

## Special Issue

# Hydrogen and Fuel Cells: Emerging Technologies and Future Prospects

### Message from the Guest Editors

In a future scenario where renewable energies (REs) play a preponderant role, hydrogen and fuel cells will have a significant role due to their intrinsic properties. Hydrogen is an energy vector that can assist in coupling energy supply and demand, sometimes mismatched by the irregular energy production of REs. Additionally, it is a crucial raw material in various industrial processes. Nevertheless, its current production is based on fossil fuel, especially steam natural gas reforming and coal gasification. Alternative green routes are mainly based on water electrolysis, whose development is hampered by the high final cost of H<sub>2</sub>. New technologies are then required to face the challenge of reducing the high price of green H<sub>2</sub> to make it competitive. In this sense, this Special Issue welcomes manuscripts that address technological advances in this topic, such as more active and resistant materials, separators, and other related developments, as well as techno-economic analyses.

### Guest Editors

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### Deadline for manuscript submissions

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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