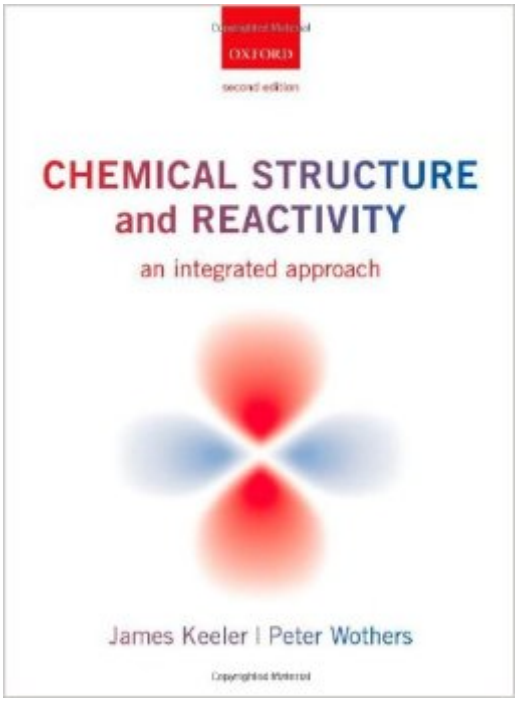
Chemical Structure And Reactivity: An Integrated Approach



Synopsis

Why do certain substances react together in the way that they do? What determines the shape of molecules? And how can we predict whether a particular reaction will happen at all?Such questions lie at the heart of chemistry - the science of understanding the composition of substances, their reactions, and properties. Though introductory chemistry is often broken into three sections-inorganic, organic, and physical-the only way for students to fully understand the subject is to see it as a single, unified whole. Chemical Structure and Reactivity rises to the challenge of depicting the reality of chemistry. Offering a fresh approach to the subject by depicting it as a seamless discipline, the text shows how organic, inorganic, and physical concepts can be blended together in order to achieve the common goal of understanding chemical systems. With a lively and engaging writing style enhanced by vivid illustrations, only Chemical Structure and Reactivity makes teaching chemistry with an integrated approach possible. Special Features--The only introductory text to take a truly integrated approach in explaining the fundamentals of chemistry.--Fosters an orbital-based understanding of reactions, with clear curly-arrow mechanistic detail throughout.--A two-part structure allows flexibility of use: Part I lays down the core of the subject, while Part II describes a series of relatively standalone topics, which can be selected to fit a particular course.--Numerous concepts are illustrated with fully cross-referenced custom-developed online modules, enabling students to develop an understanding through active learning.--Self-test exercises embedded in the text (with solutions at the end of each chapter) and extensive question sets encourage hands-on learning, to help students master the subject and gain confidence.--The Online Resource Centre features a range of additional resources for both students and registered adopters of the book.New to this Edition--A new chapter on symmetry has been added to Part I.--Discussions of organometallic chemistry, spectroscopy, and molecular geometry have been expanded.--Cross references from Part I to Part II have been increased to make the links between core concepts and more advanced topics clearer.--More self-test questions and exercises have been provided.

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Best general chemistry & introductory theoretical chemistry book available.

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