# **CONTENTS**

# Part A

## SECTION ONE: Ecosystem Restoration

Distribution of Sagitta setosa Müller, 1847 (Chaetognatha) in the South Eastern Black Sea

A. Muzaffer FEYZIOGLU (3)

Effects of Road Deicing Salt on Ground Water Resources Quality; Case Study; Hamadan- Asadabad Road in Iran

REYAHI KHORAM Mahdi, NAFEA Mino, MAHJUB Hossien,

HASHEMY Marzieh & PARCHIAN Maesumeh (7)

Different Methods of Nitrogenous Fertilizer Applications in Order to Decrease its Environmental Poisonous Effects on the Vegetation and Reproductive Properties, Yield and Protein and Growth Indices of Silage Corn

Sayed Majid LOHMOUSAVI (12)

Retention Performance of a Constructed Wetland as Measured Automatically with Sensors

Jari KOSKIAHO, Markku PUUSTINEN & Niina KOTAMÄKI (21)

Biennial Results for Evaluation of Squash (*Cucurbita pepo*) Seed and Fruit Influenced by Planting Patterns and Exogenous Ethylene Application

M. YADEGARI & R. BARZEGAR (31)

The Effect of Sulphur and *Thiobacillus* on Nutrient Availability, Vegetative Growth and Essence Production in Lemon Balm (*Melissa officinalis* L.)

YADEGARI M, BARZEGAR R & IRANIPOUR R (35)

Persistence of Flusilazole and Carbendazim in Paddy and Soil

SK SAHOO, S PANDHER, URVASHI, RS BATTU & B SINGH (40)

The Habitat Environment of the Salamander at High Altitude Areas Ecological Engineering Design in Taiwan, China

HOU Wen-Shang, CHANG Yuan-Hsiou & CHEN Chun-Hsiang (43)

Modeling Responses of Fine Rice Growth and Yield to Increased Carbon Dioxide Concentration, Temperature and Precipitation under Current & Future Climate Scenarios

A. AHMAD, S. IQBAL, A. HUSSAIN, S. A. WAJID,

T. KHALIQ, M. USMAN & W. NASIM (50)

Morphological Malformations in Bivalves with Economic Interest from the Tunisian Coast

Ferdaous J. KEFI, Lamia G. BEN ABDALLAH & Najoua T. EL-MENIF (60)

Climate Change Issues of Nepal: Challenges and Perspectives for Future Generations

REGMI Mr Megha Raj (67)

Modeling the Effect of Climate Change on Sowing Dates, Yield and Yield Components in Various Wheat Cultivars under Different Agro-ecological Zones of Punjab-Pakistan

WAJID NASIM, A. AHMAD, S. A. WAJID, M. USMAN, A. HUSSAIN, T. KHALIQ,

S. R. SULTANA, M. A. MUDDASIR & SHAKEEL AHMAD (69)

Effects of Reclaimed Water on Physiological Parameters and Stress Resistance of Turf-grasses in Different Temperatures

GUO Xiaoyu, ZHAO Wenji, LI Xiaojuan & GONG Huili (75)

Characteristics of Ammonia Volatilization of the Typical *Calamagrostis angustifolia* Wetland Soils in the Sanjiang Plain, Northeast China

SUN Zhigao, YU Junbao & CHEN Xiaobing (78)

Responses of Phenol Oxidase Activity to Water Level Changes in Peatlands: Implications for Global Carbon Cycling

XIANG Wu, HE Ling, SUN Xingting, HU Xiaofang & ZHANG Ran (84)

Emergy Analysis of the Land Use Practices in West Jilin Province, a Typical Area of the Agro-pastoral Transition Zone in Northern China

WANG Mingquan, WANG Jinda & LIU Jingshuang (89)

Salt Characteristics and Ecological Effects under Arid Environmental Background

WANG Ranghui, ZHAO Zhenyong, ZHANG Huizhi & NING Husen (95)

Fuzzy Comprehensive Evaluation Model of Ecological Security Based on Distinguishable Weight of Indexes

