TABLE OF CONTENTS

	Preface	K
Chapter 1	Leveraging Precipitation Modification around Large Reservoirs in Orographic Environments for Water Resources Management Wondmagegn Yigzaw and Faisal Hossain	1 ·
Chapter 2	Laboratory Assessment of Kaolinite and Bentonite under Chemical-electrokinetic Treatment Nasim Mosavat, Erwin Oh and Gary Chai	6
Chapter 3	The Prediction of Contaminant Transport through Soil: A Novel Two-Dimensional Model Approach Amin Chegenizadeh Behzad Ghadimi and Hamid Nikraz	l 3
Chapter 4	Grain Size and Beach Formation Characteristic at the T-Head Groins System at Kiyicik, Turkey (Eastern Black Sea)Veli Süme	19
Chapter 5	Production of Activated Carbon from Cocoa (<i>Theobroma cacao</i>) Pod Husk	24
Chapter 6	SCS-CN-based Simulation of Pollutants Removal Narain S, Mishra SK, Ojha CSP and Biftu TW	30
Chapter 7	Application of Water Quality Index and Diversity Index for Pollution Assessment of Kankaria Lake at Ahmedabad, India Ashutosh Kumar and Sharma MP	35
Chapter 8	Acid production as a Limiting Factor during the Aerobic Biological Pre-Treatment of Confectionary Wastewaters Christian Drakides and Meiling Lay-Son	.39
Chapter 9	Growth Rate Measurement of Scirpus Grossus Plant as Preliminary Step to Apply the Plant in Wastewater Treatment using Reedbed System Bieby Voijant Tangahu	.45
Chapter 10	Effect of Temperature Variation and Type of Embankment Soil on Integral Abutment Bridges in SudanOnsa EH and Ahmed AA	.49
Chapter 11	River Basins of Imo State for Sustainable Water Resources Management BC Okoro, RA Uzoukwu and NM Chimezie	.54

Chapter 12	Aerobic Granules Formation in Dual-Layer Percolating Filters	62
Chapter 13	Drought Forecasting using Indices and Artificial Neural Networks for Upper Tana River Basin, KenyaRaphael M Wambua, Benedict M Mutua and James M Raude	68
Chapter 14	Performance Evaluation of Three Vegetative Filter Strip Designs for Controlling Feedlot Runoff Pollution	80
Chapter 15	Removal of Organics and Metal Ion Nanoparticles from Synthetic Wastewater by Activated Sludge Process (ASP)	89
Chapter 16	Development of Water Resources for Micro Watershed at Chinamushidiwada Village in Visakhapatnam, Andhra Pradesh, India Kiran Jalem	97
Chapter 17	The Development and Rehabilitation of the Hammamlif Coastline: A Geotechnical Study Abir Baklouti, Mohamed Bejaoui, Samir Medhioub and Chokri Yaich	107
Chapter 18	Estimation of Runoff Depth and Volume using NRCS-CN Method in Konar Catchment (Jharkhand, India)	117
Chapter 19	Improving Chemigation Systems Efficiency under Arid Conditions based on Weighing-Points Technique Yasser E Arafa and Khaled A Shalabi	123
Chapter 20	Life Time Approach for Prediction Groundwater Depletion	129
Chapter 21	Auscultation of a Dam for Mining Restoration in Quebec, Canada Coulibaly Yaya, Li Zhen Cheng, Tikou Belem and Sylvain Lortie	134
Chapter 22	Chemical and Mineral Characteristics of Melted Snow-Water in the Jilin Province, North-East China Xingmin Zhao, Xinxin Guo, Yiying Mao, Haibin Yan, Mingtang Li and Lanpo Zhao	142
Chapter 23	Performance Evaluation of Contaminated Cohesive Soils	151
Chapter 24	Roller-Compacted Concrete Dams Rehabilitation in Terms of Different Problem Orod Zarrin, Mohesn Ramezan Shirazi, Hassan Moniri and Mohammad Moniri	155

Chapter 25	Analysis and Classification of Channel Network Types for Intermittent Streams in the United Arab Emirates and Oman Jung K and Ouarda TBMJ	159
Chapter 26	Characterization of Extracellular Polymeric Substances (Eps) Produced by Cloacibacterium normanense Isolated from Wastewater Sludge for Sludge Settling and Dewatering	166
	Klai Nouha, Hoang NV, Yan Song, Tyagi RD and Surampalli RY	
Chapter 27	Impact of Different Washing Conditions on the Release of Ag Species from Textiles	174
	Joanna Kyzioł-Komosińska, Agnieszka Baran, Czesława Rosik-Dulewska, Justyna Czupiol, Sławomir Boncel and Agnieszka Dzieniszewska	•
Chapter 28	Flood Hazard Assessment and Mapping of Flood Inundation Area of the Awash River Basin in Ethiopia using GIS and HEC-GeoRAS/HEC-RAS ModelGetahun YS and Gebre SL	185
	Permissions	
	List of Contributors	
	Index	