

Contents

1	Energy, Environment and the Future of Mankind	1
	Yuan Tseh Lee	
2	Bio-fuels: A Blessing in Disguise	11
	O. Surriya, Syeda Sarah Saleem, K. Waqar, A. Gul Kazi and M. Öztürk	
3	Engineered Phyto-Covers as Natural Caps for Containment of Hazardous Mine and Municipal Solid Waste Dump Sites– Possible Energy Sources	55
	M. N. V. Prasad	
4	Chromium and Nickel Phytotoxicity and Genotoxicity.....	69
	Agáta Fargašová, Bernd Markert and Karol Mičieta	
5	Physio-Anatomical Responses of Plants to Heavy Metals.....	79
	Riffat Batool, Mansoor Hameed, Muhammad Ashraf, Muhammad Sajid Aqeel Ahmad and Sana Fatima	
6	Integration of Different Bioindication Methods for Chemical Elements: The Multi-Marked-Bioindication-Concept (MMBC)	97
	Bernd Markert, Agáta Fargašová, Stefan Fraenzle and Simone Wuenschmann	
7	Interaction Between Plants and Biosurfactant Producing Microorganisms in Petroleum Contaminated Absheron Soils.....	115
	Elmira Akhundova and Yamen Atakishiyeva	
8	Phytoremediation of Crude Oil-Contaminated Soil by <i>Medicago sativa</i> (Alfalfa) and the Effect of Oil on its Growth	123
	Saeed Minoui, Dariush Minai-Tehrani and Malak Hossein Shahriari	

9 Bioremediation of Petroleum Polluted Soils using <i>Amaranthus retroflexus</i> L. and its Rhizospheral Funji.....	131
Fariba Mohsenzadeh and Abdolkarim Chehregani Rad	
10 Reciprocal Effects of Oil-contaminated Soil and <i>Festuca</i> (Tall fescue).....	141
Dariush Minai-Tehrani, Saeed Minoui and Malak Hossein Shahriari	
11 Fundamentals of Hydrogen Production via Biotechnology (Bio-H2)....	149
Nuri Azbar	
12 Evaluation of <i>Senecio glaucus</i> L. and its Root-Associated Fungi for Bioremediation of Crude Oil Polluted Soils	175
Fariba Mohsenzadeh and Abdolkarim Chehregani Rad	
13 Root and Shoot Peroxidase Activity in <i>Festuca arundinacea</i> in Light Oil-Contaminated Soil	185
Zahra Ghaffari, Sahar Shademan, Zahra Sobhani-Damavandifar and Dariush Minai-Tehrani	

Phytoremediation for Green Energy

Öztürk, M.; Ashraf, M.; Aksoy, A.; Ahmad, M.S.A. (Eds.)

2015, X, 191 p. 47 illus., 4 illus. in color., Hardcover

ISBN: 978-94-007-7886-3