PANG Yanjun, LIU Limin & LI Wenguo (99)

Study on Aeration United with Bio-film Technique to Treat Urban Landscape Waters

SONG Yingwei, YAN Haihong, NIAN Yuegang, HUANG Minsheng,

HUANG Jianjun & NIE Zhidan (104)

Studies on Lignite Biodegradation by Rhodopseudomonas Spheroides

XU Jingyao, ZHANG Mingxu & WEI Dezhou (109)

Effect of Road Networks on Regional Landscape

FU Wei, LIU Shiliang, DONG Yuhong & ZHANG Zhaoling (114)

Study on Ecological Risk of Heavy Metals in Reclaimed Soils of Mining Area in Xuzhou

WANG Ying & DONG Jihong (120)

Simulation of Mountainous Watershed Hydrological Process Responses on the Land Cover and Climate Changes Based on SWAT Model

LU Ying, Sam BUCHANAN, HE Daming & LIU Jiang (124)

**Ecological Security of Harbin City Based on Urban Land Use Extension** 

CAI Chunmiao & SHANG Jincheng (128)

Fishes in Manwan, before and after Manwan Dam Construction on Mekong Mainstream

KANG Bin, LIU Jiang, HU Wenxian & DENG Weide (133)

Effects of Elevated Ozone Concentration on the Antioxidative System in Leaves of Soybean (*Glycine max*)

ZHAO Tianhong, FU Yu, SUN Jiawei, JIN Dongyan, CAO Ying,

WANG Yan & Shi Yi (137)

Heavy Metals in Marine Mollusks, Crustaceans and Fish from the Shenzhen Coastal Region

DENG Li, LIN Shaozheng & ZHANG Huimin (142)

Calculation and Application of the Models in the Strategic Environment Assessment (SEA)

XU Taihai, PENG Xinran, MA Shuyan, LI Juan, KANG Shuang & ZHANG Ying (147)

Assessment of Particulate Nitrogen and Phosphorus Losses with Soil Erosion in Upper Watershed of Three Gorges Reservoir

LIU Lamei, LONG Tianyu, ZHANG Xiang & LI Chongming (150)

Heavy Metal Contamination of Roadside Surficial Soils, Atmospherically Deposited Dusts, and Ornamental Plants from Urban Arteries in Nanjing City

HU Xin (156)

Ecological Impact on Earthquake Disaster Area of Wenchuan, Sichuan Province in Southwest China

JIA Binyang, HUANG Lei & ZHANG Fengyu (161)

Study on Photovoltaic Solar Cell Cooling System

LIU Peng, GUAN Xin, CAI Kang, MU Zhijun & TONG Tang (166)

Research and Application on Supporting Technology of Deep Foundation Pit Soil Nail

LI Guofu, DAI Tieding & LI Zhu (171)

Assessment of Urban Ecosystem Health in Chongqing Based on the Entropy and Gray Correlation Method

GUO Yue & GAO Kai (176)

Water Resources Vulnerability Assessment Based on the Fuzzy Optimum Selection Method: a Case Study of Zhangjiakou Region, Guanting Reservoir Basin in North China

WANG Xuan, LI Jianying, TAN Yayi & SHAN Shan (182

**Ensuring National Ecological Security for the Coordinated Economic Development** 

CHEN Jun (188)

# SECTION TWO: Environmental Toxicology

An Add-on Nitrifying Membrane Bioreactor as Effluent Polishing Technique for 17α-Ethinylestradiol

DE GUSSEME Bart, PYCKE Benny, HENNEBEL Tom,

BOON Nico & VERSTRAETE Willy (195)

**Heavy Metals in Chinese Herbs** 

WU Hongli, Lawrence N NGEH, XU Hong, John D ORBELL, Paul ADORNO,

Stavros TZARDIS & Saman BUDDHADASA (203)

Biodegradation of Chloroaromatic Pollutants by a Bacterial Consortium from Paper and Pulp Mill Effluents

Robertcyril S. HOSKERI, Sikandar I. MULLA & Harichandra Z. NINNEKAR (210)

