

1. Record Nr.	UNINA9910144010803321
Titolo	Modern biooxidation [[electronic resource] ] : enzymes, reactions, and applications // edited by Rolf D. Schmid and Vlada B. Urlacher
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2007
ISBN	1-281-08794-7 9786611087944 3-527-61152-5 3-527-61153-3
Descrizione fisica	1 online resource (320 p.)
Altri autori (Persone)	SchmidRolf <1942-> UrlacherVlada B
Disciplina	541.393 572.791
Soggetti	Enzymology Oxidizing agents Monooxygenases Electronic books.
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	Modern Biooxidation; Contents; Preface; List of Contributors; 1 Biooxidation with PQQ- and FAD-Dependent Dehydrogenases; 1.1 Introduction; 1.2 Basic Technical Information Regarding Membrane-bound Enzymes; 1.2.1 Preparation of Cytosolic Fractions and Membrane Fractions; 1.2.2 EDTA Treatment of the Membrane Fraction Carrying PQQ as Coenzyme; 1.2.3 Assays of Enzyme Activity; 1.3 PQQ-Dependent Dehydrogenases; 1.3.1 Alcohol Oxidation; 1.3.1.1 Membrane-Bound Alcohol Dehydrogenase (ADH III); 1.3.1.2 Soluble Alcohol Dehydrogenases 1.3.1.3 Cyclic Alcohol Dehydrogenase (Secondary Alcohol Dehydrogenase), Membrane-Bound 1.3.2 Glucose Oxidation; 1.3.2.1 Membrane-Bound D-Glucose Dehydrogenase (m-GDH); 1.3.2.2 Soluble D-Glucose Dehydrogenase (s-GDH); 1.3.2.3 Applications of Quinoprotein GDHs as D-Glucose Sensors; 1.3.3 Polyol Oxidation; 1.3.3.1 D-Arabitol Dehydrogenase, Membrane-Bound; 1.3.3.2 meso-

Erythritol Oxidation Dehydrogenase, Membrane-Bound; 1.3.3.3 D-Gluconate Oxidizing Polyol Dehydrogenase, Membrane-Bound; 1.3.3.4 Glycerol Dehydrogenase, Membrane-Bound; 1.3.3.5 D-Mannitol Dehydrogenase, Membrane-Bound  
1.3.3.6 Ribitol Dehydrogenase, Membrane-Bound  
1.3.3.7 D-Sorbitol Dehydrogenase, Membrane-Bound; 1.3.3.8 L-Sorbosone Dehydrogenase, Membrane-Bound; 1.3.4 Quinate Oxidation. Membrane-Bound Quinate Dehydrogenase (QDH); 1.4 FAD-Dependent Dehydrogenase; 1.4.1 D-Fructose Dehydrogenase, Membrane-Bound; 1.4.2 D-Gluconate Dehydrogenase, Membrane-Bound; 1.4.3 D-Hexosamine Dehydrogenase, Membrane-Bound; 1.4.4 2-Keto-D-gluconate Dehydrogenase, Membrane-Bound; 1.4.5 Sorbitol Dehydrogenase, Membrane-Bound; 1.5 Miscellaneous; 1.5.1 Aldehyde Dehydrogenase, Membrane-Bound; References  
2 Catalytic Applications of Laccase  
2.1 Properties of Classical Laccase;  
2.1.1 Structure; 2.1.2 Enzymology; 2.1.3 As Industrial Catalysts; 2.1.3.1 Advantages; 2.1.3.2 Shortcomings; 2.2 Applications of Laccase for Industrial Oxidation Processes; 2.2.1 Laboratory-Level Trials; 2.2.1.1 Delignification; 2.2.1.2 Dye and Colorant Bleaching; 2.2.1.3 Bioremediation; 2.2.1.4 Other Degradation Applications; 2.2.1.5 Functional Biotransformation; 2.2.1.6 Biosensing; 2.2.1.7 Desirable Application Modes; 2.2.2 Commercialized Applications; 2.2.2.1 Preventing Taint in Cork Stoppers; 2.2.2.2 Denim Bleaching  
2.2.2.3 Paper Mill Effluent Treatment and Cardboard Strengthening  
2.2.2.4 Major Hurdles to Further Development from Laboratory Trials; 2.3 More Recent Developments; 2.3.1 Novel Laccase Catalytic Systems; 2.3.1.1 New Laccases; 2.3.1.2 New Mediators; 2.3.1.3 Cooperation with Other Enzymes; 2.3.2 New Leads for Laccase Application; 2.3.2.1 Laccase-Based Defense Against Biological and Chemical Warfare Agents; 2.3.2.2 Degradation of PAH, Plastics, or Lipids; 2.3.2.3 Enzymatic Fuel Cells/Batteries; 2.3.2.4 Novel Synthetic Applications; 2.3.2.5 Biorefinery; 2.4 Further Developing Laccase Catalysis  
2.4.1 Laccase Engineering

---

## Sommario/riassunto

Filling a gap in the literature, leading expert editors and top international authors present the field of biooxidation from an academic and industrial point of view, taking many examples from modern pharmaceutical research. Topics range from the application of different monooxygenases to applications in the pharmaceutical industry, making this volume of high interest not only for those working in biotechnology but also for organic synthetic chemists, among others.

---

2. Record Nr.	UNINA9910702238003321
Titolo	Midway Well NW quadrangle, California--Baja California Norte : 7.5-minute series // produced by the United States Geological Survey
Pubbl/distr/stampa	[Reston, Va.] : , : U.S. Department of the Interior, U.S. Geological Survey, , 2012-
Descrizione fisica	1 online resource (maps) : color
Soggetti	Maps. Imperial County (Calif.) Maps All American Canal (Calif.) Maps Baja California (Mexico : State) Maps California All American Canal California Imperial County Mexico Baja California (State)
Lingua di pubblicazione	Inglese
Formato	Materiale cartografico a stampa
Livello bibliografico	Periodico
Note generali	Relief shown by contours and spot heights. Includes location map and index of adjoining quadrangles.