Record Nr. UNINA9910963877203321 Autore Shields George C (George Charles), <1959, > Computational approaches for the prediction of pKa values / / George Titolo C. Shields, Paul G. Seybold Pubbl/distr/stampa Boca Raton:,: CRC Press,, [2014] ©2014 **ISBN** 1-04-021887-3 0-429-18523-5 1-4665-0878-7 Edizione [1st ed.] Descrizione fisica 1 online resource (164 p.) QSAR in Environmental and Health Sciences Collana QSAR in environmental and health sciences; ; 4 Classificazione SCI013040SCI013050 Disciplina 546/.24 Soggetti Acids - Basicity Dissociation Chemistry, Physical and theoretical Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Contents; Series Introduction; Foreword; Acknowledgments; About the Authors; Preface; Chapter 1: Introduction; Chapter 2: Absolute pKa Calculations; Chapter 3: Relative pKa Calculations; Chapter 4: Quantitative Structure-Acidity Methods; Chapter 5: Oxyacids and Related Compounds; Chapter 6: Nitrogen Acids: Chapter 7: Additional Types of Acids: Chapter 8: Acidities in Nonaqueous Solvents: Chapter 9: Additional Factors Influencing Acidity and Basicity; Chapter 10: Conclusions; References; Back Cover The book describes how one can calculate the acidities and basicities of Sommario/riassunto chemicals (pKa is the dissociation constant). Many drugs, industrial chemicals, biochemicals and pollutants dissociate to form new species under different conditions. The nature of the species present has a profound effect on how the species act, and it is important to be able to estimate which species will be present under different conditions. No other book summarizes how one can estimate the natures of the

species present using modern theoretical methods. This book fills that

need--