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Clean Ammonia Synthesis and Utilization for a Sustainable World: Catalytic & Electron-Driven Routes

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Message from the Guest Editors

The scope of this Special Issue is to explore the potential of ammonia as a clean carrier that could be used for energy. With the global transition from fossil fuels to intermittent renewable energy sources, there is a need for the long-term storage and long-range transmission of energy, for which ammonia is a perfect fit. Specifically, this Special Issue intends to cover the most recent progress in the catalytic synthesis of ammonia as well as electron-driven routes (electrocatalysis and photocatalysis), to gain insight into the development of materials, reactors and electro-driven devices related to one of the future sustainable energy carriers. Moreover, the Special Issue also aims to explore the scientific challenges associated with ammonia utilization in fuel cells, in combustion engines or to produce hydrogen.



