

particles, DNA-like polyelectrolyte adsorption onto polymer colloids, amino-containing latexes as a solid support of single-stranded DNA fragments and their use in biomedical diagnosis, covalent immobilization of peptides onto reactive latexes, preparation and applications of silicone emulsions, colloidal particles, poly (alkylcyanoacrylates), preparation of biodegradable particles by polymerization processes, supercritical fluid processes for polymer particle engineering.

The chapters present original works, fresh results, new methodologies, and several applications of colloidal particles in biomedicines. In this way, this volume is a good manual for all kinds of subjects related with colloids in the biomedical field.

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**Abdelhamid Elaissari, editor. Colloidal Polymers Synthesis and Characterization, Marcel Dekker, Santa Barbara, CA, USA, 2003 (xiii + 453pp., £99.00, ISBN 0-8247-4304-0)**

Although emulsion polymers have been known as a products for over a half century, it is surprising to note that growth in the volumes used by industry worldwide has continued to rise and is still estimated at 6% a year up to 2005. The introduction of seeded polymerisation techniques in the 1960s, associated with more advanced monomers feeding programs, made possible not only to improve control of the particle size characteristics but also toad interestingly on the morphology and internal structure of particles. These seeded techniques paved the way for new innovation applied in industry from 1965 to 1970 so as to create rubber toughened plastics, thanks to graft copolymers such as acrylonitrile butadiene styrene (ABS) and methyl methacrylate butadiene styrene resins (MBS).

Polymerisation in dispersed media is increasing from both practical and fundamental points of view. The need for well-defined dispersion has led to the production of diverse types of particles. The specialty chemicals industry is particularly interested in a large number of uses involving the elaboration of latexes with specific characteristics, such as narrow size distribution, and often-surface fictionalisation.

Free radical polymerisation is widely utilised technology to prepare synthetic polymers in aqueous colloidal dispersion form. It is by far the most commonly used process in industry; manufacturers find that it has a large number of technical

advantages and economic advantages. The synthetic latexes, which are obtained from polymerisation reaction vessels, can be processed on the production site to separate the polymer, dry it, and then market it in various dry forms.

Further, a selection of extended reviews and detailed papers are included in order to give an overview of related fields. In this way, this book examines the following points: synthesis of reactive polymer colloids, physico-chemical and colloidal characterisation of prepared latexes and biomolecules-polymer colloids interactions.

The main objective of this book is to report on the preparation of polymer colloids by presenting original processed and innovative materials leading to original properties. The goal of this book is to present recent result and information on polymer colloids beginning with their preparation and biomolecules interactions and going further into a study of some of their finer biomedical applications.

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**Victor A. Vinci and Sarad R. Parekh, Handbook of Industrial Cell Cultures: Mammalian, Microbial and Plant cells, Humana Press, Totowa, NJ, 2003 (536pp., ISBN 1-58829-032-8)**

Mammalian, microbial and plant cells are traditionally used for the manufacture of products derived directly or semi-synthetically from cellular metabolites. These cells are increasingly used as the cellular machinery to express the recombinant proteins of considerable economic and therapeutic value. Supporting the production of novel therapeutics in mammalian, microbial and plant cells is an impressive array of new methodologies from the field of molecular genetics, proteomics, genomics, analytical biochemistry, and screening. For an industrial bioprocess, manipulation and propagation of cells in order to elicit expression of a product is followed by the recovery, analysis, and identification of these products.

In *Handbook of Industrial Cell Cultures: Mammalian, Microbial and Plant cells*, a diverse team of researchers, technologists, and engineers describe, in simple and practical language the major current and evolving technologies for improving the biocatalytic capabilities of mammalian, microbial and plant cells. The authors present state-of-the art techniques, proven methods, and strategies for industrial screening,