Special Issue

Future Trends in Green Chemistry

Message from the Guest Editor

Current research in this area is aiming to develop emerging eco-friendly synthetic strategies for the synthesis of organic and inorganic nanomaterials via routes that use benign reagents rather than the hazardous substances conventionally used. One of the thrust areas for achieving this target is to explore the generation of chemicals from renewable biomass-derived materials and efficient catalytic processes, exploiting nano-catalysis. Essentially, the contributions in this issue will follow “sustainable” principles and would strive to exploit the earth-abundant resources with sparse use of rare and expensive metals. Additionally, the strategy must follow "benign by design" principles and aim to utilize renewable and biodegradable resources wherever possible. Finally, the evaluation matrices for defining the “greenness” of a process via holistic life cycle assessment may be the inclusion of the most preferred important factors.

- greener synthesis
- sustainable chemistry
- alternative activation
- earth-abundant materials
- biomass-derived materials
- nano-catalysts
- magnetic nano-catalysts
- multi-component reactions
- life cycle analysis

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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