

AAPS Introductions in the Pharmaceutical Sciences

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Karen M. Nagel

Introduction to Biologic and Biosimilar Product Development and Analysis



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Preface

This book is targeted at those in the pharmaceutical industry who have worked only with small molecule products, in order to give them a brief introduction to the differences in processing, analysis, and delivery of peptides, proteins, monoclonal antibodies, and other biologics. PhD and PharmD students enrolled in introductory pharmaceutical biotechnology courses may also find this book useful. This book is intended to be more focused on pharmaceuticals- and drug development-related aspects of biologics, such as product analysis and delivery methods, with limited focus on the therapeutic applications of the products themselves.

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Downers Grove, IL, USA

Karen M. Nagel

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Karen M. Nagel is an associate professor of Pharmaceutical Sciences at Midwestern University Chicago College of Pharmacy, teaching in the areas of biotechnology, physical pharmacy and dosage form design, nonsterile compounding, and history of pharmacy. She received her BS from St. Louis College of Pharmacy and her Ph.D. in Industrial and Physical Pharmacy from Purdue University. She is an active member of AAPS, has served in leadership roles for the local AAPS Chicagoland discussion group, and is the faculty advisor for her university's student chapter. In addition to her roles with AAPS, she has served in leadership positions in AACP and APhA, and as a member of the NABP Foreign Pharmacy Graduate Equivalency Exam/Pharmacy Curriculum Outcomes Assessment Standard Setting and Review Committee. She has published in the areas of herbal product analysis, pharmacy compounding, and biotechnology.