Record Nr. UNINA9910734849803321 Autore Jindal Anil B **Titolo** Pharmaceutical Process Engineering and Scale-up Principles [[electronic resource] /] / edited by Anil B. Jindal Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 3-031-31380-1 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (226 pages) Collana AAPS Introductions in the Pharmaceutical Sciences, , 2522-8358;; 13 Disciplina 615.19 Soggetti Pharmaceutical chemistry Pharmacology Pharmacy Pharmacovigilance **Pharmaceutics** Drug Safety and Pharmacovigilance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Part I: Physical properties of solids -- Part II: Mixing -- Rapid Mixer Nota di contenuto Granulator -- Fluid bed processing technology -- Drying --Compression -- Pan coating -- Size reduction -- Part III: Mixing and filtration -- Scale-up of liquid mixing process -- Manufacturing process of nanoparticles -- Scale-up of nanoparticle manufacturing process -- Part 4: Manufacturing and scale-up of biotechnologyderived products. . Sommario/riassunto The book offers a comprehensive overview of the unit operations involved in the manufacturing process of solid and liquid dosage forms. along with the scale-up of each operation. This book is a valuable resource for professionals working in the pharmaceutical industry and researchers seeking to develop a comprehensive understanding of the various aspects of the manufacturing process. The book is divided into four sections, covering a range of topics. Section I provide readers with a comprehensive understanding of the basic principles behind the manufacturing process of solid and liquid dosage forms. Section II

covers the different unit operations involved in the production of solid dosage forms, including mixing, granulation, drying, compression,

coating, and size reduction. This section includes case studies to provide readers with practical insights into the scale-up principles involved in the manufacturing process. Section III focuses on the manufacturing and scale-up of liquid formulations, covering topics such as mixing, filtration, and scale-up of liquid mixing process. This section offers a comprehensive understanding of the various aspects of the manufacturing process, including the challenges and opportunities associated with the scale-up of liquid formulations. Finally, Section IV includes two chapters that describe the manufacturing and scale-up of advanced drug delivery systems, including the manufacturing and scale-up of nanoparticles and biotechnology-derived products. This section provides readers with insights into the development of innovative drug delivery systems and the challenges involved in their scale-up. Overall, the book is an essential guide for professionals and researchers seeking a deeper understanding of the manufacturing process. The case studies and practical examples offer valuable insights into the challenges and opportunities involved in the scale-up process, making it an indispensable resource for those involved in the pharmaceutical industry. Only book that is dedicated to pharmaceutical process engineering and scale-up; Contain numerous case studies for easy reference; Covers solid, liquid, and advanced dosage forms.