With a focus on chemistry and physics content that is directly relevant to the practice of anesthesia, this text--written in an engaging, conversational style--supplies all the scientific information required for the combined chemistry and physics course for nurse anesthesia students.

Now in its third edition, the text is updated and reorganized to facilitate a greater ease and depth of understanding. The addition of a third author--a practicing nurse anesthetist--enhances the clinical relevance of the scientific information. Clinical scenarios now begin every chapter, and a concluding chapter, new to this edition, provides detailed, step-by-step solutions to the book’s review questions. Also included is a comprehensive list of need-to-know equations.

The third edition retains the many outstanding learning features from earlier editions, including a special focus on gases, the use of illustrations to demonstrate how scientific concepts relate directly to their clinical application in anesthesia, and end-of-chapter summaries and review questions to facilitate self-assessment. This clear, easy-to-read text will help even the most chemistry- and physics-phobic students to master the foundations of these sciences and competently apply them in a variety of clinical situations.

**New to the Third Edition:**
- Increased focus on clinical relevance
- Revised and updated chapters foster ease of understanding
- Clinical application scenarios open each chapter
- A new chapter provides guidance about calculator use and a unique problem-solving method
- Detailed step-by-step solutions clarify answers to end-of-chapter problems
- Comprehensive list of all key equations with explanation of symbols

**Key Features:**
- Written in an engaging, informal style for ease of understanding
- Focuses solely on chemistry and physics principles relevant to nurse anesthetists
- Provides end-of-chapter summaries and review questions
- Includes abundant illustrations that apply theory to practice