catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 4.0

CITESCORE 7.6

New Advances in Surface-Mediated Catalysis

Guest Editors:

Dr. Francesc Viñes Solana

Dr. Ángel Morales-García

Dr. José R. B. Gomes

Deadline for manuscript submissions:
closed (31 August 2021)

Message from the Guest Editors

Advances in surface-mediated catalysis are needed in order to progress towards greener and more sustainable fabrication processes. Over the last few years, we have been witnessing an increase in the complexity of the research being carried out, from ultra-high vacuum, very-low temperature, and single-crystal surfaces to more realistic conditions employing high-pressure/high-temperature and disordered substrates. Our understanding of how the operando conditions affect the catalytic surfaces and the mediated reactions is of utmost importance for designing stable, long-lasting, and more efficient catalyst surfaces, i.e., catalysts that can avoid the formation of unsought intermediates and products and can work under mild conditions.

This Special Issue aims to provide a complete account of recent advances in the utilization of state-of-the-art experimental and computational techniques to understand reactions occurring at catalytic surfaces. We welcome original research articles, short communications, mini-reviews, and perspective papers.