Influence of Cadmium on Chlorophyll Content of Beans (*Phaseolus Vulgaris*) Use of Plant as Bio-Indicator of Pollution (in Vivo Experimentation)

Hocine BENABID & Mohamed Fouzi GHORAB (214)

Histopathological Changes of Rainbow Trout (*Oncorhynchus mykiss*) after Exposing Sublethal Composite Nitrogen Fertilizers

Ilhan ALTINOK, Erol CAPKIN & Serap BIRINCIOGLU (217)

Geomedical Hazards Caused by Toxic Contaminants in Mining Areas: A Clinical Perspective

Mohamed ZENGO (219)

Short Overview of the Toxicity and (Modelled) Degradability of Model Substances of the 1<sup>st</sup> Generation Biofuels

PEIJNENBURG Willie & DEN HOLLANDER Henri (227)

Toxicity Spectra of Substituted Aromatic Hydrocarbon Compounds to Vibrio-qinghaiensis sp.-067

MO Lingyun, LIU Shushen, LIU Hongyan & QIN Litang (231)

Decolorization and Mechanisms of Acid Blue 45 Biodegradation by Fusarium sp.

CAI Weijian & LI Jiwu (235)

Structure-Activity Relationships of Natural Insecticidal Picrodendrin and Related Terpenoid GABA Antagonists

JU Xiulian, HAO Yanli & LIU Genyan (240)

Relation between Cellulases Activity and Strains in a Lignocellulose-degradation Bacterial Community

LIU Changli, WANG Xiaofen, LV Yucai, NIU Junling, SHEN Hailong & CUI Zongjun (247)

Individual and Joint Effects of Lead and Mercury on the Viability of Root Border Cells in Mung Bean (Vigna Radiata)

HUANG Bijie, ZHU Lin, LIU Xinyong, ZHANG Yang & ZHAO Na (254)

Reducing the Undesirable Microorganisms of Poultry Wastes by Dictyostelids

CUI Juntao, ZHANG Wei, WANG Chengyu & LI Mingtang (259)

Biosorption of Cadmium(II) and Lead(II) from Aqueous Solutions by Fruiting Body Wastes of Fungus Flammulina velutipes

ZHANG Dan, GAO Tingyan, MA Pei & HE Haijiang (263)

Studies on Urease Activity and the Release of Nitrogen and Its Control in Aquaculture Pond Sediments

TIAN Xiuping, CAI Dandan, LU Xianzhi, HAO Jianchao & ZHANG Weijie (269)

Effect of Organic Pollution on DNA and Tissue Damage of Goldfish Carassius auratus Auratus from the Yellow River

GENG Guangqin, BAI Yang, CHEN Peng, REN Peili, ZHANG Yingmei & JI Weihong (273)

Study on Toxic Effect of p-Chloroaniline on a Strain of Purple Non-sulfur Photosynthetic Bacteria

LI Liang, HU Xiaomin, DONG Yihua, LIU Yi, HE Yingdian & ZHENG Linzi (278)

Study on the Genotoxicity of Source Water and Drinking Water during Chlorine and Chloramine Disinfection using the *Umu*-Test

LIU Wenjun, LIU Qing, ZHANG Liping, NIE Xuebiao & GAO Jingwei (283)

QSPR/QSAR Study on Solubility and Acute Toxicity to Photobacterium Phosphoreum of Substituted Anilines

LIU Hui, SUN Ping, CHEN Jianting & WANG Zunyao (289)

Chronic Exposure of Engineered Silica Nanoparticles to Carassius Auratus Gill: Oxidative Damages and Influence of Synthesis Method

LIU Yang, JI Xiuling & LI Rong (293)

Bioconcentration and Depuration of 16 Priority Polycyclic Aromatic Hydrocarbons in Mariculture Fish Lateolabrax Japonicus

LIN Jianqing, WANG Xinhong & HONG Huasheng (297)

## SECTION THREE: Environmental Chemistry

Determination of Radio Strontium (90Sr) in Milk and Milk Powder Samples Used in Tehran and Calculation of Resulted Annual Dose

