Special Issue

Metal Catalyst Discovery, Design and Synthesis

Message from the Guest Editors

Catalysts remain an indispensable piece of kit in the synthetic chemist's toolbox that facilitates chemical transformations with efficiency and selectivity. Transition metals and their complexes are considered the pillars of this arena owing to their redox properties and proclivity to facilitate bond breaking and formation steps. Whilst the development of new catalysts with tailored properties often depends on trial-and-error experimentation, these processes are now routinely directed by computational approaches. Advanced nano-synthetic techniques with cutting-edge characterization tools synergistically coordinate with the established models to lead the designed catalysts to the real world.

This Special Issue delves into the multifaceted realm of catalyst design, exploring state-of-the-art experimental and computational strategies used for the de novo design of catalysts or their optimisation towards enhanced activity, stability, and selectivity. Contributions are invited within a broad thematic scope, including mechanistic studies, process development and synthetic strategies for catalyst design and optimisation.

Guest Editors

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Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

Editor-in-Chief

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