Nature Environment and Pollution Technology

Vol. 16, No. (4), December, 2017

CONTENTS

1.	Scholastica Gatwii i Mathenge, Kuth Mutta Wanjau and Giaston Mwangi Kenji, Timethopinii and	
	Sulfamethoxazole Residues in Untreated Wastewater used for Irrigation in Peri-urban Farms in Nairobi	
	County, Kenya	989-994
2.	A. M. Hariati, Aulaniam, E. Y. Herawati and D. G. R. Wiadnya, Effect of Immobilized Bacteria on	
	TAN Suppression, Survival Rate, and Biomass Harvest of Pacific White Shrimp, Litopenaeus vannamei,	
	Grown in Biofloc Culture System	995-1002
3.	Liu Shuai and Wang Xudong, Nitrogen Transformation and Loss During the Composting Process of	
	Livestock and Poultry Manure With or Without Bio-fermentation Agent	1003-1010
4.	Yancheng Li, Benzhou Gong, Yingmu Wang, Jiale Wang and Jian Zhou, Co-metabolic	
	Biodegradation of Nitrified Old Landfill Leachate with Nitrate-N in Anoxic Sequencing Batch	
	Biofilm Reactors (ASBBRs)	1011-1018
5.	A. Choudhary and S. Mathur, Removal Kinetics and Performance Evaluation of 3D Rotating	
	Cylindrical Anode Reactor for Textile Wastewater Treatment	1019-1024
6.	R. Radhika, Monsoonal Floods Affecting Cochin Backwater Ecosystem	1025-1033
7.	Qingkong Cai, Erjun Li and Ruibo Jiang, Analysis of the Relationship Between Land Surface	
	Temperature and Land Cover Changes Using Multi-temporal Satellite Data	1035-1042
8.	Ting-fang Yu, Lei Liao and Ran Liu, Prediction of NOx Emissions from Coal-Fired Boilers Based on	
	Support Vector Machines and BP Neural Networks	1043-1049
9.	Wang Yue, Li Xu, Guo-Dong Ding, Gao Guanglei, Zhao Yuanyuan and Yu Minghan, Seasonal	
	Changes in Soil Microbial Biomass Carbon and Nitrogen of Different Vegetation Types in the Mu	
	Us Sandland, Northwestern China	1051-1058
10.	Yun Xia, Ermeng Yu, Zhifei Li, Deguang Yu, Guangjun Wang, Jun Xie [†] , Wangbao Gong and	
	Kai Zhang, Bacterial Community Composition Associated with Freshwater Cyanobacterial Blooms	
	of Intensive Culture Ponds	1059-1066
11.	Alrum Armid, Ryuichi Shinjo, Siti Hadijah Sabarwati and Ruslan, Pollution Assessment of	
	Various Heavy Metals in the Surface Sediment of Kendari Bay, Indonesia	1067-1074
12.	Ritu Rani and Naresh Kumar, Does Nuclear Energy Consumption Improve Environment? Empirical	
	Evidence From India	1075-1079
13.	Ranjit Hazarika and Purbajyoti Deka, Assessment of DNA Damage in Agricultural Workers Exposed	
	to Mixture of Pesticides in Assam (India)	1081-1086
14.	Yanli Yang and Jun Meng, Environment Pollution State and Improvement Measures in Rural Areas of	
	Heilongjiang, China	1087-1093
15.	Sulemana Abubakari, Xiaohua Dong, Bob Su, Xiaonong Hu, Ji Liu, Yinghai Li, Tao Peng, Haibo	
	Ma Kai Wang and Shijin Xu, Modelling the Spatial Variation of Hydrology in Volta River Basin of	
	West Africa Under Climate Change	1095-1105
16.	Hao Wang, Can Tian, Huiyuan Zhong, Xiaoqing An and Bingxu Quan, Nitrogen Degradation	
	Kinetic Analysis in Different Subsurface Constructed Wetlands	1107-1112
17.	Hongmei Zhang, Bairen Yang, Aihui Chen† and Huixing Liang, Soil Microbial Diversity of Marshes	
	Covered by Suaeda salsa and Spartina alternifora in Yancheng Wetland	1113-1119
18.	Musthofa Lutfi, Sumardi Hadi Sumarlan, Bambang Susilo, Wignyanto, Risma Zenata and	
	Lita Puspita R. Perdana, The Glycerol Effect on Mechanical Behaviour of Biodegradable Plastic	
	from the Walur (Amorphophallus paenifolius var. sylvestris)	1121-1124
19.	R. Kamalraj, M. Nandhivarman, Pynkhlainbor Thongni, M. Pradheeps and G. Poyyamoli,	
	Utilization of Agrowastes for Vermicomposting and its Impact on Growth and Reproduction of	
	Selected Earthworm Species in Puducherry, India	1125-1133
20.	A. Arun Kumar and R. Senthamizh Selvan ,Performance of Recycled E-waste as Aggregates in Green	
	Concrete	1135-1140

