



Improvement of Photobiological Hydrogen Production

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Message from the Guest Editor

Dear Colleagues,

Photobiological hydrogen production enables the generation of a clean energy vector from renewable materials using solar power. However, in spite of this attractive feature, so far, there have not yet been any large-scale industrial applications of this process.

The purpose of this Special Issue is to illustrate the wide range of approaches available to improve photobiological hydrogen production, including the use of bioinspired artificial and hybrid systems, metabolic engineering and modeling, process engineering, and bioreactor design. Research on H₂-producing enzymes and photosynthetic microorganisms (microalgae and photofermentative bacteria) will be covered, and both original research papers and review articles will be considered. In addition to providing an overview of state-of-the-art research in this field, authors will be encouraged to give their perspectives for future research and development. This will hopefully provide a template for identifying and overcoming the technological barriers to large-scale production, either as a primary energy source in fuel cells or as an intermediate in chemical processes.





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Message from the Editor-in-Chief

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