

## Special Issue

# Whole-Cell System and Synthetic Biology, 2nd Edition

### Message from the Guest Editor

The whole-cell system has been of great interest recently and has advanced the analysis and manufacturing techniques in the past decade, benefitting from the development of molecular biology and synthetic biology. The understanding of cell metabolism and gene regulation at the molecular level is of particular significance. The understanding of how the whole-cell system is applied in analysis or manufacturing has progressed, but there is still a great deal to be learnt. Key issues gaps in the area are as follows: (1) Gene interactions and regulatory networks still need to be explored. (2) Technical approaches need to be upgraded to edit the whole cell system. (3) The performance of the whole-cell system needs to be improved. (4) How to effectively apply the whole cell system in food, the environment and other fields needs to be understood. Therefore, the aim of this Special Issue is to summarize and broaden the knowledge of new gene circuits, innovative molecular modification methods and the application of whole cell systems.

### Guest Editor

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### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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