21.	Zhen Li and Zhi Liu, Hazards, Sources and Control Measures of Heavy Metal Pollution of Forest Soil:	
	Taking Jin-Jing-Ji Region of China as an Example	1141-1147
22.	Li Yang and Feng Qian, The Research on The Ecological Environment of Green Building	1149-1156
23.	Hirra Rashid and Ghazala Yaqub, Bioadsorbents and Filters for Removal of Heavy Metals in Different	
	Environmental Samples-A Brief Review	1157-1164
24.	Chengde Wang, Baoguo Wu, Chen Dong and Jiancheng Liu, Study on the R-Based Dynamic	
	Construction Techniques for Stand Density Management Diagrams	1165-1173
25.	Glushankova Irina, Vaisman Yakov, Surkov Alexandr and Dokuchaeva Darya, Applied Problems	
	of Selecting Synthetic Polymer Waste as Raw Material For Production of Active Carbon	1175-1181
26.	V. Hariram, S. Seralathan and A. Mohammed Raffiq, Formulation and Characterization of Pyrolytic	
	Oil from Waste Tyre and Waste Plastic: A Comparative Study	1183-1188
27.	Anita Bhatnagar, Navneet Cheema and Abhay Singh Yadav, Alterations in Haematological and	
	Biochemical Profile of Freshwater Fish, Cirrhinus mrigala (Hamilton) Exposed to Sub-lethal	
	Concentrations of Chlorpyrifos	1189-1194
28.	Zhang Guijun, Zhou Zhi, Zhang Pengtao and Zhang Yigong, Study on Ecological Safety Monitoring	
	Practice of County Cultivated Land: A Case Study from Huanghua City, Hebei Province of China	1195-1204
29	Zawawi Daud, Noorain Suhani, Radin Maya Saphira Radin Mohamed and Halizah Awang	1170 120.
	Feasibility of Banana (<i>Musa sapientum</i>) Trunk Biofibres for Treating Kitchen Wastewater	1205-1210
30	Mehran Shaygan and Marzieh Mokarram, Investigation of Landform Classes in Geomorphology	1203 1210
50.	Units (Case Study: South of Isfahan, Fars Province, Iran)	1211-1216
31	Jie Ma, Lin-hua Sun, Song Chen, He-rong Gui and Hai-tao-Zhang, Geochemical Study of the Ground-	1211 1210
51.	water from Coal Bearing Aquifer in Zhuxianzhuang Coal Mine, Northern Anhui Province, China	1217-1222
32	Xin Huang, Hai-tao Chen and Zheng-ying Guan, Study on Water Environmental Carrying	1217-1222
32.	Capacity Based on Improved Catastrophe Theory	1223-1228
33	Reeba Maria Jose and Jojo P. J., Radiation Dose to the Populace in Southern Peninsular India	1223-1220
33.	Through Foodstuff	1229-1234
21	Yanli Peng, Study on Sources, Causes and Countermeasures of Water Pollution in Rural Areas of	1229-1234
34.	Guangxi in China	1235-1241
25	Vhutshilo Nekhubvi and David Tinarwo, Methane Capturing Using Anaerobic Digestion	1233-1241
33.		1042 1047
26	Technology: A Way Towards Mitigating Green House Gases in Limpopo Province, South Africa	1243-1247
30.	Hai Wang, Chengcai Huang, Muqing Qiu and Chunxia Hu, Equilibrium and Kinetic Studies on	1240 1254
27	Removal of Cd ²⁺ Ion in Aqueous Solution by the Multiple Modified Diatomite	1249-1254
31.	Dong Yingbo and Lin Hai, Different Types of Inoculated Sludge for Chemical Wastewater Treatment:	1055 1060
20	Acclimation and Microbial Community	1255-1260
38.	Hui-xia Yang, Ran Li and Juan Wei, Analysis on Sensitivity of Parameters in Numerical Simulation of	1061 1066
20	Dissolved Gas Supersaturated in Spillway Discharges	1261-1266
39.	Wei Na, Effects of Combined Pretreatment of Sewage Sludge on Biogas Production in Anaerobic	1077 1070
10	Digestion Process	1267-1270
40.	Jiancheng Liu, Baoguo Wu and Chen Dong, Improvement and Compilation of Density Management	1071 1077
4.1	Diagram of Larix principis-rupprechtii Mayr Forest in Northern Hebei	1271-1277
41.	Hao Wang, Bingxu Quan, Huiyuan Zhong, Shan Yan and Meiyuan Yang, Decomposition of Inorganic	1250 1202
	Nutrient Nitrogenous Matter from Lightly Polluted Wastewater Using Electrochemical System	1279-1282
42.	Ruqin Gao, Yiming Gu, Guoting Li and Qian Sun, Study on Preparation and Adsorption Properties of	
	Diatomite-Based Porous Ceramsite	1283-1286
43.	Zuo Zheng and Zheng Xiao-xian, Disturbance Status of Secondary Forest of Castanopsis on Jiangle	
	Forest Farm, Fujian Province, China	1287-1292
44.	Jian Jin, Xiaoyi Ma and Yashuo Gao, China's Carbon Emission Productivity and its Development	
	Tendency from an Environmental Protection Perspective	1293-1301
45.	Hongmei Zhang, Jiwen Wu, Yang Gao and Zhuo Chen, Spatial Assessment of Ecological Vulnerability	
	in Fuzhou District in China Using Remote Sensing and GIS	1303-1312
46.	Davood Namdar Khojasteh, Hossein Ali Bahrami, Mehran Kianirad and William Sprigg, Using	
	Bio-mulch for Dust Stabilization (Case Study: Semnan Province, Iran)	1313-1320
47.	Zhang Lei, Chen Jihao, Sha Xiangling, Zhang Lei, He Huibin, Ma Zhenhua and Yang Dan,	
	The Mechanism of Denitrification by Plasma with Different Background Gases in Clearing of the Flue	
	Gas for NO_X	1321-1325

