Special Issue

Ammonia as an Energy Carrier

Message from the Guest Editors

Ammonia is a high energy density fuel and is carbon free. The technology for ammonia synthesis is well developed and can easily migrate from using natural gas as input to green electricity. An innovative energy loop based on ammonia considers the “power to ammonia” process, based on atmospheric nitrogen and green hydrogen, and the “ammonia to power” reverse process where ammonia is converted into power in both traditional and innovative power plants. Ammonia is also being considered as a ‘hydrogen carrier’ as it can be stored for long periods, thus contributing significantly to hydrogen economy.This Special Issue aims to bring together current progress on the use of ammonia as a fuel which can contribute to a better knowledge of the impact on the energy sector. The following topics are addressed:

- Ammonia production from renewable energy sources
- New technologies and solutions for ammonia synthesis
- Use of ammonia for power production
- Market and economical studies on the use of ammonia as a fuel
- Safety issues on the use of ammonia as a fuel
- Environmental studies on the use of ammonia as energy storage

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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