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Advances in Reforming Catalysts for Hydrogen Production

Guest Editors:

Dr. Kee Young Koo

Hydrogen Research
Department, Korea Institute of
Energy Research, Daejeon,
Republic of Korea
Advanced Energy and System
Engineering, University of
Science and Technology (UST),
Daejeon, Republic of Korea

Dr. Unho Jung

Hydrogen Research Department, Korea Institute of Energy Research, Daejeon, Korea

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Message from the Guest Editors

Hydrogen is indispensable as an ecofriendly energy and energy storage media. Hydrogen can be produced from various processes, such as coal gasification, methane reforming, water electrolysis, NH3 cracking, etc.

As to a typical natural gas reforming reaction, there is steam methane reforming, dry (CO2) reforming of methane, and partial oxidation of methane. Various research works have been steadily conducted to address the deactivation problems for coking and sintering of reforming catalyst. In this Special Issue, we invite authors to submit original research and review articles that seek improvement of catalytic performance and stability for reforming reactions.

The potential topics in this Special Issue include but are not limited to:

Advances in reforming catalysts; Catalyst deactivation: coking, sintering, poisoning;

Manufacture of reforming catalyst and operation in scaleup process;

Metal structured catalysts (monolith, foam) for hydrogen production;

Hydrogen production process via various feed such as coal, biomass, LOHC (liquid organic hydrogen carriers), ammonia, etc.