The Journal		International Scientific Indexing with Impact Factor 1.953 (2016)		
is		NAAS Rating of the Journal (2016) = 4.94		
		Scopus®, SJR (0.123) 2016	Index Copernicus (2016) = 109.4	
Currently		El Compendex of Elsevier	Indian Science Abstracts, New Delhi, India	
Abstracted and		Chemical Abstracts, U.S.A.	Elsevier Bibliographic Databases	
		Pollution Abstracts, U.S.A.		
Indexed		Paryavaran Abstract,	Zoological Records	
		New Delhi, India	Indian Citation Index	
in:		Electronic Social and Science Citation Index (ESSCI)	EBSCO: Environment Index™	
Zetoc		Google Scholar	ProQuest, U.K.	
J-Gate		Environment Abstract, U.S.A.	British Library	
Centre for Research Libraries		WorldCat (OCLC)	JournalSeek	
Connect Journals (India)		CSA: Environmental Sciences and Pollution Management		
Research Bible (Japan)		Indian Science	Geobase	
Elektronische Zeitschriftenbibliothek (EZB)		SHERPA/RoMEO	Directory of Science	
CNKI Scholar (China National		Access to Global Online Research in Agriculture (AGORA)		
Knowledge Infrastructure) AGRIS (UN-FAO)		Full papers are available on the Journal's Website: www.neptjournal.com		

The journal is also included in the UGC (India) approved list of journals (As per their Notice dated 11-1-2017)

www.neptjournal.com

Nature Environment and Pollution Technology

EDITORS

Dr. P. K. Goel

Former Head, Deptt. of Pollution Studies Yashwantrao Chavan College of Science Vidyanagar, Karad-415 124 Maharashtra, India Dr. K. P. Sharma

Former Professor, Ecology Lab, Deptt. of Botany University of Rajasthan Jaipur-302 004, India Rajasthan, India

Marketing Manager: Mrs. Apurva Goel Garg, C-102, Building No. 12, Swarna CGHS, Beverly Park, Kanakia, Mira Road (E)-401107, Distt. Thane, Maharashtra, India **(E-mail: journalnept@gmail.com)**

Business Manager: Mrs. Tara P. Goel, Technoscience Publications, 2 Shila Apartment, Shila Nagar, Karad-415 110, Maharashtra, India (E-mail: contact@neptjournal.com)

Managaing Editor at Jaipur: Dr. Subhashini Sharma, Department of Zoology, Rajasthan University, Jaipur, Rajastahn, India

All correspondence regarding publication of papers in the journal must be made only by e-mail (contact@neptjournal.com)

