Special Issue

Sustainable Hydrogen Technologies and Their Value Chains

Message from the Guest Editor

The suggested topics for this Special Issue include, but are not limited to, the following:

(1) Environmental life cycle assessment (e-LCA) of hydrogen value chains. (2) Assessment methods of social life cycle assessment (s-LCA) of hydrogen value chains. (3) Green hydrogen production from renewable sources (solar PV and wind turbines) integrated with water electrolysis technologies. (4) Valorization of waste biomass to greener and sustainable hydrogen production in support of circular economy. (5) Manufacturing of water electrolyzers for hydrogen production. (6) Hydrogen carrier chemicals such as conventional and green ammonia gas. (7) Hydrogen storage materials. (8) Use of hydrogen in road transport (light-weight fuel cell-powered electric vehicles, trucks, and trailers) and electrified aircraft (hybrid-electric and all-electric). (9) Hydrogen safety codes and standards. (10) Critical reviews of research related to the hydrogen value chain. (11) Hydrogen production integrated with carbon capture, utilization, and storage (CCUS).

Guest Editor

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