

1. Record Nr.	UNINA9911019857103321
Titolo	Advances in enzymology and related subjects of biochemistry . Volume XI // edited by F. F. Nord
Pubbl/distr/stampa	New York, : Wiley, 1951
ISBN	1-282-68221-0 9786612682216 0-470-12256-0 0-470-12333-8
Edizione	[11th ed.]
Descrizione fisica	1 online resource (482 p.)
Collana	Advances in enzymology and related subjects of biochemistry ; ; 11
Altri autori (Persone)	NordF. F
Disciplina	612.0151
Soggetti	Clinical enzymology Enzymes
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 and index.
Nota di contenuto	ADVANCES IN ENZYMOLOGY; CONTENTS; The Nature of Entropy and Its Role in Biochemical Processes; I. The Nature of Entropy; A. Introduction; B. Historical; C. Some Fundamental Definitions; D. Entropy of Systems in Equilibrium; E. Entropy of Irreversible Processes and Open Systems; F. Procedures for Experimental Determination of Entropy Changes; II. Entropy Changes in Some Selected Processes; A. Ehtropy and Change of State of a Gas; B. Entropy of Mixing: Osmotic and Diffusion Processes; C. Entropy and Elasticity of Fibers; D. Entropy and Chemical Equilibria and Reactions III. Conclusions about the Nature and Role of EntropyReferences; Reactions at Interfaces in Relation to Biological Problems; I. Introduction; II. Distribution of Soluble Ions at Interfaces; III. Partition of SH Groups between Surface and Bulk Phases; A. Nonionogenic Thiols; B. Ionogenic Thiols; C. Effect of Variation in Ionic Strength; D. Effect of Variation in Bulk Thiol Concentration; E. Significance for Studies with Enzymes; F. Redox Indicators; G. Other Surface SH Problems; IV. Partition of Reactants between Surface and Bulk Phases; V. Factors Influencing Rate of an Interfacial Reaction A. Pressure, Temperature, and Tightness of Packing of Molecules or

Ions in the Interface; B. Stereochemical Configuration of Reactant Molecules; C. Changed Ionic Concentrations at the Interface; D. Rates of Diffusion to and from the Interface of Reactants and Products, Respectively; VI. Oxidation and Reduction Phenomena in an Interface; A. Toxicity of Ions; B. Effect of Position of Double Bonds in Sterols on Their Oxidation; C. Photooxidation and Surface Potential; VII. Some Particular Surface Reactions; A. Digestion of Esters by Pancreatin; B. Action of Snake Venoms on Surface Films
C. Photochemical Reactions in Monolayers
VIII. Interactions and Complex Formation in Monolayers; IX. Reactions Involving Two Surface Phases; X. General Discussion; References; Chlorophyll Fluorescence and Photosynthesis; I. Introduction; II. The Work of Kautsky et al; III. Studies of the Utrecht-Delft Group; IV. The Work of McAlister and Myers; V. The Investigations of Franck et al; VI. Observation of Van der Veen and Others; VII. Conclusions; References; Thiol Groups of Biological Importance; I. Introduction; II. Some Properties of Thiols; A. Oxidation by Oxygen; B. Other oxidizing Agents
C. Photochemical Oxidation-Reduction
D. Oxidation-Reduction Potentials; E. Alkylating Agents; F. Mercaptides; G. Other Reactions of Biological Significance; III. Thiol Groups in Proteins; A. Types of -SH Groups; B. Denaturing Agents; C. Oxidizing Agents; 1. Ferricyanide; 2. Porphyrindin.; 3. Iodosobenzoate; 4. Iodine; 5. Other Oxidizing Agents; D. Alkylating Agents; E. Mercaptide-Forming Agents; F. Reducing Agents; IV. Myosin; V. Thiol Enzymes; A. Thiol Groups Essential in Enzyme Activity; B. Thiol Reagents for Enzyme Activity; 1. Oxidizing Agents; 2. Mercaptide-Forming Agents
3. Alkylating Agents

Sommario/riassunto

Advances in Enzymology and Related Areas of Molecular Biology is a seminal series in the field of biochemistry, offering researchers access to authoritative reviews of the latest discoveries in all areas of enzymology and molecular biology. These landmark volumes date back to 1941, providing an unrivaled view of the historical development of enzymology. The series offers researchers the latest understanding of enzymes, their mechanisms, reactions and evolution, roles in complex biological process, and their application in both the laboratory and industry. Each volume in the series featu
