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PREFACE

Sustainable Synthesis of Inorganic/Organic Nanomaterials Based Efficient and Reusable Catalysts: A Way Forward to Sustainable Development Goals

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1 Introduction

The global push for Sustainable Development Goals (SDGs) highlights the urgent need for sustainable practices. These goals guide addressing critical issues such as climate change, resource depletion, and environmental damage. This special issue, entitled "Sustainable Synthesis of Inorganic/Organic Nanomaterials Based Efficient and Reusable Catalysts: A Way Forward to Sustainable Development Goals," of Topic in Catalysis Journal delves into the synthesis of inorganic and organic nanomaterials, highlighting their potential as efficient and reusable catalysts that align with the principles of sustainability.

The journey towards sustainable/green synthesis is multifaceted, encompassing advancements in materials science, green chemistry, and catalytic processes. Researchers and scientists contributed to this special issue by exploring novel green synthesis methodologies and strategies for the development of different nanomaterials-based catalysts (polyhedral zirconia NPs, NiMoS/TiMg, NiWS/TiMg, La_2O_3-SiO_2 nanocomposite, Ag-rGO nanocomposite, geopolymers with copper ferrites, carbon nanodots/TiO_2 composite, g-C3N4 decorated graphene oxide /V_2O_5 nanocomposite, NCDs/$FeNH_2$ BDC photocatalysts, Nb_2O_5 catalyst, WO_3 nanorods) that enhance not only catalytic potency but also minimize environmental impact [1–17]. Through the promotion of reusable catalyst development, our goal is to diminish waste generation, lower energy consumption, and minimize the overall ecological footprint linked with chemical processes.

This compilation of articles brings together cutting-edge research from diverse scientific disciplines, providing a comprehensive overview of the latest advancements in sustainable synthesis. Each contribution is a testament to the collaborative efforts driving progress toward a more sustainable future, from the design principles of nanomaterials to their catalytic applications.

2 Analytics and VSI Summary

With the strong dedication and assistance of the editorial team, reviewers, and authors, a total of 23 articles were published in this Special Issue, SI: Sustainable Synthesis of Inorganic/Organic Nanomaterials Based Efficient and Reusable Catalysts: A Way Forward to Sustainable Development Goals by authors from different countries worldwide.

We (Editors) hope that the insights and innovations presented here will contribute to the scientific community and inspire a collective commitment to sustainable development goals. Together, let us embark on a transformative journey towards a greener, cleaner, and more sustainable world. We would also like to thank the publishing editor of Topics in

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