Parviz ABDOLMALEKI, Neda SARAYEGORD AFSHARI,

Fereshteh ABBASISIAR & Ali ATTAILAR (307)

Physicochemical Characteristics of Humic Acid Aggregates Formed in Zero-Valent Iron Systems

Daniel C W. TSANG, Irene M.C. LO & Nigel J D. GRAHAM (313)

Thermal Convection in a Shallow Closed Water Body with Floating Aquatic Plants

Kunihiko HAMAGAMI, Ken MORI & Yasumaru HIRAI (320)

Investigation on the Role of Calcium in Aluminum Toxicity in Cultured Tobacco (Al sensitive) and Tea (Al tolerant) Cells

Faezeh GHANATI, Taraneh BANAEE & Farnoosh NEMATI (326)

Effect of Aluminum on the Activity of Antioxidant System and Growth Stimulation in Rooted Cuttings of Lisianthus (Eustoma grandiflora L.)

Faezeh GHANATI, Farnoosh NEMATI & Taraneh BANAEE (331)

A Rapid and Convenient Estimation of Bacterial Intracellular Polyphosphate Content by Using Photometric Method

Toshiyuki NIKATA, Kyoichi KANEKO, Koji SATO & Kazuo KAKII (336)

Impact of Plant Covers on Nutrient Losses by Agricultural Runoff from the Taluses of Terraces with Subtropical Crops

Carmen Rocio RODRÍGUEZ PLEGUEZUELO, Víctor Hugo DURÁN ZUAZO,

Experimental Model of *Enterococcus Faecalis* Surveillance in Recreational Waters of the Southern Coast of the Caspian Sea: a Case Study in a Microcosm

Sahar IRANKAH, Mohammad Reza SOUDI & Sara GHARAVI (343)

Effect of Encapsulated and Free Isolated *Lactobacillus*, *Lactobacillus Plantarum* ATCC 8014 on Fermentation, Aerobic Stability of Corn Silage

PEYMANFAR SH, KASRA-KERMANSHAHI R & FOOLADI J (349)

Quantitative Determination of Amylase Enzymes from Egyptian Soil

Nashwa M. H. RIZK, Salah M. El-KOUSY & Ayman M. M. SAWAN (354)

Melatonin Applied by Osmopriming as a Biostimulator Improving Cucumber (*Cucumis sativus* L.) Seedling Growth at Abiotic Stress Conditions

POSMYK Malgorzata M, BALABUSTA Marta & JANAS Krystyna M (362)

Melatonin in Plants-Scientific and Practical Aspects

POSMYK Malgorzata M & JANAS Krystyna M (370)

Copper Accumulation and Eco-physiological and Biochemical Responses of Androgenic Carrot Cultures to Copper Stress

SZAFRANSKA Katarzyna, KOWALSKA Urszula, GORECKA Krystyna,

OSINSKA Katarzyna & JANAS Krystyna (377)

Melatonin Applied by Hydropriming as a Biostimulator Improving Sweet Corn (*Zea mays* L.) Seedling Growth in Abiotic Stress Conditions

JANAS Krystyna M., CIUPINSKA Emilia & POSMYK Malgorzata M. (383)

Concentrations of Cadmium, Lead, and Zinc in Water, Sediment and Fish from the Mae Kuang River, Thailand

Chanagun CHITMANAT, Ponlayuth SOOKSAMITI & Siripen TRAICHAIYAPORN (389)

Changes in Growth and Antioxidant Enzymes Activities during Nickel Stress in Raphanus sativus L.

