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Nota di contenuto	Frontmatter -- Preface -- Contents -- List of contributing authors -- 1 Introduction - Integration in microalgal biotechnology / Posten, Clemens -- 2 Products from microalgae: An overview / Rosello Sastre, Rosa -- 3 Spirulina production in volcano lakes: From natural resources to human welfare / Thein, Min / Aung, Toe / Pyone Lwin, Khin / Khaing , May Yu / Pulz, Otto -- 4 Case study of a temperature-controlled outdoor PBR system in Bremen / Thomsen, C. / Rill , S. / Thomsen, L. -- 5 Algae for aquaculture and animal feeds / Shields , Robin / Lupatsch, Ingrid -- 6 Algae as an approach to combat malnutrition in developing countries / Hug , Christophe / von der Weid, Denis -- 7 Hydrogen production by natural and semiartificial systems / Happe, Thomas / Lambertz, Camilla / Kwon, Jong-Hee / Rexroth , Sascha / Rögner, Matthias -- 8 The carotenoid astaxanthin from Haematococcus pluvialis / Grewe , Claudia B. / Griehl, Carola -- 9 Screening and development of antiviral compound candidates from phototrophic microorganisms / Walter, Christian -- 10 Natural product drug discovery from microalgae / Niedermeyer , Timo / Brönstrup, Mark -- 11 Biorefining of microalgae: Production of highvalue products, bulk chemicals and biofuels / Eppink, Michel H. M. / Barbosa , Maria J. /

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## Sommario/riassunto

With the high interest in renewable resources, the field of algal biotechnology has undergone a huge leap in importance in recent years. The book *Microalgae Biotechnology - Integration and Economy* treats integrated approaches to bring the high potential of microalgae into application, accelerate the development of really working production processes and put finally the products on the market. Close interaction of biology and process engineering becomes visible in the described processes. The big impact of microalgal biotechnology on our future society is outlined as a desirable consequence of scientific progress. This book will allow protagonists in academia and industry as well as decision makers in industry and politics to get a clear picture of current possibilities and future trends in microalgal biotechnology.

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