

Contents

Part I Microbial Biofouling and Microbially Influenced Corrosion

Why Microorganisms Live in Biofilms and the Problem of Biofouling	3
Hans-Curt Flemming	
The Effect of Substratum Properties on the Survival of Attached Microorganisms on Inert Surfaces	13
K.A. Whitehead and J. Verran	
Mechanisms of Microbially Influenced Corrosion	35
Z. Lewandowski and H. Beyenal	
Industrial Biofilms and their Control	65
P. Sriyutha Murthy and R. Venkatesan	
Biofilm Control: Conventional and Alternative Approaches	103
H.-C. Flemming and H. Ridgway	
An Example: Biofouling Protection for Marine Environmental Sensors by Local Chlorination	119
L. Delauney and C. Compère	
Surface Modification Approach to Control Biofouling	135
T. Vladkova	
A Strategy To Pursue in Selecting a Natural Antifoulant: A Perspective	165
K.E. Cooksey, B. Wigglesworth-Cooksey, and R.A. Long	

Novel Antifouling Coatings: A Multiconceptual Approach	179
D. Rittschof	
Concept and Consequences of the EU Biocide Guideline	189
H.-C. Flemming and M. Greenhalgh	
Part II Macrofouling	
<i>Hydroides elegans</i> (Annelida: Polychaeta):	
A Model for Biofouling Research	203
Brain T. Nedved and Michael G. Hadfield	
Marine Epibiosis: Concepts, Ecological Consequences	
and Host Defence	219
T. Harder	
Larval Settlement and Surfaces: Implications	
in Development of Antifouling Strategies	233
P. Sriyutha Murthy, V.P. Venugopalan, K.V.K. Nair,	
and T. Subramoniam	
Macrofouling Control in Power Plants	265
R. Venkatesan and P. Sriyutha Murthy	
Inhibition and Induction of Marine Biofouling by Biofilms	293
S. Dobretsov	
A Triangle Model: Environmental Changes Affect	
Biofilms that Affect Larval Settlement	315
P.Y. Qian and H.-U. Dahms	
Index	329