Record Nr. UNINA9910817731203321 Pulp and paper chemistry and technology. Volume 2 Pulping chemistry **Titolo** and technology / / edited by Monica Ek, Goran Gellerstedt, Gunnar Henriksson Berlin, : De Gruyter, c2009 Pubbl/distr/stampa **ISBN** 1-5231-1652-8 1-282-45692-X 9786612456923 3-11-021342-7 Edizione [1st ed.] Descrizione fisica 1 online resource (484 p.) Pulp and Paper Chemistry and Technology;; Volume 2 Collana Classificazione VN 5500 Altri autori (Persone) EkMonica GellerstedtGoran HenrikssonGunnar Disciplina 676 Pulping - Chemistry Soggetti Wood-pulp Papermaking - Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Frontmatter -- Contents -- 1. Overview of Pulp and Paper Processes --Nota di contenuto 2. Wood Handling -- 3. Mechanical Pulping Chemistry -- 4. Mechanical Pulping -- 5. Chemistry of Chemical Pulping -- 6. Pulping Technology -- 7. Kinetics of Chemical Pulping and Adaptation to Modified Processes -- 8. Pulp Washing -- 9. Chemistry of Bleaching of Chemical Pulp -- 10. Bleaching of Pulp -- 11. Production of Bleaching Chemicals at the Mill -- 12. Recovery of Cooking Chemicals: the Treatment and Burning of Black Liquor -- 13. The Recovery of Cooking Chemicals: the White Liquor Preparation Plant -- 14. Towards Increased Closure and Energy Efficiency -- 15. Paper Recycling -- 16. Pulp Characterisation --Backmatter This four volume set covers the entire spectrum of pulp and paper Sommario/riassunto chemistry and technology from starting material to processes and products including market demands. This work is essential for all students of wood science and a useful reference for those working in

the pulp and paper industry or on the chemistry of renewable resources. Volume 2 focuses on creating an understanding of the chemical and technical processes involved in the production of pulp. The work treats wood handling, i.e. barking, chipping, storage and screening processes, chemistry and technology during mechanical and chemical pulp production, including pulping and bleaching chemistry and technology, production of bleaching chemicals at the mill, recovery processes, including the treatment and burning of black liquor and the white liquor preparation plant, paper recycling processes, changes in structure and properties of wood polymers and pulps in the pulping process line, description of the equipment and processes involved in the manufacturing of pulp, pulp characterization, including methods available to evaluate pulp properties, end-product requirements.