

1. Record Nr.	UNISALENTO991000105859707536
Autore	Dean, David
Titolo	The Thirties : recalling the English architectural scene / David Dean
Pubbl/distr/stampa	London : Trefoil, 1983
Descrizione fisica	144 p. : ill. ; 34 cm
Soggetti	Architettura inglese
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910827658903321
Autore	Stephanos Joseph J.
Titolo	Chemistry of metalloproteins : problems and solutions in bioinorganic chemistry / / Joseph J. Stephanos, Anthony W. Addison
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2014 ©2014
ISBN	1-118-80152-0 1-118-80223-3 1-118-80149-0
Descrizione fisica	1 online resource (451 p.)
Collana	Wiley Series in Protein and Peptide Science
Disciplina	572/.6076
Soggetti	Metalloproteins
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	Chemistry of Metalloproteins: Problems and Solutions in Bioinorganic Chemistry; Contents; Preface; 1 Introduction; Proteins: Formation, Structures, and Metalloproteins; Organelles and Their Functions; Structure of DNA; Cell Growth and Division; Protein Synthesis; Common Natural -Amino Acids; Peptide Chain Formation; Protein physiological

functions; Structural Features of Proteins; Causes of Polypeptide Chain Folding; Metal Amino Acid Complexes; Comparison of P-O versus M-O Bond Scission Rates for Row 3 Elements; Redox Advantages: Sulfur versus Phosphorus; Bioenergetic Phosphate Derivatives

References2 Alkali and Alkaline Earth Cations; References; 3 Nonredox Metalloenzymes; Carboxypeptidases; What are the main functions of carboxypeptidases?; What are the main types of carboxypeptidases?; What are the requirements to stimulate carboxypeptidase-A and carboxypeptidase-B?; What are the main structural features of carboxypeptidase-A and carboxypeptidase-B?; How can  $\text{Zn}^{2+}$  be extracted from carboxypeptidase-A and carboxypeptidase-B?What are the consequences of metal ion removal?; What are the spectral consequences when  $\text{Zn}^{2+}$  is replaced by  $\text{Co}^{2+}$  in carboxypeptidases? Describe the role of  $\text{Zn}^{2+}$  in carboxypeptidase-A and carboxypeptidase-B.Design models to mimic the role of the metal ion in carboxypeptidase-A and carboxypeptidase-B.; Carbonic Anhydrase; What are the main functions of carbonic anhydrase?; Conversion of carbonic acid to  $\text{CO}_2$  and  $\text{H}_2\text{O}$  is a spontaneous process. Why is carbonic anhydrase needed?; What are the main structural and chemical features of carbonic anhydrase?; Describe the role of the metal ion in carbonic anhydrase.; What are the possible mechanisms that describe the action of carbonic anhydrase? Design models for the carbonic anhydrase, and what do they reveal?

Rate Constants; Alcohol Dehydrogenase; What is the catalytic role and the structural features of the alcohol dehydrogenases?; What is the sequence of events during the reaction of alcohol dehydrogenase?; A number of model systems have been investigated to study the influence of  $\text{Zn}^{2+}$  on the reactivity of the carbonyl; give an example.; References; 4 Copper Proteins; Introduction; Electronic Spectra of Copper Ions; What are the structural and spectral features of copper(II)-peptide complexes in the visible region?

ESR Spectra of Copper IonsHow can ESR spectra be used as a ``spectral probe to study copper enzymes?; Define; How do the nuclear-spin of  $\text{Cu}^{2+}$  ion and the attached ligands affect the ESR signal? How can the hyperfine and superhyperfine splitting be used as a ``spectral probe for studying the copper enzymes?; How may the spectrochemical series and the stereochemistry affect g-values of  $\text{Cu}^{2+}$  ion and what is the significance of All-gII trend?; Copper Proteins Identify the significant roles of copper in the biological process, classify, give examples, and explain their functions and main chemical properties.

## Sommario/riassunto

"This question-and-answer guide on metalloproteins reflects the broad range of aspects within this branch of protein science. It is divided into seven parts, addressing: the cell, the alkali and alkaline earth cations, non-redox metalloenzymes, carboxypeptases, carbonic anhydrase, alcohol dehydrogenase, copper proteins, electronic and ESR spectra of copper ions, plastocyanin, stellacyanin, superoxide dismutase, electronic spectra of iron ions, Mossbauer spectroscopy of iron ions, ESR spectra of iron (III), iron bioavailability, siderophores, non-heme iron proteins, ferritin, transferrin, dioxygenase-iron proteins, rubredoxin, 2Fe-2S Ferredoxins, 4Fe-4S Ferredoxins and hiPIP, aconitase, hydroxylases, hydrogenases, nitrogenases, binuclear Fe proteins, hemerythrin, ribotide reductase, purple acid phosphate and methane mono-oxygenase, heme proteins, myoglobin and hemoglobin, electronic spectra of hemoproteins, cytochrome C, peroxidase, cytochrome P450, ESR spectra of hemoproteins, vitamin B12, and chlorophyll. Each section ends with suggestions for further reading"--

Provided by publisher.

