

## Special Issue

# Biotechnological and Biostimulant Approaches in Plant Physiology

### Message from the Guest Editor

Plant physiology is undergoing rapid development, driven by advances in biotechnology and the increasing use of biostimulants in sustainable crop production. Understanding the physiological, biochemical, and molecular mechanisms that regulate plant growth, adaptation, and tolerance to environmental stresses is becoming increasingly important for modern agricultural science. This Special Issue features interdisciplinary research that combines innovative tools with practical applications to boost crop performance and resilience. We welcome contributions that address, among others, the following: Physiological, biochemical, and molecular bases of biostimulant function; The effects of natural bioactive compounds, microbial inoculants, and signaling molecules on photosynthesis, metabolism, and stress tolerance; Omics-based approaches (transcriptomics, proteomics, and metabolomics) to elucidate mechanisms of plant adaptation; Innovative biotechnological strategies improving plant growth and productivity under abiotic and biotic stress conditions; Integration of biostimulation methods with sustainable agricultural and breeding practices in the context of climate change.

### Guest Editor

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### Deadline for manuscript submissions

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## Applied Sciences

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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.

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### Editor-in-Chief

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