

Special Issue

Advances in Microbial Biotechnology

Message from the Guest Editors

Microbial biotechnology is a dynamic and interdisciplinary field that harnesses microorganisms' impressive metabolic and genetic diversity for a wide range of applications across industry, medicine, and environmental management. Numerous well-established and emerging industrial biotechnologies use the unique properties of microorganisms to produce a diverse array of value-added chemicals, such as enzymes, alcohols, antimicrobial and anticancer compounds, bioplastics, and biofuels. In addition, microorganisms play an important role in environmental remediation, facilitating the degradation of various pollutants, including oil, heavy metals, and pesticides. They also offer sustainable solutions in mining by extracting valuable metals from ores or mine waste. Beyond these applications, the development of microbial-based biosensors has enabled the detection of a wide range of analytes, expanding the possibilities for environmental monitoring and other applications.

Given the extensive potential of microorganisms, this Special Issue aims to highlight cutting-edge research and advancements in microbial biotechnology.

Guest Editors

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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.

Editor-in-Chief

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