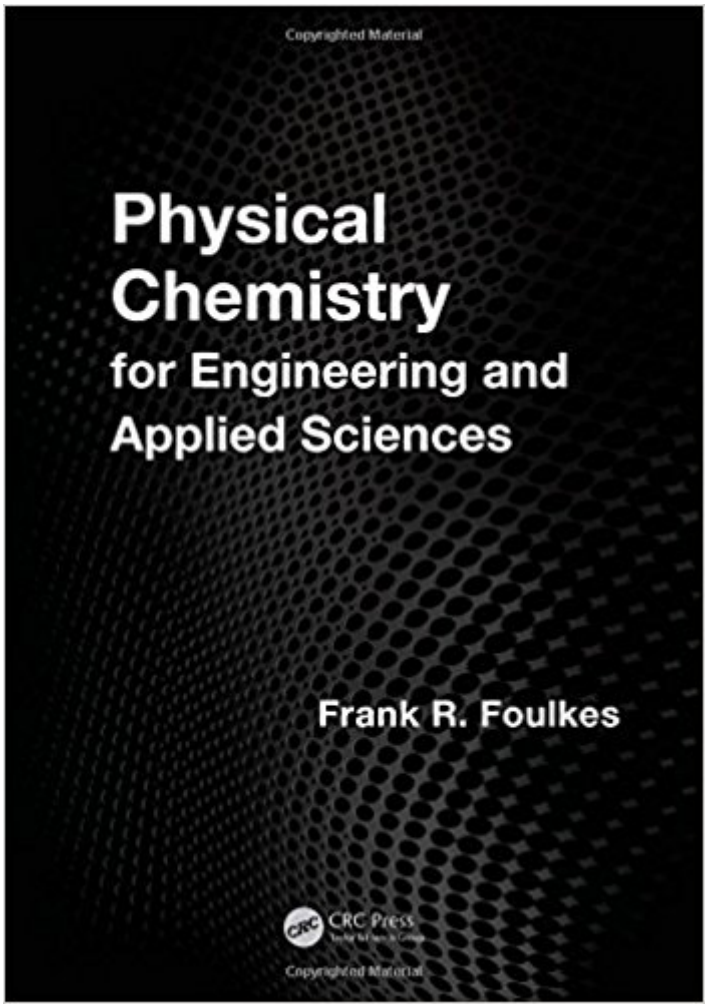
Physical Chemistry For Engineering And Applied Sciences



Synopsis

Physical Chemistry for Engineering and Applied Sciences is the product of over 30 years of teaching first-year Physical Chemistry as part of the Faculty of Applied Science and Engineering at the University of Toronto. Designed to be as rigorous as compatible with a first-year studentÃ¢â ¬â„¢s ability to understand, the text presents detailed step-by-step derivations of the equations that permit the student to follow the underlying logic and, of equal importance, to appreciate any simplifying assumptions made or mathematical tricks employed. In addition to the 600 exercises and end-of-chapter problems, the text is rich in worked non-trivial examples, many of which are designed to be inspiring and thought-provoking. Step-by-step derivation of all equations enables the student to smoothly follow the derivation by sight, and can be understood relatively easily by students with moderate skills and backgrounds in mathematics. Clear and accessible, Physical Chemistry for Engineering and Applied Sciences includes: The answers to all of the 112 worked examples, 99 exercises following many of the worked examples, and 496 end-of-chapter problems Topics not normally seen in introductory physical chemistry textbooks (ionic reaction rates, activities and activity coefficients) or not regularly explained in much detail (electrochemistry, chemical kinetics), with an eye on industrial applications Special appendices that provide detailed explanations of basic integration and natural logarithms for students lacking a background in integral calculus An in-depth chapter on electrochemistry, in which activities and activity coefficients are used extensively, as required for accurate calculations

Book Information

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Customer Reviews

Used this book for a bioengineering thermo class and thought it was too basic for what was required of us. There are also not enough samples or enough explanation to solve the homework problems-unless of course you are a professor that has done the material 1000 times before, such as good old Mr. Foulkes.

Physical Chemistry for Engineering and Applied Sciences Distributions in the Physical and Engineering Sciences: Distributional and Fractal Calculus, Integral Transforms and Wavelets (Applied and Numerical Harmonic Analysis) Advanced Mechanics of Materials and Applied Elasticity (5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Advanced Mechanics of Materials and Applied Elasticity (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Basic Principles and Calculations in Chemical Engineering (8th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamental Concepts and Computations in Chemical Engineering (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Bioprocess Engineering: Basic Concepts (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamentals of Chemical Engineering Thermodynamics (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Elements of Chemical Reaction Engineering (5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Physical Chemistry Plus MasteringChemistry with eText -- Access Card Package (3rd Edition) (Engel Physical Chemistry Series) Surviving Chemistry Review Book: High School Chemistry: 2015 Revision - with NYS Chemistry Regents Exams: The Physical Setting Surviving Chemistry Guided Study Book: High School Chemistry: 2015 Revision - with NYS Chemistry Regents Exams: The Physical Setting Applied Functional Analysis: Main Principles and Their Applications (Applied Mathematical Sciences) Applied Functional Analysis: Applications to Mathematical Physics (Applied Mathematical Sciences) (v. 108) Ace General Chemistry I and II (The EASY Guide to Ace General Chemistry I and II): General Chemistry Study Guide, General Chemistry Review Study Guide: Ace Organic Chemistry I - The EASY Guide to Ace Organic Chemistry I: (Organic Chemistry Study Guide, Organic Chemistry Review, Concepts, Reaction Mechanisms and Summaries) Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Physical Chemistry: Principles and Applications in Biological Sciences (5th Edition) Physical Chemistry for

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