Special Issue

Efficient Catalytic Systems for Sustainable Development

Message from the Guest Editor

Catalysis is a key technology for the efficient production of economically important chemicals. Heterogeneous catalysis, wherein the reactants and catalyst are in different phases, involves a complex interdependency between adsorption/desorption, diffusion, and speciation processes. One of the main challenges of heterogeneous catalytic reactions is understanding the kinetic behaviour of the surface species, and especially to find out how the reaction rates of these species affect the reaction mechanism and selectivity. The aim of this Special Issue is to understand the atomic and molecular interactions at catalytic surfaces, for which in situ and operando studies offer unique insights. We invite contributors to submit original research papers or reviews that account for advances in the field of catalytic surface reactions with a focus on reaction kinetics and mechanisms applying in situ and operando techniques.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2024)

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Message from the Editor-in-Chief

Clean Technologies (ISSN 2571-8797) is an international, open access journal of novel scientific research on technology development aimed at reducing the environmental impact of human activities. *Clean Technologies* publishes reviews, regular research papers, communications and short notes which show a significant advance in the development of sustainable technology that reduces energy consumption, environmental pollution and/or the use of water and nonrenewable resources. Our aim is to encourage scientists to publish their experimental and theoretical research in detail as open access, serving a trustable base of advance for the scientific community.

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