Special Issue

Improvement and Application of Microbial Hydrolytic Enzymes

Message from the Guest Editor

We are inviting manuscript submissions to the Special Issue on Improvement and Usage of Cell Wall Lytic Enzymes. Cell walls are mainly composed of cellulose, hemicellulose, and pectin. Cellulose has a linear structure of □-1,4-linked D-glucose units and makes a complex structure with hemicellulose via non-covalent interactions. Hemicelluloses are backboned with xylan, mannan and glucomannans, or xyloglucan. Pectins are present as homogalacturonan, xylogalacturonan, and rhamnogalacturonan. Cell wall-lytic (or degrading) enzymes hydrolyze these backbones and efficient biocatalysts used in various fields. With increasing demand, properties of the enzymes have been improved with many types of methods such as directed evolution and mutation based on rational design including molecular simulations. In this Special Issue, we invite eminent submissions exploring cutting-edge research and recent advances in the fields of Improvement and Usage of Cell Wall Lytic Enzymes produced from microbial sources. Both experimental articles and comprehensive reviews are welcome.

Guest Editor

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Deadline for manuscript submissions

closed (18 February 2022)

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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.

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