

## Special Issue

# Free and immobilized enzymes for biofuels, biosensing and bioremediation

### Message from the Guest Editor

As new nanostructured materials are discovered new immobilized enzymatic biocatalysts are prepared by means of physical adsorption, covalent binding, entrapment or encapsulation. Nonetheless, there are some cases where enzymes must be kept in solution in the “free form” as, for example, when substrates are in the solid phase. Both free and immobilized enzymes can be used for several applications like organic synthesis particularly for the pharmaceutical industry. The present Special Issue is dedicated to other, likely less investigated, but very important applications of free and immobilized enzymes. In particular, the issue will focus on the immobilization of enzymes on new inorganic (mesoporous silica, metal organic frameworks, etc) and polymeric materials, and on their use for biofuels (biodiesel and bioethanol) production, bioremediation (oxidation of polluting compounds, like dyes, phenols, etc.), and for the realization of enzymatic biosensors and biofuel cells.

### Guest Editor

Prof. Dr. Andrea Salis

Dipartimento di Scienze Chimiche e Geologiche, Università di Cagliari, Cittadella Universitaria, S.S. 554 bivio Sestu, 09042 Monserrato, CA, Italy

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## International Journal of Molecular Sciences

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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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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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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