Record Nr. UNINA9911019671203321 Autore Meyer Thierry **Titolo** Handbook of Polymer Reaction Engineering [Place of publication not identified], : John Wiley & Sons Incorporated, Pubbl/distr/stampa 2005 **ISBN** 3-527-61987-9 Descrizione fisica 1 online resource (1000 pages) Disciplina 547.28 Soggetti Polymerization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto INTRODUCTION TO POLYMER REACTION ENGINEERING, AN INTEGRATED APPROACH.POLYMER CHARACTERIZATION.POLYMER THERMODYNAMICS.POLYCONDENSATION.FREE RADICAL POLYMERIZATION: HOMOGENEOUS.FREE RADICAL POLYMERIZATION: SUSPENSION.Emulsion Polymerization.lonic Polymerization. COORDINATION POLYMERIZATION. Numerical Methods. SCALE-UP. SAFETY IN POLYMERIZATION PROCESSES. Measurement and control of polymerization reactors.POLYMER PROPERTIES.POLYMER MECHANICAL PROPERTIES.POLYMER STABILIZATION AND DEGRADATION.Modification Processes. Thermosets. Fibers. Removable. Novel polymers and Developement.Recent Developments in Polymer Processes. This first book dedicated to all aspects of the field presents our current Sommario/riassunto knowledge in its entirety, covering the necessary disciplines and processes involved - from the monomer to the final product. With an international editor and author team from academia and such leading chemical companies as Bayer, BASF and DuPont, the text adopts a multidisciplinary approach and a practical point of view. Starting with polymer chemistry and thermodynamics, the book goes on to deal with measurement, control, and characterization, before tackling process development, safety issues, scale-up, and modeling. It concludes with

> emerging processes. With its unparalleled depth of coverage, this will be the definitive reference on this topic for years to come. The impulse for this book comes from the Working Party on Polymer Reaction Engineering of the European Federation of Chemical Engineering, and

internationally recognized experts from different fields in industry and academia have come together to put their knowledge in writing. There is nothing like colleagues' comments to recommend a book: 'This handbook is an excellent idea since there is a gap in the literature expecially concerning the significant research and development that has recently been carried out in this field.' 'Authors and editors are active academic and industrial polymer reaction engineers - among the best in the field.' 'In my opinion there is a definite need because there is no similar publication available in English covering engineering aspects'.