

Heterogeneous Catalysis: Topics and Advances

Guest Editors:

Dr. Bozhidar Stefanov

Department of Chemistry,
Technical University of Sofia,
Sofia, Bulgaria

Dr. İlknur Bayrak Pehlivan

Department of Materials Science
and Engineering, Solid State
Physics, Uppsala University, Box
35, 751 03 Uppsala, Sweden

Prof. Dr. Silvia Todorova

Institute of Catalysis, Bulgarian
Academy of Sciences, 1113 Sofia,
Bulgaria

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Message from the Guest Editors

Dear Colleagues,

Heterogeneous catalysis has seen a surge in academic interest due to its important applications, such as renewable-energy conversion, environmental remediation, organic products synthesis and transformations, green catalysis, and many others. Although unnoticed on its own, symmetry and its implications is often a main topic of research in the field of catalysis. Hence, this Special Issue of *Symmetry* is dedicated to the theme “Heterogeneous Catalysis: Topics and Advances.”

The issue is open to submissions covering any aspects of heterogeneous catalysis, fundamental or practical. Special attention will be paid to research, focused on the the implications of symmetry in catalysis, such as (but not limited to): effects of crystallographic structure, shape and orientation on catalytic activity; effects of substrate symmetry in catalysis; symmetric/asymmetric activity and reaction pathways in catalysts; effects of support morphology and structure on catalytic activity (e.g., photonic effects in photocatalysts supported on highly-ordered substrate), etc.





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Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca
i Estudis Avançats (ICREA),
Passeig Luis Companys, 23,
08010 Barcelona, Spain
2. Institute of Space Sciences
(ICE-CSIC), C. Can Magrans s/n,
08193 Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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Symmetry Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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