Hakimeh ALIPOUR-DARVARY, Mozafar SHARIFI & Hassan ZARE-MAYVAN (392)

Comprehensive Molecular Characterization of Organic Contaminants in Freshwater Sediments by Gas Chromatography/Mass Spectrometry and Liquid Chromatography/Time-of-Flight Mass Spectrometry

Senka TERZIC, Iva MIKAC, Ivan SENTA & Marijan AHEL (397)

Enhanced Degradation of Chlorobenzene with Microwave-Induced Zerovalent Iron

LEE Chien-Li & JOU Chih-Ju G (406)

Kinetics of the Oxidative Reaction of Phenol and ChlorinatedPhenols Employing Fenton Reagent

Asim K DE & Sekhar BHATTACHARJEE (410)

Residues and Risk Assessment of DDTs and HCHs in Surface Sediments from the Peacock River in Xinjiang, China

CHEN Wei, BURNET Ellis Julia, QI Shihua, SONG Qi & LIU Meng (417)

Study on the Content and Species Distribution of Heavy Metal in Sanming Sewage Sludge

ZHANG Lihua, ZHANG Juncheng, ZHANG Qiwei, ZHANG Yan & ZHENG Chengsong (423)

Distribution and Release Law of Several Phenolic Compounds in Ice

KANG Chunli, GAO Hongjie, GUO Ping, ZHANG Geshan, PENG Fei,

XUE Honghai, TANG Xiaojian, LI Li & JIANG Yan (426

Effect of pH and Ionic Strength on the Adsorption of Antimony(III) on Kaolinite

XI Jianhong & HE Mengchang (431)

Transfer of Zinc from Soil to Crops in Suburban Areas of Fujian Province, Southeast China

LUO Dan, LIU QingFu, CHEN Yanhui, HUANG Yan, STAUNTON Siobhán & WANG Guo (436)

**Cadmium-Induced Oxidative Stress in Radish Seedlings** 

TANG Chunfang, ZHANG Riqing, WEN Shizhi & LI Kelin (443)

Effects of Oxalic Aid and Succinic Acid on Sorption an	d Transformation of Aluminum in Tea Garden Soi
--	--

XIE Zhonglei, SUN Wentian, LI Hang, WANG Jinghua & YIN Bo (447)

Study on Replacement of Cement with Fly Ash in Polymer Modified Mortar

ZHU Shuquan, GUO Xiangkun, WANG Xiaoling & GAO Zhifang (452)

Quantifying Metallothionein Transcript by Real Time PCR during Single and Combined to Cadmium and Copper in *Sinopotamon yangtsekiense* 

GAO Aibao, WANG Lan, YUAN Hui & LEI Wenwen (456)

Study on the pH Control and Oxygen-Releasing Characteristic of Oxygen-releasing Compounds

LIU Shejiang LIU Xiuli & LI Xingang (461)

Soil Nutrient Dynamics in Age Sequence of Mixed Plantations of Alder and Cypress in the Hilly Area of Central Sichuan Basin, China

WU Pengfei & ZHU Bo (465)

Asymmetric Hydrolysis of Ethyl Lactate by Enzymatic Catalysis

HUANG Zhihong, LIU Xiaoyan, GAO Jing, LI Weijie & ZHOU Liya (473)

**Leaching Characteristic of Trace Element in UCG Residues** 

LIANG Jie, LI Yulan, SUN Chuengjiang & LIU Xin (477)

**Nutrient Limiting Biofouling Formation in Recirculating Cooling Water System** 

LIU Fang, ZHAO Chaocheng, XIA Lu, ZHANG Guizhi & HOU Yanmei (482)

Distribution Characteristics of Total Nitrogen and Organic Matter and Its Sources in Core Sediments from the Guangzhou Reach of the Pearl River

LIANG Mingyi, WU Wencheng & WU Qunhe (487)

Establishment of Prediction Model for Ammonia Nitrogen Concentration in Landfill Leachate and Its Application

ZHENG Shuangjin, XIAN Ping, HUANG Shizhao, WU Jiaqian, LI Lihe & LIANG Ji (492)

Competitive Adsorption of Chromate and Arsenite with Arsenate on Hydrous Ferric Oxide

RAO Pinhua, XU Jingli, XIAO Wenfa, ZHANG Wenqi & LI Yongfeng (496)

Biochemical Mechanism of Fermentative Hydrogen Production by Bacteria

YUE Liran, LI Yongfeng, REN Nanqi, LIU Xiaoye, XIONG Xiaojing & LI Jianzheng (502)

