

Contents

Part I Applied Waste Management

Impact of Water Pollution on Coconut Cultivation in Vellore District, Tamil Nadu	3
K. Sivakumar and M.P. Parvez Ahmed	
Solid Waste Management in Vellore District, Tamil Nadu	13
A. Royal Edward Williams and S. Kumar	
Site Suitability Analysis for Solid Waste Management Using Multi Criteria Analysis	19
Sanhita Ghosh and Sachikanta Nanda	

Part II Alternate Clean Energy Fuel Technologies

Nitrate Reduction by Denitrifying <i>Bacillus Cohnii</i> Isolated from Sewage Treatment Plant	35
T.K. Poornima Priyadharsani, D. Suriyaparakasham, P. Prakash and K. Thamaraiselvi	
A Mini Review on Cyanophycin: Production, Analysis and Its Applications	49
J. Aravind, T. Saranya, G. Sudha and P. Kanmani	
Utilization of Cheese Industry Whey for Biofuel–Ethanol Production	59
G. Rajarajan, A. Irshad, B.V. Raghunath, G. Mahesh kumar and A. Punnagaiarasi	
Anaerobic Digestion of Wastewater and Municipal Sludge to Isolate Potent Methanogen Using BMP Assay	65
Ayesha Sulthana, K.C. Latha and S. Balasubramanian	

Part III Waste Management Strategies

A Statistical Based Experimental Approach for Biodegradation and Optimization of Heavy Metals	85
S. Umadevi, S. Aalfin Emmanuel, P.M. Ayyasamy and S. Rajakumar	
Wastewater Treatment Studies on Free Water Surface Constructed Wetland System	97
G. Midhun, L. Divya, Jessen George, P. Jayakumar and S. Suriyanarayanan	
Recycling of Distillery Spent Wash and Their Effect on Growth of Sesame (<i>Sesamum</i>) Crop	111
V. Karthika, G. Rajannan and P. Thangavel	
ISO 14001: Environmental Management System	117
R. Mayamurugan	

Part IV Bioremediation and Environmental Sustainability

Utilization of Medicinal Oil Effluent for Lipase Production by <i>Penicillium citrinum</i> MKF3	125
N. Vinod Kumar, Mary Esther Rani, R. Gunaseeli and N.D. Kannan	
Waste Water Sludge Treatment Using Rice Bran	133
P. Geetha and M. Kokila	
A Novel Lipopeptide Bacterial Biosurfactant for Bioremediation	139
C. Elizabeth Rani Juneius and Jayasundari	
Bioremediation of Ethylbenzene by Soil Column Study and Bioreactor Study for Polluted Soil and Water Samples Using Optimized Bacterial Consortium	155
S. Ashok, V. Akila, P.M. Ayyasamy and S. Rajakumar	
Bio-degradation of Reactive Dyes by Indigenous Bacteria Obtained from Textile Effluent Contaminated Site	169
P. Muthukumaran, M. Priya, P. Vignesh and J. Aravind	
Hydrolytic Enzyme Profiling of <i>Bacillus Subtilis</i> COM6B and Its Application in the Bioremediation of Groundnut Oil Mill Effluent	179
P. Kanmani, J. Aravind and K. Kumaresan	
Management of Grey Water with Bio-beds Using Phytotechnology	191
N.D. Shrinivahashini, R. Chithra Devi, R. Viji, D. Mahamuni and M. Sheela Mary	

Optimization of <i>Bacillus</i> sp. (KTSMBNL-16) for Decolourization of Dye AV90 Using Batch Studies	207
P. Prakash, M. Dexilin, B. Gowri Manogri and K. Thamaraiselvi	
 Part V Implications of Waste on Human Health and Community Participation in Waste Management	
Role of NGO's in Protecting Environment and Health	221
M. Loganathan and Jothi Narendiran	
A Study on Self-sacrificing Role Played by Garbage Pickers in Cleaning up the Environment	229
J. Jacob Stanley Inbaraj and M. Elangovan	
Impact of Dairy Effluent on Environment—A Review.	239
B.V. Raghunath, A. Punnagaiarasi, G. Rajarajan, A. Irshad, A. Elango and G. Mahesh kumar	
Treatment of Waste Water from Meat Industry	251
A. Irshad, S. Sureshkumar, B.V. Raghunath, G. Rajarajan and G. Mahesh Kumar	
Waste Management in Food Packaging Industry	265
G. Mahesh Kumar, A. Irshad, B.V. Raghunath and G. Rajarajan	

Integrated Waste Management in India
Status and Future Prospects for Environmental
Sustainability

Prashanthi, M.; Sundaram, R. (Eds.)

2016, IX, 277 p. 125 illus., 21 illus. in color., Hardcover

ISBN: 978-3-319-27226-9