

A ONE-STOP REFERENCE ON THE STATE OF THE ART OF BIOCATALYSIS IN IONIC LIQUIDS

Owing to their remarkable properties, ionic liquids (ILs) have emerged as a promising solution for biotransformations and organocatalysis. This book provides a much-needed multidisciplinary review of this field, highlighting current and potential applications in organic chemistry, electrochemistry, catalysis, physical chemistry, and engineering.

Written by world-class authorities on ILs, *Ionic Liquids in Biotransformations and Organocatalysis* covers both fundamentals and practical applications. Contributed chapters examine ILs' interactions with proteins and enzymes as well as current uses in biotransformations, then go on to explore state-of-the-art IL applications.

A key feature of this book is its emphasis on non-solvent applications. In addition to addressing ILs as solvents and co-catalysts, it covers a wide range of non-solvent uses, such as performance additives, a tool for process engineering, whole-cell processes, organocatalyst immobilization, and many more. Up-to-date information on the toxicity of ILs for microorganisms is also included. Several chapters discuss their promising uses for green technology and emerging deep-eutectic solvents, and numerous examples further illustrate the tremendous potential of this technology.

Chemists, materials scientists, chemical engineers, biotechnologists, crystallographers, and electrochemists will find *Ionic Liquids in Biotransformations and Organocatalysis* an indispensable reference work for this rapidly evolving field.

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