

Special Issue on  
**Functional Porous Nanomaterials for Sustainable Applications**

# CALL FOR PAPERS

The rapid growth of industrialization, overpopulation, and depletion of fossil fuels has negative effects on the quality of air, water, soil, and climate change. To address these environmental and energy challenges, urgent research efforts are necessary to develop new technologies that can remediate the negative environmental impact and make efficient use of natural resources in a way that is functional, economical, and sustainable. In this regard, substantial advances in materials science and nanotechnology have been carried out; these include but are not limited to novel porous nanomaterials for the efficient utilization of renewable energy, innovative means of air pollution reduction, wastewater treatment, and carbon emission mitigation, and in-depth mechanistic understanding of pollutant evolution in the environment. We believe that the development of advanced materials with multiple functions can help in accelerating the transformation towards a cleaner and safer environment for all.

We invite researchers and investigators to submit their original research articles and review articles to this special issue.

Potential topics include but are not limited to the following:

- ▶ Green synthesis of porous nanostructured materials
- ▶ Porous nanomaterials and composite sorbents for capture and catalytic conversion and utilization of carbon dioxide
- ▶ Porous nanomaterials for water treatment and other environmental applications
- ▶ Porous nanomaterials for solar power capture and conversion
- ▶ Porous nanomaterials for renewable energy storage
- ▶ Porous nanomaterials in reduction of energy consumption, such as lightweight materials, and intelligent coatings for efficient heating, cooling, and anticorrosion applications
- ▶ Porous nanomaterials in reduction of particulate air pollution
- ▶ Fundamental phenomena of porous nanomaterials in the environment such as transport, aggregation, stability, and fate in water and air

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jnt/fpnsa/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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**Submission Deadline**

Friday, 27 October 2017

**Publication Date**

March 2018