Special Issue

Emerging Technologies in Food Microbiology: Innovations in Beer, Wine and Fermented Beverages

Message from the Guest Editors

The Special Issue aims to explore recent advances in microbial processes, quality control and biotechnological innovations shaping the production of alcoholic and non-alcoholic fermented beverages. As fermentation science continues to evolve, novel techniques such as metagenomics, artificial intelligence-driven quality assessment and precision fermentation are transforming the way we understand and control microbial activity in beer, wine and other beverages. This Special Issue welcomes contributions covering a broad range of topics, including microbial ecology of fermentation, advances in yeast and bacterial strain selection, bioprocess optimization and innovative preservation methods. We also encourage research on sustainable brewing and winemaking practices, nontraditional fermentation substrates and the impact of emerging technologies on flavor and sensory profiles. By gathering insights from leading researchers worldwide, this issue will serve as a valuable resource for industry professionals and scientists striving to improve the safety, efficiency and quality of fermented beverages.

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 multidimensional network.

Editor-in-Chief

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