# **Special Issue**

# Development, Application and Prospects of Hydrogen Production from Renewable Energy

# Message from the Guest Editors

This Special Issue on "Development, Application and Prospects of Hydrogen Production from Renewable Energy" seeks high-quality original research and review articles focusing on the integration of hydrogen production systems with renewable energy sources, with particular attention to material durability, corrosion, and advanced electrochemical processes. Topics include, but are not limited to, the following:

- Alkaline electrolysis of water using solar, wind, or hydroelectric power
- Seawater splitting and brine valorization
- Corrosion and degradation mechanisms in electrolyser components
- Protective coatings, corrosion-resistant alloys, and insitu monitoring strategies
- Advanced electrode materials and catalytic systems for the hydrogen evolution reaction
- Integration of hydrogen production with photovoltaic systems
- Process modelling, optimisation, and life-cycle analysis (LCA) of green hydrogen systems
- Use of industrial waste or byproducts for sustainable hydrogen generation
- Hydrogen application in mineral processing
- Water management and purification technologies for electrolysis
- Decentralized and off-grid hydrogen production systems, etc.

## **Guest Editors**

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# Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

# Editor-in-Chief

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