# **Special Issue**

## Advanced Materials for Production, Storage, and Application of Sustainable Fuels: Hydrogen and Ammonia

## Message from the Guest Editors

This Special Issue will present a broad range of topics covering nanomaterial research for generation, storage, characterization, and applications of H2 and NH3 technologies. Contributing papers will cover the latest research results on, but not limited to, the following topics:

- Nanomaterials for H2 and NH3 generation, for example, recent advances in thermal, electrochemical, plasma, and photocatalytic synthesis.
- Nanomaterials for H2 and NH3 storage such as inorganic chemical hydrides, carbon materials, novel steel alloys, metal halides, porous materials, protonbased materials, sorbent materials, etc.
- The use of H2 and NH3 for energy generation with nanomaterials for low-temperature fuel cells (alkaline and acid electrolytes), electrocatalysts, solid oxide fuel cells, internal combustion engines and gas turbines, among others.

## **Guest Editors**

Dr. Ivonne Liliana Alonso-Lemus Centro de Investigacion y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City, Mexico

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## Deadline for manuscript submissions

20 January 2026



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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.

## Editor-in-Chief

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