## **Special Issue**

## Cellular Stress in Applied Microbiology, Biotechnology, and Processes Bioengineering

## Message from the Guest Editors

Microorganisms are used in many biotechnological processes. During the process, microorganisms may be exposed to internal and external stressors, including produced metabolites, reactive oxygen species, or xenobiotics such as nanomaterials. These factors can affect the viability and metabolic activity of cells leading to surprising effects on the process outcome such as the formation of persister cells or the induction of prophages. There are also reports showing that cellular stress can induce metabolic traits in microorganisms, that could be used to more effectively (or specifically) produce metabolites of interest. This Special Issue focuses on abiotic and biotic stressors that can play a positive or negative role in biotechnological processes and bioengineering. We sincerely invite you to share your results regarding all aspects of physical, mechanical, chemical, or biological stressors in applied microbiology, biotechnology, and bioengineering.

- antimicrobials
- bioengineering
- cellular stress
- microbial physiology
- process optimization
- metabolic stimulation
- nanomaterials

#### **Guest Editors**

Prof. Dr. Rafał Rakoczy

Prof. Dr. Agata Markowska-Szczupak

Dr. Adrian Augustyniak

## Deadline for manuscript submissions

closed (31 July 2022)



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Applied Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

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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.

## Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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