Record Nr. UNINA9910426055803321 Drug stability and chemical kinetics / / Muhammad Sajid Hamid Akash, **Titolo** Kanwal Rehman, editors Pubbl/distr/stampa Gateway East, Singapore:,: Springer,, [2021] ©2021 981-15-6426-4 **ISBN** Edizione [1st ed. 2020.] 1 online resource (XIV, 284 p. 22 illus., 13 illus. in color.) Descrizione fisica Disciplina 615.19 Soggetti Drug stability Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Nota di contenuto 1 Principles of pharmaceutical analysis in drug stability and chemical kinetics -- 2 Guidelines for drug stability and stability testing -- 3 Chemical kinetics and its applications in drug stability -- 4 Methods and protocols for drug stability studies -- 5 Physical basis of degradation of pharmaceutical products -- 6 Role of microbiological degradation on drug stability -- 7 Role of decomposition on drug stability -- 8 Role of catalysis in drug stability -- 9 Analytical techniques for the assessment of drug stability -- 10 Stability of pharmaceutical products -- 11 Role of kinetic models in drug stability -- 12 Stability studies of vaccines -- 13 Stability studies of proteinous compounds -- 14 Stability studies of extemporaneous pharmaceutical products -- 15 Stability studies of parenteral products -- 16 Stability studies of solid dosage forms. This book comprehensively reviews drug stability and chemical Sommario/riassunto kinetics: how external factors can influence the stability of drugs, and the reaction rates that trigger these effects. Explaining the important theoretical concepts of drug stability and chemical kinetics, and providing numerous examples in the form of illustrations, tables and calculations, the book helps readers gain a better understanding of the rates of reactions, order of reactions, types of degradation and how to prevent it, as well as types of stability studies. It also offers insights

into the importance of the rate at which the drug is degraded and/or decomposed under various external and internal conditions, including

temperature, pH, humidity and light. This book is intended for researchers, PhD students and scientists working in the field of pharmacy, pharmacology, pharmaceutical chemistry, medicinal chemistry and biopharmaceutics.