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Food Technology

Applied Research and Production Techniques

Editors: Murlidhar Meghwal, PhD

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In this era of climate change and food/water/natural resource crises, it is important that current advancements in technology are made taking into consideration the impact on humanity and the environment. This new volume, *Food Technology: Applied Research and Production Techniques*, in the *Innovations in Agricultural and Biological Engineering* book series, looks at recent developments and innovations in food technology and sustainable technologies. Advanced topics in the volume include food processing, preservation, nutritional analysis, quality control, and maintenance as well as good manufacturing practices in the food industries. The chapters are highly focused reports to help direct the development of current food- and agriculture-based knowledge into promising technologies.

Features:

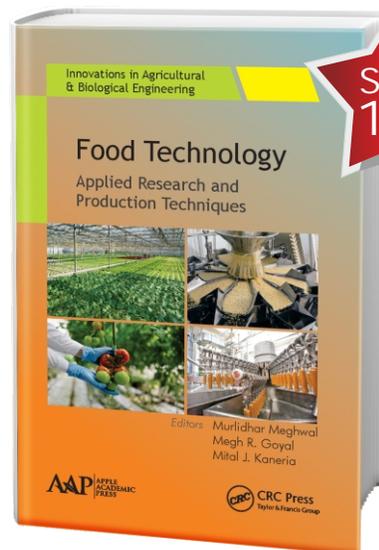
- provides information relevant to technology
- makes suggestions for equipment and devices
- looks at standardization in food technology
- explores new and innovative packaging technology
- studies antimicrobial activities in food
- considers active constituents of foods and provides information about isolation, validation and characterization of major bioactive constituents
- discusses the effect of laws and regulatory guidelines on infrastructure to transform technology into highly value-added products

Food Technology: Applied Research and Production Techniques will be a very useful reference book for food technologists, practicing food engineers, researchers, professors, students of these fields and professionals working in food technology, food science, food processing, and nutrition.

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ABOUT THE EDITORS

Murlidhar Meghwal, PhD, is a distinguished researcher, engineer, teacher, and professor at the Food Technology Division at the Centre for Emerging Technologies, Jain Global Campus, at Jain University, in Bangalore, India.

Dr. Meghwal is working on developing inexpensive, disposable, and biodegradable food containers using agricultural wastes; quality improvement, quality attribute optimization, and freeze-drying of milk. At present, he is doing research and acting as course coordinator for MTech (food tech) courses as well as teaching at the Food Technology Division at Jain University Bangalore, India.

He has several books and many research papers, and he is a reviewer and an editorial board member of several journals. He has attended many national and international seminars and conferences.

Dr. Meghwal received his BTech degree (Agricultural Engineering) in 2008 from the College of Agricultural Engineering Bapatla, Acharya N. G. Ranga Agricultural University, Hyderabad, India. He received his MTech degree (Dairy and Food Engineering) in 2010 from the Indian Institute of Technology Kharagpur, West Bengal, India; and his PhD degree (food process engineering) from the same institute. He worked as research associate at INDUS Kolkata, (a rice parboiling, milling, and processing company) in the eastern part of the India on the development of a quicker and industrial-level parboiling system for paddy and rice milling.

Megh R. Goyal, PhD, PE, is a Retired Professor in Agricultural and Biomedical Engineering from the General Engineering Department in the College of Engineering at University of Puerto Rico—Mayaguez Campus; and Senior Acquisitions Editor and Senior Technical Editor-in-Chief in Agriculture and Biomedical Engineering for Apple Academic Press Inc. He has worked as a Soil Conservation Inspector and as a Research Assistant at Haryana Agricultural University and Ohio State University. He was the first agricultural engineer to receive the professional license in Agricultural Engineering in 1986 from the College of Engineers and Surveyors of Puerto Rico. On September 16, 2005, he was proclaimed as "Father of Irrigation Engineering in Puerto Rico for the twentieth century" by the ASABE, Puerto Rico Section, for his pioneering work on micro irrigation, evapotranspiration, agroclimatology, and soil and water engineering. During his professional career of 45 years, he has received many prestigious awards. A prolific author and editor, he has written more than 200 journal articles and textbooks and has edited over 25 books. He received his BSc degree in engineering from Punjab Agricultural University, Ludhiana, India; his MSc and PhD degrees from Ohio State University, Columbus; and his Master of Divinity degree from Puerto Rico Evangelical Seminary, Hato Rey, Puerto Rico, USA.

Mital J. Kaneria, PhD, is presently working as Assistant Professor in the Department of Biosciences, Saurashtra University, Rajkot, India. He formerly worked as a research associate at GUIDE (Gujarat Institute of Desert Ecology), Bhuj-Kachchh, India, in the terrestrial ecology division on the study of floral diversity, mangrove monitoring, herbarium preparation, and soil-water analytical parameters. He has published more than 40 research papers in national and international journals and has also written book chapters and books. He is a reviewer and editorial board member of many journals, has attended and presented several papers in several national and international seminars and conferences, and has received best paper awards. His current research involves isolation and characterization of bioactive phyto-constituents focused on *in vitro* and *in vivo* antimicrobial, antioxidant, and pharmacological activities of medicinal plants, particularly in relation to safety profiling, ageing, and various acute and chronic diseases and disorders.

Dr. Kaneria received his BSc degree in botany from M.D. Science College, Porbandar, Saurashtra University, Gujarat, India, and his MSc degree in botany from the Department of Biosciences, Saurashtra University, Rajkot, Gujarat, India. He earned his PhD degree in botany under the guidance of Prof. Sumitra Chanda, from the same Institute. During his PhD training, he was awarded a BSR Fellowship from UGC, New Delhi, India, for three years. His doctoral research is based on the phytochemical and pharmacological potency of a selected medicinal plant from Gujarat region.

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