EDITORIAL ADVISORY BOARD

- Dr. Prof. Malay Chaudhury, Department of Civil Engineer ing, Universiti Teknologi PETRONAS, Malaysia
- Dr. Saikat Kumar Basu, University of Lethbridge, Lethbridge AB, Canada
- 3. Dr. Sudip Datta Banik, Department of Human Ecology Cinvestav-IPN Merida, Yucatan, Mexico
- Dr. Elsayed Elsayed Hafez, Deptt. of of Molecular Plant Pathology, Arid Land Institute, Egypt
- Dr. Dilip Nandwani, College of Agriculture, Human & Natural Sciences, Tennessee State Univ., Nashville, TN, USA
- **6. Dr. Ibrahim Umaru**, Department of Economics, Nasarawa State University, Keffi, Nigeria
- 7. Dr. Prof. D.S. Mitchell, Albury, Australia
- 8. Dr. Prof. Alan Heritage, Sydney, Australia
- 9. Mr. Shun-Chung Lee, Deptt. of Resources Engineering, National Cheng Kung University, Tainan City, Taiwan
- Samir Kumar Khanal, Deptt. of Molecular Biosciences & Bioengineering, University of Hawaii, Honolulu, Hawaii
- Dr. Prof. P.K. Bhattacharya, Dept. of Chemical Engineering, IIT, Kanpur, U.P., India
- **12. Dr. Zawawi Bin Daud,** Faculty of Civil and Environmental Engg., Universiti Tun Hussein Onn Malaysia, Johor, Malaysia
- **13. Dr. Srijan Aggarwal**, Civil and Environmental Engg. University of Alaska, Fairbanks, USA
- **14. Dr. M. I. Zuberi**, Department of Environmental Science, Ambo University, Ambo, Ethiopia
- Dr. Prof. A.B. Gupta, Dept. of Civil Engineering, MREC, Jaipur, India
- **16. Dr. Kiran Tota-Maharaj**, Faculty of Engineering & Science University of Greenwich, Kent, ME4 4TB, United Kingdom
- **17. Dr. Bing Jie Ni**, Advanced Water Management Centre, The University of Queensland, Australia
- Dr. Prof. S. Krishnamoorthy, National Institute of Technology, Tiruchirapally, India
- **19. Dr. Prof. (Mrs.) Madhoolika Agarwal,** Dept. of Botany, B.H.U., Varanasi, India

- 20. Dr. Anthony Horton, Envirocarb Pty Ltd., Australia
- 21. Dr. Riccardo Buccolieri, University of Salento-DISTEBA S.P. 6 Lecce-Monteroni 73100 Lecce, Italy
- Dr. Prof. A.M. Deshmukh, Dept. of Microbiology, Dr. B.A. Marathwada University Sub-Centre, Osmanabad, India
- 23. Dr. Prof. M.P. Sinha, Vinoba Bhave University, Hazaribagh India
- 24. Dr. G.R. Pathade, H.V. Desai College, Pune, Maharashtra, India
- **25. Dr. Hossam Adel Zaqoot,** Ministry of Environmental Affairs. Ramallah. Palestine
- **26. Dr. T.S. Anirudhan,** Dept. of Chemistry, University of Kerala, Trivandrum, Kerala, India
- **27. Dr. James J. Newton**, Environmental Program Manager 701 S. Walnut St. Milford, DE 19963, USA
- **28. Dr. M.G. Bodhankar,** Dept. of Microbiology, Yashwantrao Mohite College, Pune, India
- Dr. Murat Eyvaz, Department of Environmental Engg. Gebze Inst. of Technology, Gebze-Kocaeli, Turkey
- **30. Dr. Zhihui Liu**, School of Resources and Environment Science, Xinjiang University, Urumqi, China
- 31. Dr. Sandeep Y. Bodkhe, NEERI, Nagpur, India
- **32. Dr. D. R. Khanna**, Gurukul Kangri Vishwavidyalaya, Hardwar, India
- **33. Dr. S. Dawood Sharief**, Dept. of Zoology, The New College, Chennai, T. N., India
- **34. Dr. B. N. Pandey,** Dept. of Zoology, Purnia College, Purnia, Bihar, India
- **35. Dr. Xianyong Meng**, Xinjiang Inst. of Ecology and Geography, Chinese Academy of Sciences, Urumqi, China
- **36. Dr. Ms. Shaheen Taj**, Dept. of Chemistry, Al-Ameen Arts, Science & Commerce College, Bangalore, India
- **37. Dr. Nirmal Kumar, J. I.**, ISTAR, Vallabh Vidyanagar, Gujarat, India
- **38. Dr. Wen Zhang**, Deptt. of Civil and Environmental Engineering, New Jersey Institute of Technology, USA