

1. Record Nr.	UNINA9910143297903321
Titolo	Chemistry and technology of surfactants [[electronic resource] /] / edited by Richard J. Farn
Pubbl/distr/stampa	Oxford ; ; Ames, Iowa, : Blackwell Pub., 2006
ISBN	1-280-74827-3 9786610748273 0-470-98859-2 1-4051-7179-0
Descrizione fisica	1 online resource (338 p.)
Altri autori (Persone)	FarnRichard J
Disciplina	541.33 541/.33 668.1
Soggetti	Surface chemistry Surface active agents
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 and Technology of Surfactants; Contents; Contributors; Preface; Glossary; 1 What Are Surfactants?; 1.1 History and applications of surfactants; 1.1.1 Introduction; 1.1.2 Properties and other criteria influencing surfactant choice; 1.1.3 Surfactant applications; 1.1.4 Conclusion; Appendix: Application guide; 1.2 Surfactant market overview: importance in different industries; 1.2.1 Introduction; 1.2.2 Consumer; 1.2.3 Industrial; 2 The Basic Theory; 2.1 Molecular structure of surfactants; 2.2 Surface activity; 2.2.1 Surface tension; 2.2.2 Interfacial tension 2.2.3 Surface and interfacial tension reduction2.2.4 Test methods for surface and interfacial tension measurements; 2.3 Self-assembled surfactant aggregates; 2.3.1 Micelles and critical micelle concentration; 2.3.2 Aggregate structures and shapes; 2.4 Adsorption of surfactants at surfaces; 2.4.1 Adsorption at liquid-gas and liquid-liquid interfaces; 2.4.2 Adsorption at liquid-solid interface; Acknowledgement; References; 3 Applied Theory of Surfactants; 3.1 Introduction; 3.2 Detergency; 3.2.1 Fundamental processes; 3.2.2 Basic formulae of

detergents and cleansers

3.2.3 Adsorption at the solid-liquid interface 3.2.4 Surface tension and wetting; 3.2.5 Interplay of surfactants with other detergent ingredients; 3.3 Phase behaviour of surfactants; 3.3.1 Introduction; 3.3.2 Surfactant phases; 3.3.3 Impact of the phase behaviour on detergency; 3.4 Emulsions; 3.4.1 Introduction; 3.4.2 Emulsion types; 3.4.3 Breakdown of emulsions; 3.5 Foaming and defoaming; 3.5.1 Introduction; 3.5.2 Stabilising effects in foams; 3.5.3 Correlation of foamability with interfacial parameters; 3.5.4 Foam control; 3.6 Rheology of surfactant solutions; 3.6.1 Introduction 3.6.2 Rheological terms 3.6.3 Rheological behaviour of monomeric solutions and non-interacting micelles; 3.6.4 Entanglement networks of rod-like micelles; 3.6.5 The rheological behaviour of bilayer phases; References; 4 Anionic Surfactants; 4.1 Sulphonates; 4.1.1 Alkylbenzene sulphonates; 4.1.2  $\alpha$ -Olefin sulphonates; 4.1.3 Paraffin sulphonates; 4.1.4 Sulphonated methyl esters; 4.1.5 Sulphonated fatty acids; 4.1.6 Sulphosuccinates; 4.2 Sulphates; 4.2.1 Alkyl sulphates; 4.2.2 Alkyl ether sulphates; 4.3 Phosphate esters; 4.4 Carboxylates; 4.4.1 Soap; 4.4.2 Ether carboxylates 4.4.3 Acyl sarcosinates 4.4.4 Alkyl phthalamates; 4.4.5 Isethionates; 4.4.6 Taurates; References; 5 Non-ionic Surfactants; 5.1 Introduction; 5.2 General alkoxylation reactions; 5.3 Alkyl phenol ethoxylates; 5.4 Fatty alcohol ethoxylates; 5.5 Polyoxethylene esters of fatty acids; 5.6 Methyl ester ethoxylates; 5.7 Polyalkylene oxide block co-polymers; 5.8 Amine ethoxylates; 5.9 Fatty alkanolamides; 5.10 Amine oxides; 5.11 Esters of polyhydric alcohols and fatty acids; 5.12 Glycol esters; 5.13 Glycerol esters; 5.14 Polyglycerol esters; 5.15 Anhydrohexitol esters 5.16 Polyoxyalkylene polyol esters

---

## Sommario/riassunto

Surfactants are used throughout industry as components in a huge range of formulated products or as effect chemicals in the production or processing of other materials. A detailed understanding of the basis of their activity is required by all those who use surfactants, yet the new graduate or postgraduate chemist or chemical engineer will generally have little or no experience of how and why surfactants work. Chemistry & Technology of Surfactants is aimed at new graduate or postgraduate level chemists and chemical engineers at the beginning their industrial careers and those in I

