Record Nr. UNISALENTO991003232089707536 Autore Davenport, William George Titolo Sulfuric acid manufacture [e-book]: analysis, control and optimization / William G. Davenport and Matthew J. King Amsterdam ; London : Elsevier, 2006 Pubbl/distr/stampa 9780080444284 **ISBN** 0080444288 xiv, 413 p.: ill. (some col.), 1 map; 25 cm Descrizione fisica Altri autori (Persone) King, Matthew J. Disciplina 661.22 Soggetti Sulfuric acid Sulfuric acid industry Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Includes bibliographical references and index Nota di bibliografia Nota di contenuto 24 Chapters, including the following: -- -- Production and Consumption (chapter 2) -- Regeneration of Spent Sulfuric Acid (chapter 5) -- Catalytic Oxidation of SO2 to SO3 (chapter 7) --Production of H2SO4 from SO3 (chapter 9) -- Catalyst Bed (chapters 13-16) -- Optimum Double Contact Acidmaking (chapter 20) -- H2SO4 Making (chapter 23) -- Acid Temperature Control and Heat Recovery (chapter 24) -- Appendices -- Answers to Numerical Problems Sommario/riassunto More sulfuric acid is produced every year than any other chemical. It has a wide range of uses including phosphate fertilizer production, explosives, glue, wood preservatives, and lead-acid batteries. It is also a particularily corrosive and dangerous acid, with extreme environmental and health hazards if not manufactured, used, and regulated properly. <IT>Sulfuric Acid Manufacture: Analysis, Control and Optimization</IT> keeps the important topics of safety and regulation at the forefront as it overviews and analyzes the process of sulfuric acid manufacture. The first nine chapters focus on the chemical plant processes involved in industrial acidmaking, with considerable

data input from the authors' industrial colleagues. The last 15 chapters are dedicated to the mathematical analysis of acidmaking. Both Authors

bring years of hands-on knowledge and experience to the work.

making it an exceptional reference for anyone involved in sulfuric acid research and/or manufacture. * Only book to examine the processes of sulfuric acid manufacture from an industrial plant standpoint as well as mathematical. * Draws on the industrial connections of the authors, through their years of hands-on experience in sulfuric acid manufacture. * A considerable amount of industrial plant data is presented to support the text