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New Perspectives on the Plant Cell Wall

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Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Cell walls are crucial for a wide range of biological processes in plants, including the regulation of growth and development, creating resilient and adaptable structures, stomatal dynamics, and pathogen and pest resistance to name just a few. They are amongst the first materials used by humans and are an important source of biopolymers and biofuels in the twenty-first century.

They are complex mechanical systems in which their physical behavior is controlled by wall chemistry and biochemistry to fulfill the biomechanical, physiological, and ecological requirements of the organism.

A thorough understanding of the intersections between the scientific fields of biology, chemistry, and physics in plant cell walls will contribute to our knowledge of the biological processes dependent on the wall, and help us to improve and expand the applications of cell-wall-based biomaterials.

This Special Issue seeks to explore how plant-cell-wall chemistry, composition, and biochemistry influence cell wall properties, how living organisms control cell wall behavior, and how we might use this information in relation to biomaterial development.



mdpi.com/si/138950

Special Issue



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Message from the Editor-in-Chief

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