed, electrochemical processes are key technologies for sustainable development. This Special Issue addresses the aforementioned topics.