

Special Issue

Regulation of Bacterial Stress Responses by Sigma Factors: From Transcriptional Control to Metabolic and Physiological Adaptation

Message from the Guest Editor

This Special Issue aims to highlight recent advances in our understanding of the sigma factor-mediated regulation of bacterial stress responses. We welcome contributions that address the characterization of both novel and well-studied sigma factors, with emphasis on their regulatory mechanisms, gene targets, and integration within broader cellular networks. Particular interest will be given to studies that investigate stress-induced physiological and metabolic changes, including, but not limited to, cell envelope remodelling, energy and redox homeostasis, metal homeostasis, growth arrest, and sporulation. Original research articles, short communications, and reviews are invited. Topics of interest include, but are not limited to, the following:

- Signalling pathways leading to sigma factor induction;
- Interactions between sigma factors and their cognate anti-sigma factors;
- Sigma factor-dependent transcriptional responses;
- Sigma factor-regulated physiological and metabolic adaptations;
- Sigma factor-mediated interactions with host organisms or microbial communities.

Guest Editor

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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