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Valorization of Food Industry Wastes and ByproductsChapter 20: Energy-Efficient Food Processing: Principles and Practices; Back Cover

Sommario/riassunto

Food is a complex product of biological nature comprised of various macro- and micro-nutrients. All food materials are available in various forms, such as solid, liquid, colloid, and viscous forms, which are processed prior to their consumption. Various processing technologies are employed for these purposes, and these technologies improve the shelf life as well as maintain the nutritional, sensory, physicochemical, and biological qualities of a food. Therefore, food process engineering has a major role in transforming raw materials into final products. As food process engineering becomes more advanced and sophisticated, there is a huge need for specific knowledge of raw materials and effects of various processing treatments on them rather than the specific commodity technology. In this context, the present book Fundamentals of Advanced Food Process Engineering is intended as a general reference book for students and others who are interested in various aspects of processing, packaging, storage, quality control, and assessment systems. The book describes the basic principles and major applications of emerging food processing technologies of the modern research in the field of food process engineering. The above processes are systematically described in three sections through 20 novel chapters in total from different areas of food process engineering. All the chapters have been prepared by high-profile, internationally renewed, and wellexperienced professors and scientists throughout the world--