Special Issue

Catalytic Reforming of Methane

Message from the Guest Editors

Natural gas reforming by means of dry reforming has recently achieved great importance as a way of producing syngas. Great attention is being paid to the conversion of CH4 and CO2, the cheapest carbon-containing materials, into more valuable compounds by catalytic reactions. This particular Special Issue of *Catalysts* is, therefore, on the following topics:

- Tackling the issue of catalyst design based on an understanding of its deactivation mechanism;
- Active catalysts with a small particle size, appropriate metal-support interaction but nonetheless good reducibility, and a certain tolerance to carbon formation;
- Investigating the prevention of carbon diffusion into active metal crystallites while maintaining acceptable activity;
- Optimizing of the reaction conditions for the process in a variety of different catalytic material classes, including perovskite mixed oxides, metal-oxide systems, and intermetallic compounds;
- Combining catalysis and plasma, which can be an alternative to integrate the advantages of catalysis and plasma.

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Editor-in-Chief

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