

Special Issue

Extremozymes for Industrial Biocatalysis and Green Chemistry

Message from the Guest Editor

For the chemical industry, the use of enzymes presents important benefits, which include higher selectivity, increased sustainability and a low toxicity. These efforts in novel green chemistry processes are translated to cleaner production and lower environmental impact at the industrial and global levels. Enzymes derived from extremophiles, or extremozymes, have already adapted to thrive in environments that present extreme physicochemical conditions. They often have natural outstanding properties, which include being able to carry out reactions under nonstandard conditions (e.g., high or low temperatures, acidic or alkaline pH, high concentrations of salt or organic solvents, and high pressure) where traditional mesophilic enzymes underperform. Moreover, extremozymes are a better starting point for protein design and engineering. This Special Issue aims to present recent advances in the discovery of novel enzymes derived from extremophiles, their use to design or optimize biotechnological processes and/or potential industrial applications.

Guest Editor

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