Special Issue

Advances in Catalytic Dry Reforming of Methane

Message from the Guest Editor

We invite submissions for this Special Issue focused on catalytic dry reforming of methane (CDRM), a process that converts methane and carbon dioxide into synthesis gas (syngas), a mixture of carbon monoxide and hydrogen. This method uses greenhouse gases as feedstocks, effectively managing energy content and reducing emissions, making CDRM a promising technology. We welcome original research articles and reviews that explore:

1. Development of novel catalysts (nickel, cobalt, noble metals) and their supports (alumina, zirconia, ceria).
2. Optimization of reaction conditions to enhance efficiency and sustainability.
3. Solutions to challenges such as coke formation and catalyst deactivation.
4. Integration of CDRM with renewable energy sources for producing renewable hydrogen, methanol, and Fischer-Tropsch-based fuels.

This Special Issue aims to advance the understanding and application of CDRM, contributing to more sustainable and effective systems.

Guest Editor

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Deadline for manuscript submissions

closed (14 February 2025)

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