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Biocatalysis and Biotransformation of Extremozymes

Guest Editors:

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Deadline for manuscript submissions: closed (20 June 2022) Message from the Guest Editors

This Special Issue is devoted to basic research on enzymes that function under harsh reaction conditions, for example in DNA transactions at high temperatures and/or radiations, or cellular metabolism under freezing water. We further welcome applied research that employs these biocatalysts in different "biotech" fields, including in the decomposition of hardly soluble and insoluble polymers for sustainable energy production and in food and detergent industries.

Reviews and original research papers from fundamental research to industrial application are welcome.

The main *topics include but are not limited to:*

- Enzyme evolution and adaptation;

- Catalysis at temperature extremes;

- Stabilization of mesophilic enzymes by protein engineering;

- DNA-associated extremozymes;
- Enzymes in polar environments;
- Extremophiles catalysts for sustainable bio-refineries;
- Novel and sustainable enzymes from marine extremophilic sources;

Specialsue

- Biotechnology of extremozymes.



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