

BIOSEPARATION PROCESS IN FOOD

Kurra Venkata Gopaiah



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Bioseparation steps often pose the greatest impediment to scale-up and commercialization of a process. Bioseparations using conventional techniques (distillation, absorption, solvent extraction, etc.) are often impractical because many biomaterials are of high molecular weight, have very low vapor pressure and are often unstable at elevated temperatures. The separation of multicomponent mixtures of similar physico-chemical properties often makes solvent selectivity requirements very tight. The shrinking list of safe solvents and ever tightening environmental regulations have made selective liquid solvents scarce. Bioseparation steps frequently pose the greatest impediment to scale-up of a process, and given current trends in food manufacturing and new development in biotechnology, bioseparations are likely to become even more critical in the future. The book brings the latest information in the field of bioseparation of enzymes and proteins. It aims to systematically promote and enforce an essential integration between bioseparation processes and biological/chemical and engineering sciences through a series of case studies focusing on separations and separation processes in the context of industrial practice.

Contents: Introduction; Food Process Engineering; Enzymes Activity; Separation in Food Processing; Food and Thermal Processing; Biological Role of Calcium in Food; Bioprocess Parameters in Enzyme Production; Protein; Water and pH Activity in Food; Chemical Food Preservation and Treatment; Heat Transfer in Food Processing.

About the Author



Kurra Venkata Gopaiah attained B.Pharmacy from Dr. M.G.R medical University and M.Pharmacy from Jawaharlal Nehru Technological University. Pursuing Ph.D in Pharmaceutical sciences from Jaipur National University. He has attended and presented 3 National and International conferences and presented papers in various conferences around India. He is working as Asst. Prof. at Vishwa Bharathi College of Pharmaceutical Sciences, Guntur, Andhra Pradesh, India.



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sales@randompublications.com,

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