---

2. Record Nr.	UNINA9910825164703321
Autore	Boyer Pascal
Titolo	Minds make societies : how cognition explains the world humans create // Pascal Boyer
Pubbl/distr/stampa	New Haven, Connecticut : , : Yale University Press, , [2018] ©2018
ISBN	0-300-23517-8
Descrizione fisica	1 online resource (372 pages)
Disciplina	153
Soggetti	Cognition and culture Cognition Social evolution Socialization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages [295]-343) and index.
Nota di contenuto	Front matter -- Contents -- Preface -- Introduction: Human Societies through the Lens of Nature -- Six Problems in Search of a New Science -- One. What Is the Root of Group Conflict? Why "Tribalism" Is Not an Urge but a Computation -- Two. What Is Information For? Sound Minds, Odd Beliefs, and the Madness of Crowds -- Three. Why Are There Religions?...And Why Are They Such a Recent Thing? -- Four. What Is the Natural Family? From Sex to Kinship to Dominance -- Five. How Can Societies Be Just? How Cooperative Minds Create Fairness and Trade, and the Apparent Conflict between Them -- Six. Can Human Minds Understand Societies? Coordination, Folk Sociology, and Natural Politics -- Conclusion: Cognition and Communication Create Traditions -- Notes -- Bibliography -- Acknowledgments -- Index
Sommario/riassunto	A watershed book that masterfully integrates insights from evolutionary biology, genetics, psychology, economics, and more to explore the development and workings of human societies "There is no good reason why human societies should not be described and explained with the same precision and success as the rest of nature." Thus argues evolutionary psychologist Pascal Boyer in this uniquely innovative book. Integrating recent insights from evolutionary biology, genetics,

psychology, economics, and other fields, Boyer offers precise models of why humans engage in social behaviors such as forming families, tribes, and nations, or creating gender roles. In fascinating, thought-provoking passages, he explores questions such as, Why is there conflict between groups? Why do people believe low-value information such as rumors? Why are there religions? What is social justice? What explains morality? Boyer provides a new picture of cultural transmission that draws on the pragmatics of human communication, the constructive nature of memory in human brains, and human motivation for group formation and cooperation.

3. Record Nr.	UNINA9910557546703321
Autore	Rouphael Youssef
Titolo	Toward a Sustainable Agriculture Through Plant Biostimulants : From Experimental Data to Practical Applications
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 online resource (708 p.)
Soggetti	Biology, life sciences Research and information: general Technology, Engineering, Agriculture, Industrial processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Over the past decade, interest in plant biostimulants has been on the rise, compelled by the growing interest of researchers, extension specialists, private industries, and farmers in integrating these products in the array of environmentally friendly tools to secure improved crop performance, nutrient efficiency, product quality, and yield stability. Plant biostimulants include diverse organic and inorganic substances, natural compounds, and/or beneficial microorganisms such as humic acids, protein hydrolysates, seaweed and plant extracts,

silicon, endophytic fungi like mycorrhizal fungi, and plant growth-promoting rhizobacteria belonging to the genera *Azospirillum*, *Azotobacter*, and *Rhizobium*. Other substances (e.g., chitosan and other biopolymers and inorganic compounds) can have biostimulant properties, but their classification within the group of biostimulants is still under consideration. Plant biostimulants are usually applied to high-value crops, mainly greenhouse crops, fruit trees and vines, open-field crops, flowers, and ornamentals to sustainably increase yield and product quality. The global biostimulant market is currently estimated at about \$2.0 billion and is expected to reach \$3.0 billion by 2021 at an annual growth rate of 13%. A growing interest in plant biostimulants from industries and scientists was demonstrated by the high number of published peer-reviewed articles, conferences, workshops, and symposia in the past ten years. This book compiles several original research articles, technology reports, methods, opinions, perspectives, and invited reviews and mini reviews dissecting the biostimulatory action of these natural compounds and substances and beneficial microorganisms on crops grown under optimal and suboptimal growing conditions (e.g., salinity, drought, nutrient deficiency and toxicity, heavy metal contaminations, waterlogging, and adverse soil pH conditions). Also included are contributions dealing with the effect as well as the molecular and physiological mechanisms of plant biostimulants on nutrient efficiency, product quality, and modulation of the microbial population both quantitatively and qualitatively. In addition, identification and understanding of the optimal method, time, rate of application and phenological stage for improving plant performance and resilience to stress as well as the best combinations of plant species/cultivar  $\times$  environment  $\times$  management practices are also reported. We strongly believe that high standard reflected in this compilation on the principles and practices of plant biostimulants will foster knowledge transfer among scientific communities, industries, and agronomists, and will enable a better understanding of the mode of action and application procedures of biostimulants in different cropping systems.

---