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# Advancement of Experimental and Modeling Approaches for Development of Hydrogen Energy Systems

Guest Editor:

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## **Message from the Guest Editor**

Dear Colleagues,

Hydrogen is a promising clean energy carrier for the future environmentally friendly economy, as hydrogen can be produced by renewable energy sources and used as a fuel by releasing energy when reacting with oxygen without emitting harmful pollutants.

In this Special Issue, researchers working on hydrogen energy systems will present contemporary and novel modelling approaches and experimental techniques that will help advance the elements of hydrogen energy systems. The scope of such methods and test systems is very broad. Some examples include novel and improved liquefaction cycles and associated hardware, the storage of liquid hydrogen and highly compressed gaseous hydrogen, fuel cells, hydrogen combustors, correlations for heat transfer and pressure drop in two-phase hydrogen flow, cryogenic pumps and metering devices, instabilities in hydrogen systems, hydrogen safety, materials ortho-parahydrogen hydrogen, conversion. technoeconomic analysis, and other topics relevant to hydrogen energy systems.











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### **Editor-in-Chief**

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# Message from the Editor-in-Chief

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