Food Processing and Supply Chain

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Preface

| | Preface | vii |
|----|---|-----|
| | About the Editors | ix |
| 1 | Innovative Technique in Food Processing | 1 |
| | Hina Siddiqui, Poornima Singh and Kaiser Younis | |
| 2 | Technological Innovations in Food Industry | 29 |
| | Pradeep Kumar, Mónika Máté and Poonam Sharma | |
| 3 | Advances in Food Processing | 50 |
| | Poornima Singh and Zainab Sultan | |
| 4 | Emerging Non-Thermal Technologies in Food Processing <i>Priyanka Dubey, Alisha Ahmad, Ambreen Fatima Safvi</i> <i>and Owais Yousuf</i> | 73 |
| 5 | Advances in Minimal Food Processing Pradeep Kumar and Mónika Máté | 85 |
| 6 | Novel Functional Food Products Zainab Sultan, Poornima Singh, Sachchidanand Pandey and Kaiser Younis | 113 |
| 7 | Smart and Sustainable Packaging Technology <i>Alisha Ahmad, Nazia Khursheed and Owais Yousuf</i> | 134 |
| 8 | Smart Warehouse Management System Alweera Ashfaq, Zayeema Anjum and Kaiser Younis | 156 |
| 9 | Innovative Food Supply Chain Management Nuzhat Bashir, Khwaja Osama and Owais Yousuf | 171 |
| 10 | Smart Contracting Food Supply Chain Kumari. Swati | 188 |
| 11 | Efficient and Responsive Food Supply Chain Krati Patel, Chandrabhan Gangwar and Arshi Fatima | 211 |

Preface

We welcome you to the world of innovation and progresses in the food industry. This book is a inclusive exploration of the radical techniques, technological advancements, and management strategies that are revolutionizing the way we process, distribute, and consume food. In an era of rapid change and rising demand for sustainable and efficient practices, it is vital for professionals and researchers to stay informed about the latest trends shaping the future of the food industry.

The chapters presented in this book delve into various facets of innovation in food processing and supply chain management. Each chapter offers valuable insights into the emerging practices, integration of technologies, and novel approaches that are reshaping the landscape of food production and consumption. By exploring these topics, we aim to equip readers with a comprehensive understanding of the advancements and challenges in the field, providing a foundation for future research, industry practices, and policymaking. This book addresses the hurdles faced in adopting modern technologies and management approaches, offering strategies to overcome them effectively. Additionally, it explores the advancements in minimal food processing techniques, which are gaining prominence due to their ability in preservation and shelf life of food.

We hope this book serves as a valuable resource for researchers, practitioners, policymakers, and anyone interested in the future of the food industry. It provides a platform for knowledge exchange, sparking conversations and inspiring further innovation in this vital sector. As we embark on this journey together, let us embrace the transformative power of innovation and strive for a sustainable and resilient food system that nourishes both people and the planet.

Editors

About the Editors

Dr. Owais Yousuf is an Assistant Professor in the Department of Food Technology, Islamic University of Science & Technology, JK. His principal research and teaching interests encompass the field of Food Engineering and Technology. He was awarded Ph.D. (Process & Food Engineering) in 2019 from G. B Pant University of Agriculture & Technology, Pantnagar. He has an overall research and teaching experience of more than four years and has authored more than 40 publications which include research and review articles; book chapters and popular articles. He is an ardent writer and a voracious reader and writes often for various magazines and newspapers as well. He is an Editorial Board member of numerous renowned journals and is also serving as an eminent reviewer for several journals. He has actively participated in more than 50 Conferences, Workshops and Training programs at the National and International level. He is a lifetime member of the Association of Food Scientists and Technologists of India (AFSTI) and the Indian Society of Agricultural Engineers (ISAE).

Dr. Kaiser Younis is an academic and Food Technologist hailing from the Kashmir, India. He embarked on his academic journey at the Islamic University of Science and Technology, Kashmir, where he earned his bachelor's degree in food technology. He pursued his master's program in Food Engineering at Guru Jambheshwar University of Science and Technology, Hisar. He achieved a Ph.D. in Post-Harvest Engineering and Technology from Aligarh Muslim University, Aligarh, with a focus on developing dietary fiber-enriched meat products and extending their shelf life. In 2016, Kaiser initiated his academic career as an assistant professor at Integral University, Lucknow. He made significant contributions to research, authoring 45 manuscripts covering diverse aspects of food engineering and technology, earning recognition within the scientific community. In 2023, he joined the Islamic University of Science and Technology, Kashmir, as an assistant professor in the Department of Food Technology, where he continues to inspire and guide the next generation of aspiring minds while pursuing his research interests.

Dr. Khwaja Osama is an assistant professor of bioprocess and food process engineering at Integral University, Lucknow with a decade of experience in the field. He specializes in applying machine learning, food science, and engineering to improve

food production processes, ensuring food safety, quality, and efficiency. He has taught and researched bioprocess and food process engineering, worked in a multicultural environment, and led personnel. He has mentored and guided undergraduate and postgraduate students on various research projects in food technology, biotechnology, and biomedical engineering. He has published various articles in peer-reviewed journals of high repute. He has attended and organized various national and international conferences. He is a lifetime member of the Association of Food Scientists and Technologists (AFSTI) and the Indian Society for Agricultural Engineers (ISAE). He is passionate about education and innovation and strives to impart his knowledge and skills to his students and colleagues.