

PREFACE

Bioencapsulation deals with the entrapment and encapsulation of bioactive materials to provide immobilisation, protection, controlled release or adequate physical form (i.e. often dry form). It is a rapidly growing market for such technologies involving many different fields of biotechnology, such as biomedicine, pharmacology, cosmetology, food and beverage production, agriculture, waste treatment, analytical applications and biologically derived products. The interest for immobilised/encapsulated material applications has become a real scientific and technological challenge in the last few years.

The present special issue of "Chemical Industry", dedicated to the immobilisation/encapsulation of cells, enzymes, and bioactive molecules, consists of 13 articles. It is an outcome of the editors' intention to give to the reader an overview of some of the recent results and developments that have been achieved in this multidisciplinary area. From the last International Workshop on Bioencapsulation, held in Strasbourg, France, 25–27 May 2003, organised by the Bioencapsulation Research Group (<http://bioencapsulation.net>), 11 presentations have been selected as a "State of the Art of Bio&Encapsulation Science and Technology" in the field of bioencapsulation. The included papers deal with a large range of subjects such as new technologies for the laboratory and industrial production of beads/capsules, the synthesis and characterisation of new materials for drug or active molecules encapsulation and their controlled release, new methods for studying small size tumors, modelling of the Wurster coating process, the mass transfer properties of microcapsules, new methods for the determination of the growth and viability of immobilised plant cells, multienzymatic system encapsulation, liposomes as delivery systems, and different kinds of biosensors based on immobilised cells.

We would also like to emphasise that this issue was realised within the scope of the activities of the people who founded the Biochemical Engineering Society this year in Belgrade.

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