Stress Signaling Role of Salicylic Acid to Cadmium-Induced Oxidative Stress

L POPOVA, L MASLENKOVA, R YORDANOVA, T JANDA & G SZALAI (511)

### SECTION FOUR: Environmental Monitoring and Assessment

Potential of in Vitro Methods in Ecotoxicological Risk Assessment

Helmut SEGNER (521)

Contamination of Roadside Soil and Street Dusts with Heavy metals in Petra region, Jordan

Omar Ali. AL-KHASHMAN (526)

Measuring Environmental Radioactivity: Requirements, Methods, Challenges

ROLF MICHEL (534)

#### Air Quality Mon Air Quality Monitoring in Selected Urban Areas in Myanmar during 2007-2008

TIN HLAING Ohnmar May, SWE Than Than, HTWE Tin Nwe, AYE Myo Myo,

HTWE Yi Yi, MAW Aung Myint & LWIN Phone (545)

**Emission Control in Induction Furnace: an Indian Regulatory Assessment** 

Amitava BANDYOPADHYAY (557)

**Evaluation of Volatile Organic Compounds Characteristics and Its Health Impact in the Vicinity of Petrochemical Industrial Complex** 

THEPANONDH Sarawut, JARUPAN Varoonphan & MAKKASAP Thagoon (565)

In-door Air Measurement of PM<sub>10</sub> in Different Conditions

RADA Elena Cristina, RAGAZZI Marco, ANTOLINI Daniele,

MALLOCI Elisa & VENTURI Marina (571)

Critical Analysis of Coal Life Cycle Using the Life Cycle Assessment

Cristian DINCA, Adrian BADEA, Tiberiu APOSTOL & Cosmin MARCULESCU (578)

A Numerical Modeling Assessment of the Influences of Human Impacts and Natural Conditions on Low Dissolved Oxygen and Control of Watershed Runoff in the Unnamed Tributary to Pitts Creek, Virginia

SHEN Jian, ZHAO Yuan & WANG Taiping (587)

Suitability and Assessment of Groundwater Quality Due to Anthropogenic Sources: A Case Study of Puri City, India

VIJAY Ritesh, KHOBRAGADE Puja, MOHAPATRA P K, KELKAR P S & SOHONY R A (594) Spatial Assessment of Air Pollution Exposure and Its Potential Risk

SARUTICHART Panukorn, THEPANONDH Sarawut & MAKKASAP Thagoon (600)

Assessing the Impact of Urban/Industrial Activities on Benthic Communities of Two Creeks of the Upper Bonny Estuary, Niger Delta Using Univariate and Multivariate Techniques

Erema R. DAKA, Miebaka MOSLEN & Calista A. EKEH (607)

Environmental Assessment of Recreation Areas: a Case Study in Wilderness of Kamchatka (Russian Far East)

A. V. ZAVADSKAYA (613)

Effect of Water Source on Human Health: a Case Study from Biga Peninsula, Turkey

Alper BABA & Orhan GUNDUZ (620)

A Nafion/BSA Based Conductometric Algal Whole Cell Biosensor for Heavy Metal Monitoring

GUEDRI Houssemeddine & DURRIEU Claude (623)

Biostabilization Assessment of MSWI Bottom Ash Addition on MSW Digestion in Anaerobic Bioreactors

LO Huangmu, LIN Kuoching, WANG Shunchen, LIU Minhsin, PAI Tzuyi,

CHIU Hsunying & WU Hungyu (629)

Wet Atmospheric Deposition of Inorganic N, P and Fe in the Northeastern Mediterranean and Contribution to Ecosystems

Türkan ÖZSOY & Sermin ÖRNEKTEKİN (633)

Evaluation of the Effectiveness of near Infrared Reflectance Spectroscopy (NIRS)on Fe, Cu, Mn and Zn Estimation in Compost

GALVEZ-SOLA L., MORAL R., MORENO-CASELLES J., PEREZ-MURCIA M. D.,

PEREZ-ESPINOSA A., BUSTAMANTE M. A., SAID-PULLICINO D. & PAREDES C. (643)

