Record Nr. UNINA9910380725203321 Corrosion and Fouling Control in Desalination Industry / / edited by **Titolo** Viswanathan S. Saji, Abdelkader A. Meroufel, Ahmad A. Sorour Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-34284-0 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XV, 406 p. 159 illus., 113 illus. in color.) Disciplina 620.11223 Soggetti Tribology Corrosion and anti-corrosives Coatings Materials—Surfaces Thin films Water-supply Waste management Electrochemistry Manufactures Tribology, Corrosion and Coatings Surfaces and Interfaces, Thin Films Water Industry/Water Technologies Waste Management/Waste Technology Manufacturing, Machines, Tools, Processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes index. Note generali Nota di contenuto Cooling Water Systems -- Problems in Cooling Water Treatment --Corrosion Control -- Scale Control -- Cooling Water Blowdown --Green Corrosion Inhibitors -- Determination of Environmental Parameters. This book addresses two critical problems that plague materials that Sommario/riassunto make up components in both desalination and cooling water systems:

corrosion, and fouling. The book addresses various types and

components of industrial desalination technologies with solutions for

controlling corrosion, scaling and biofouling. Issues unique to desalination systems, vital for the production of clean water, are considered as well. Green technologies are discussed throughout, along with environmental and economic considerations. The book presents solutions to the problems encountered by internal and external parts of these systems and will aid professionals that design, operate, and maintain them. It will be valuable to professionals in the materials, corrosion, electrochemical and wastewater industries, as well as chemical engineers. Addresses the corrosion issues facing the conventional and modern water desalination systems; Discusses the causes and remediation of problems caused by corrosion, scaling, and biofouling in water treatment; Offers green solutions, thereby minimizing environmental impact while increasing control and productivity of water systems; Suitable for professionals working with water desalination plants, materials scientists and corrosion engineers.