Record Nr. UNINA9910830683203321 Autore Friedrich-Schiller Klemm Titolo Comprehensive Cellulose Chemistry, Functionalization of Cellulose. Vol. [Place of publication not identified], : Wiley VCH Imprint, 1998 Pubbl/distr/stampa **ISBN** 1-280-56066-5 9786610560660 3-527-60193-7 Descrizione fisica 1 online resource (404 pages) Disciplina 547.782 Soggetti Cellulose Cellulose - Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Systematics of derivatization: formation and modification of the polymer skeleton; interaction with basic compounds; transition metal complexes; esterification; etherification; oxidation. Future developments: new cellulose compounds; future progress in commercial processes; new supramolecular architectures. Sommario/riassunto Cellulose is not only a major constituent of wood and natural textile fibres. It also serves as a polymeric starting material for products used in many areas of industry and everyday life.; This handbook is divided in two volumes. In the first volume, general information on cellulose structure and properties is given, as well as the principles of homogeneous and heterogenous cellulose reactions and degradation pathways. Analytical methods for the characterization of cellulose are also described.: This second volume of the book covers synthetic routes to the various classes of cellulose derivatives. Structured according to the principles of organic chemistry the achievements of today's reaction theory are considered and supplemented by an extensive collection of working procedures.; The third part deals with the latest developments and future trends in cellulose chemistry - from

> progress in cellulose processing to the supramolecular chemistry of new derivatives of cellulose.; This extensive coverage should make the

book suitable for graduate students entering this field of research. Chemists, biologists and engineers who are active in chemical processing of cellulose should also find useful information in the volumes.