



## 图书基本信息

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## 内容概要

The end of the twentieth centory marks approximately one century of effort in attempting to understand the basis of chemical reactivity and the detailed pathways of reactions of organic compounds. The result can be viewed with some satisfaction in that broad principles have been established and the mechanisms of almost all reactions can now be said to be understood in modest detail. The subject has advanced in the eight years since the first edition was published. In particular, the availability of yet more powerful computers has permitted reaction pathways of processes such as Diels-Alder reactions to be mapped by computation with increasing accuracy and the properties of transition states and inaccessible molecules to be studied. Even a limited number of solvent molecules may be included in the computations which, whatever the precision, has greatly enhanced understanding and increased confidence in results inferred from experimental measurements. Single electron transfer routes have revealed unexpected aspects of what were considered well-understood reactions such as nitration. Linear Free Energy Relationships, increasing in sophistication, continue to contribute powerfully to reactivity theory and the experimental measurement of electronic transmission. The theory and practise of chiral induction has come under increasing scrutiny following the economic importance of asymmetric synthesis while the involvement of metals in organic chemistry has reached the point which makes organometallic chemistry a subject of a size and complexity to warrant separate treatment and too great to be included within a book of this size.



## 书籍目录

Foreword to first edition .Foreword to second editionSymbols and abbreviationsMechanistic designations1 Models of chemical bonding 1.1 Covalency and molecular structure 1.2 Approximate molecular orbital theory 1.3 Properties of covalent bonds 1.4 Intermolecular forces Problems References2 Kinetics and thermodynamics

2.1 Enthalpy 2.2 Entropy 2.3 The Gibbs function, G 2.4 Factors that contribute to entropy 2.5 Chemical equilibrium 2.6 Some useful thermodynamic relationships 2.7 The application of thermodynamics to rate processes 2.8 Properties of the transition state 2.9 The uses of activation parameters 2.10 The location of the transition state Problems References3 Reagents and reaction mechanisms 3.1 Polar and radical pathways 3.2 A classification of fundamental reaction types 3.3 Reaction mechanism 3.4 Electron supply and demand 3.5 Transition-state properties an structural change Problems References4 Correlation of sturcture with reactivity 4.1 Electronic demansds 4.2 The Hammett equation 4.3 Substituent constants e 4.4 Theories of substituent effects 4.5 Interpretation of e-values 4.6 Reaction constans, p 4.7 Deviations from the Hammett equation 4.8 Dual-parameter correlations : the fowering of LFER 4.9 Molecular orbiatl considerations 4.10 Cross-interactin terms Problems References5 Solvent effects 5.1 The structure of liquids 5.2 Solutions 5.3 Solvation.......6 Acids and bases, electrophiles and nucleophiles7 Kinetic isotope effects8 Steric and conformational properties9 Homogeneous catalysis10 Substitution reactions at carbon11 Elimination reactions12 Polar addition reactions13 Intramolecular reactions14 Pericyclic reactions15 Reactions via free readicals16 Organic photobemistryIndex





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