

1. Record Nr.	UNINA9910959178603321
Titolo	Detergents : types, components and uses // Emilie T. Hagen, editor
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Science Publishers, c2010
ISBN	1-61728-241-3
Edizione	[1st ed.]
Descrizione fisica	1 online resource (185 p.)
Collana	Biochemistry research trends
Altri autori (Persone)	HagenEmilie T
Disciplina	668/.14
Soggetti	Detergents
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	Intro -- DETERGENTS: TYPES, COMPONENTS AND USES -- DETERGENTS: TYPES, COMPONENTS AND USES -- CONTENTS -- PREFACE -- Chapter 1 BIOSURFACTANTS AND THEIR USES IN THE PETROLEUM INDUSTRY AND HYDROCARBON POLLUTION REMEDIATION -- ABSTRACT -- 1. INTRODUCTION -- 2. BASIC CONCEPTS -- 2.1. Biosurfactant Nature -- 2.2. Surface and Interfacial Tension -- 2.3. Reduction of Surface and Interfacial Tension by Biosurfactants and Critical Micelle Concentration -- 2.4. Solubilization Capability -- 2.4. Solubilization Capability -- 3. CLASSIFICATION OF BIOSURFACTANTS -- 3.1. Low-Molecular-Weigh Biosurfactants -- 3.2. High-Molecular-Weigh Biosurfactants -- 4. TOXICITY AND BIODEGRADABILITY OF BIOSURFACTANTS -- 5. APPLICATIONS -- 5.1. Hydrocarbon Pollution Bioremediation -- 5.1.1. Laboratory assays using liquid-biphasic systems -- 5.1.2. Biosurfactants in soil bioremediation -- 5.1.3. Biosurfactants in bioremediation of marine pollution -- 5.2. Pretroleum Industry -- 5.2.1. Biosurfactant application for oil recovery -- 5.2.2. Other uses -- 6. CONCLUSION -- REFERENCES -- Chapter 2 DETERGENTS IN MOLECULAR BIOLOGY: DNA EXTRACTION AND PURIFICATION -- ABSTRACT -- INTRODUCTION -- Genomics and Molecular Epidemiology Studies -- DNA Extraction Techniques -- Detergent Based DNA Extraction Techniques -- Downstream Applications of Detergent Extracted DNA's -- Viral DNA Extraction from Peripheral Blood -- CONCLUSION -- REFERENCES -- Chapter 3 CARBOHYDRASES IN DETERGENTS -- ABSTRACT -- INTRODUCTION -- History and Developoment of Enzyme Usage in Detergents -- Before

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Sommario/riassunto

Reviews research in the field of detergent types, their components and uses. This title also discusses biosurfactants and their uses in the petroleum industry and in hydrocarbon pollution remediation, and, detergent-based DNA extraction techniques in molecular biology.