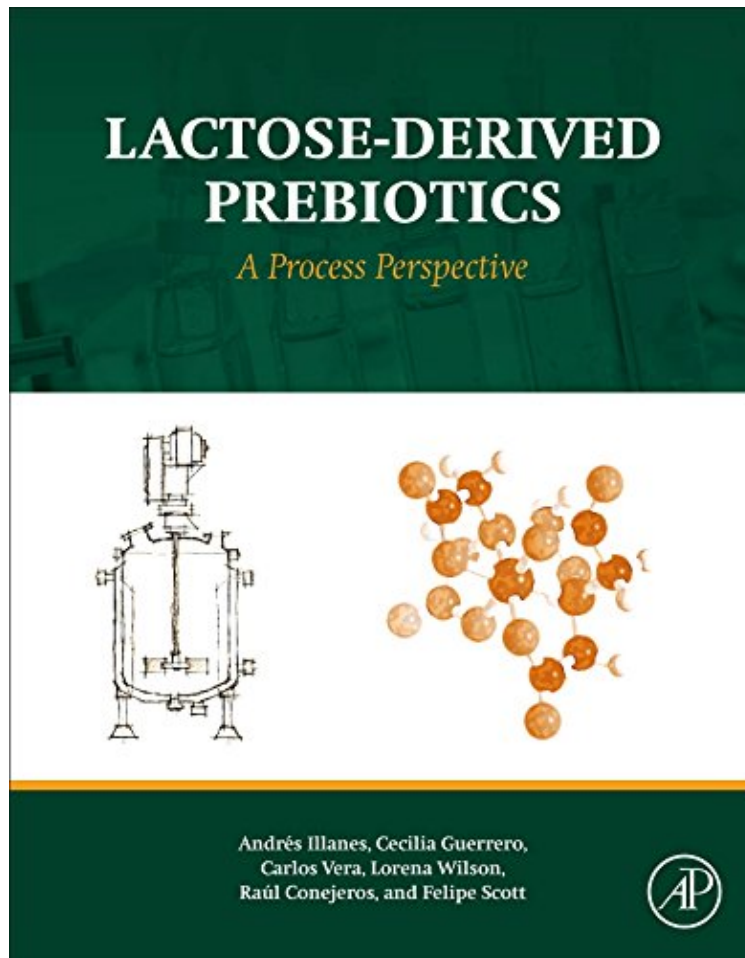


Lactose-Derived Prebiotics: A Process Perspective

Andrés Illanes, Cecilia Guerrero, Carlos Vera, Lorena Wilson, Raúl Conejeros, Felipe Scott
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#5149050 in Books Illanes Andres 2016-07-21Original language:English 9.02 x .88 x 5.98l, 2.69 #File Name: 012802724X312 pagesLactose Derived Prebiotics A Process Perspective | File size: 49.Mb

Andrés Illanes, Cecilia Guerrero, Carlos Vera, Lorena Wilson, Raúl Conejeros, Felipe Scott : Lactose-Derived Prebiotics: A Process Perspective before purchasing it in order to gauge whether or not it would be worth my time, and all praised Lactose-Derived Prebiotics: A Process Perspective:

Lactose-Derived Prebiotics: A Process Perspective is the first scientific reference to provide a comprehensive technological overview of the processes to derive oligosaccharides from dairy for use in functional foods. With their combined 90+ years in industry and research, the authors present the functional properties of prebiotics derived from lactose and the production technology required to make them. The book focuses on process engineering and includes an overview of green chemistry processes involving enzyme biocatalysis, providing detailed coverage of the use of whey lactose as raw material for producing oligosaccharides. The book's focus on processes and products allows the

reader to understand the constraints and impacts of technology on lactose-derived prebiotics. Presents the challenges of and opportunities for deriving oligosaccharides from lactose. Details the technologies and methods required to produce lactose-derived prebiotics, including a comparison between chemical and enzymatic synthesis. Discusses the potential use of whey as a raw material for the synthesis of non-digestible lactose-derived oligosaccharides. Provides a process engineer perspective and includes valuable information about kinetics and reactor design for the enzymatic synthesis of lactose-derived oligosaccharides.

About the Author: Chemical Engineer (Universidad Catlica de Valparaso), M.Sc Biochemical Engineering (Massachusetts Institute of Technology), Full Professor of the Biochemical Engineering School and Head of the Biocatalysis Group at Biotechnology Nucleus of the Pontificia Universidad Catlica de Valparaso. Visiting professor at universities in Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Panama, Peru, Spain and Uruguay. Author of more than 100 publications in ISI journals and several book chapters, editor of two books in enzyme biocatalysis. Member of the editorial boards of *Electronic Journal of Biotechnology* (president), *Process Biochemistry*, *Latin American Journal of Pharmacy* and *Colombian Journal of Biotechnology*. 1997 Regional Award in Science and Technology. 2012 Appointed Honorary Professor at the Universidad Nacional Mayor de San Marcos, Per. Fields of expertise: enzyme biocatalysis, enzyme immobilization, bioreactor design. Recent fields of work are related to enzyme catalysis in organic synthesis, namely synthesis of semi-synthetic β -lactam antibiotics and synthesis of lactose-derived oligosaccharides. Department alumnus and Wolfson student from Chile, Dr Raul Conejeros, undertook his PhD studies on Simulation, Optimisation and Control of Biological Process Systems. He was funded by Agencia Cooperacion Internacional in Chile. In 2009 he was officially given the full professorship at his current University, the School of Biochemical Engineering in Pontificia Universidad Catolica de Valparaiso, Chile, where he started working back in 2005.