

CONTENTS

CONTRIBUTORS	xiii
1. WASTE RELATED TO THE FOOD INDUSTRY: A CHALLENGE IN MATERIAL LOOPS	1
Winfried Russ and Markus Schnappinger	
2. INTRODUCTION TO FOOD WASTE TREATMENT: THE 14001 STANDARDS	15
Vassilis Gekas and Maria Nikolopoulou	
3. BASIC UNIT OPERATIONS IN WASTEWATER TREATMENT	31
Dionissios Mantzavinos	
4. ANAEROBIC DIGESTION OF ORGANIC RESIDUES AND WASTES	53
Gunther Pesta	
5. FUNDAMENTALS AND APPLICATIONS OF ANAEROBIC DIGESTION FOR SUSTAINABLE TREATMENT OF FOOD INDUSTRY WASTEWATER	73
Vasileios I. Diamantis, Eleni Vaiopoulou, and Alexandros Aivasidis	
6. FERMENTATION OF DISTILLER'S WASH IN A BIOGAS PLANT	99
Anselm Gleixner	
7. BREWERY AND WINERY WASTEWATER TREATMENT: SOME FOCAL POINTS OF DESIGN AND OPERATION	109
António G. Brito, João Peixoto, José M. Oliveira, José A. Oliveira, Cristina Costa, Regina Nogueira, and Ana Rodrigues	
8. OLIVE MILL WASTEWATER TREATMENT	133
Evangelia Tsagaraki, Harris N. Lazarides, and Konstantinos B. Petrotos	
9. ANAEROBIC DEGRADATION OF ANIMAL BY-PRODUCTS	159
Roland Kirchmayr, Christoph Resch, Martin Mayer, Stephan Prechtl, Martin Faulstich, Rudolf Braun, and Johann Wimmer	
	xi

xii	Contents
10. UTILIZATION OF WHEY	193
Gunther Pesta, Roland Meyer-Pittroff, and Winfried Russ	
11. UTILIZATION OF PLANT BY-PRODUCTS FOR THE RECOVERY OF PROTEINS, DIETARY FIBERS, ANTIOXIDANTS, AND COLORANTS	209
Vasso Oreopoulou and Constantina Tzia	
12. UTILIZATION OF BY-PRODUCTS IN THE FISH INDUSTRY	233
Kristberg Kristbergsson and Sigurjon Arason	
13. EXAMPLES OF SPECIAL CASE STUDIES IN DIFFERENT BRANCHES	259
Winfried Russ	
14. INCINERATION OF SOLID FOOD WASTE: A PROJECT ABOUT SPENT GRAIN	273
Gerald Zanker, Werner Kepplinger, and Christian Pecher	
15. COMPOSTING OF FOOD AND AGRICULTURAL WASTES	283
Stefan Shilev, Mladen Naydenov, Ventsislava Vancheva, and Anna Aladjadjiyan	
INDEX	303

Utilization of By-Products and Treatment of Waste in the
Food Industry

Oreopoulou, V.; Russ, W. (Eds.)

2007, XVI, 316 p., Hardcover

ISBN: 978-0-387-33511-7