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Catalysis Under Ultrasonic Irradiation

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Deadline for manuscript submissions:
closed (30 September 2021)

Message from the Guest Editors

The application of ultrasound waves to chemistry, called sonochemistry, has huge potential for innovation in eco-friendly and eco-efficient chemistry. Lately, the concept of sonocatalysis is attracting a lot of attention, where a synergistic effect between the catalyst and ultrasound occurs, paving the way for reactions that are usually not feasible under silent conditions. This synergistic effect between ultrasound and catalysis has been reported in the presence of solid catalysts.

This Special Issue welcomes the submission of original research papers and review articles that describes sonocatalytic applications with a green chemistry approach. Manuscripts that pay particular attention to demonstrating this aspect, related to specific points or the overall process, are particularly welcome. Submissions encompassing the 12 principles of green engineering, with notions of scale-up, energy consumption, and the design of equipment will also be appreciated. New combinations of power ultrasound with alternative liquid media (ionic liquids), microwave irradiation, enzyme, electrochemistry, or other technologies will be also considered.