

A practice-oriented all-in-one guide that provides the necessary knowledge for effective process development in chromatographic bioseparation, both for preparative-scale and for large-scale industrial applications.

With its focus on process development and bioseparation tasks, this is tailor-made reading for the professional bioengineer in both the biotech and pharmaceutical industries. Following a tried-and-tested concept, this guide has been developed over several years in training courses for biotech and chemical engineers in Europe and the U.S. Coverage begins with an overview of biomolecular properties and their relationship to downstream processing, followed by a detailed treatment of bioprocess chromatography, its dynamics, the mass transfer and dispersion effects that control its performance, the critical design and scale-up relationships, as well as the relevant stationary phases and equipment.



Giorgio Carta received his PhD in Chemical Engineering from the University of Delaware in 1984. Since then he has been a professor in the Department of Chemical Engineering at the University of Virginia, Charlottesville (USA), where his research focuses on transport phenomena and bioseparations. He regularly organizes professional courses on various aspects of bioseparations, including a course on protein chromatography development and scale-up together with Alois Jungbauer.



Alois Jungbauer is the head of protein technology and downstream processing at the Department of Biotechnology of the University of Natural Resources and Applied Life Sciences in Vienna (Austria). For more than 20 years, Professor Jungbauer has worked in biochemical engineering, with a focus on bioseparation, where he has published widely and holds 15 patents. For over 10 years, he has organized a biennial professional course in protein chromatography focused on mass transfer, dispersion, and scale-up.

ISBN 978-3-527-31819-3



www.wiley-vch.de