Special Issue

Biosynthesis and Applications of Natural Products

Message from the Guest Editors

Natural products (NPs) have played a critical role in drug discovery and development for nearly a century. Many NPs possess complex structures that provide high specificity and potency to their drug targets. However, this structural complexity often makes them difficult to reproduce or modify using conventional organic synthesis techniques. Consequently, exploring the biosynthetic pathways for NP production and harnessing them for biosynthetic or semisynthetic approaches is an attractive avenue for the diversification of existing NPs or even the generation of new "unnatural" NP-like molecules.

Topics of interest for this Special Issue include, but are not limited to, the following:

Discovery and characterization of new natural products;
Elucidation of biosynthetic gene clusters;
Functional and structural characterization of individual enzymes;
Total biosynthesis of natural products;
Engineering study of individual enzymes;
Combinatorial biosynthesis;
Chemoenzymatic synthesis;
Bioinformatics.

Guest Editors

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About the Journal

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.

Editor-in-Chief

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