Integrated Assessment Modelling for Air Pollution and Air Quality Control in Spain

Rafael BORGE, Julio LUMBRERAS, David DE LA PAZ & Encarnación RODRÍGUEZ (649)

Effective Theoretical Model for Electric Leak Location at Landfill

YANG Ping, LI Jingping, WANG Yanni & WANG Qi (661)

The	Earth-elect	ricity M	odel of Hig	h Voltage	DC Landfi	ll Leakage	Detection

YANG Ping, NENG Changxin, REN Liying & WU Jingjing (667)

Distribution of Heavy Metals in River Sediments from the AnhuiSection of the Huaihe River Basin

CHEN Xiaoyang, YAN Jiaping & HE Yong (670)

Spectrophotometric Method for the Determination of Copper with Beryllon Ⅲ-Tween-80 Ternary System

YANG Yunqiong, YANG Haizhen & CHEN Wenbin (674)

Strategic Environmental Assessment Framework in Coastal Areas: Designed from a Perspective of Ecosystem Management

FANG Qinhua, CICIN-SAIN Biliana, ZHANG Luoping,

CHEN Zhenming & HONG Huasheng (678)

Assessment of Petrochemical Enterprises Fires Environment Pollution Based on Analytic Hierarchy Process (AHP)

REN Shaoyun (683)

Gas Chromatographic Determination of Polycyclic Aromatic Hydrocarbons (PAHs) in Groundwater along Wastewater Irrigation Areas

ZHANG Yuejin & WANG Juan (688)

Magnetic Biomonitoring of Air Quality in Urban Environment Using Magnetic Properties of Tree Leaves: Effect of Tree Species

GUO Junling, WANG Hongyan & LU Shenggao (693)

Heavy Metals and Organic Pollutants Monitoring in Dianshan Lake

LI Li, QIU Yanling, ZHU Zhiliang, ZHANG Yalei & ZHAO Jianfu (698)

Study and Application on Separation and Enrichment of Cobalt-OxyteracyclineComplex by Aqueous Two-phase Gas Floatation

HOU Yanmin, YAN Yongsheng, XIE Jimin, LI Chunxiang & ZHAO Xiaojun (702)

Study and Application on Separation and Enrichment of Calcium-teracycline Complex by Aqueous Two-phase Gas Floatation Spectrometry

CHENG Yonghua & HOU Yanmin (706)

Study on Nano- and Microalgae as Indicator Species in Antarctic Environment

ZHU Genhai, HU Chuanyu, PAN Jianming, YU Peisong, ZHANG Haisheng,

CHEN Lihong, JIN Mao, LIU Zilin, HE Jianfeng & SUN Weiping (710)

Emergy Sustainability Evaluation of Eco-industrial Park of Polyvinyl Chloride from Calcium Carbide

LI Yan, ZHUANG Huisheng & GE Wen (715)

Monitoring and Assessment of Acid Deposition's Ecological Impacts in Guizhou Longli Ecological Park of China

LI Wei, LI Jia & HOU Jinxiang (720)

Study on Environmental Problem and Its Prevention Caused by Underground Engineering in City

Yu Guangming, Pan Yongzhan, He Keqiang & Yuan Changfeng (728)

Study on the Assessment and Management of Air Quality of Nansha Area

LIU Yanju, LI Wei, LI Jia & XIE Dechang (733)

Hierarchy and Fuzzy Synthesis Approach for Evaluating the State of Environment and Resource: a Case of China

MAO Guozhu, DU Huibin ,YANG Dongning & WANG Shutong (739)

Application of Data Mining based on Neural Networksin Ozone Concentration Forecast

QIN Xia, SU Jingzhi, LIU Wei, MA Mintao & WANG Fangfang (744)

**Study on Determination of Odour Concentration** 

ZHANG Qingdong, ZHAO Dongfeng, ZHAO Chaocheng & ZHANG Jiguang (747)

Speciation Distribution and Potential Ecological Risks of Metals in Sediments of Changjiang Estua	Sr	oeciation	<b>Distribution</b>	and Potential	Ecological Ri	isks of Metals in	Sediments of	Changjiang	Estuai
---	----	-----------	---------------------	---------------	---------------	-------------------	--------------	------------	--------

LIU Feifei, YU Zenghui & ZHAI Shikui (751)

Investigation on Organic Pollutants and Heavy Metals in the Leachate of Datui Shan Landfill in Jiangmen

ZHANG Hongguo, CHEN Diyun, LUO Dinggui & ZHOU Shaoqi (757)

Application of Environmental Carrying Capacity Analysis on Plan Environmental Impact Assessment of Coal Chemical Industrial Park

FANG Chunsheng, MENG He, SHAN Yushu, LIU Hongwen, LI Na & WANG Ju (761)

### SECTION FIVE: Air Pollution and Air Quality Control

Air Pollution Control through CDM and Its impact on Industry

UNNIKRISHNAN Seema (767)

**Evaluation of Traffic Pollution through a Dynamic Link Loading Model** 

Mauro DELL'ORCO, Hilmi Berk ÇELIKOĞLU & Gürkan Emre GÜRCANLI (773)

Validation of Monod Model for the Removal of Styrene from Waste Gas Stream

R. DEHGHANZADEH, A. TORKIAN & M. ASADI (778)

Particulate Matter Concentrations during the XXIX Summer Olympic Games in Beijing

Martin BRANIŠ & Jaroslav VĚTVIČKA (785)

Characterizing the Emissions of Polybrominated Dibenzo-p-dioxins and Dibenzofurans (PBDD/Fs) from Metallurgical Processes

WANG Lin-Chi, TSAI Cheng-Hsien, WANG Ya-Fen & CHANG-CHIEN Guo-Ping (790)

Indoor Bacterial Removal by an Absorption Dehumidification System

WANG Ya-Fen, CHUNG Tsai-Wang, WANG Lin-Chi,

TSAI Cheng-Hsien & JIAN Wei-Ming (793)

Biosorption Study for the Removal of Nitrous Oxide Gas Using Compost Biofilter

UTAMI Tania Surya, SLAMET Slamet,

NASIKIN Mohammad & HERMANSYAH Heri (799)

**Aspects Influencing Fitness Centers Environment** 

ONCHANG Rattapon & PANYAKAPOO Mallika (803)

Factors Controlling the Atmospheric Partitioning of Bifunctional Carbonyls

ORTIZ Ricardo, SHIMADA Satoru, KUBOTA Tsutomu & SAKAMOTO Kazuhiko (810)

Impact of Transport and Industrial Emissions on the Ambient Air Quality of Lahore City, Pakistan - II

Makshoof ATHAR & Mahboob ALI (817)

**Impacts of Landfill Cover in Pollution Prevention** 

AGAMUTHU P., FAUZIAH S.H., NAVARANI V. & KHAIRUDIN L. (823)

**Characteristics of Gravity Wave Energy over Wuhan** 

LI Wei, ZHANG Qinghui, JIN Guangfeng & PANG Zhenpeng (830)

**Experimental Study on Three-way Catalyst Assessment via Inlet-Outlet Temperature Measurements** 

QIU Zhaowen, PENG Xiaohong & WEI Lang (834)

Modeling of In-use Passenger Car CO Emission Based on Large Sample Measurement and Statistical Analysis

XU An & QIAO Xiangming (838)

Study on Dust Filtration Efficiency about Wet Fibre Layer

CHEN Xishan, GU Huiying, MIAO Cuifang & CAO E (841)

Study on Dust Filtration Resistance about Wet Fibre Layer

CHEN Xishan, GU Huiying, MIAO Cuifang & CAO E (848)

Case Study on GRAL for Simulation of Atmospheric Dispersion under Low Wind Speed Conditions from Road Tunnel Portals in Nanjing

MIAO Shujiang & FU Dafang (855)

Variation Regularities of Dust Storms in Spring in Wuchuan, China

ZOU Chunxia, SHEN Xiangdong, LI Zhangjun & LI Ruiping (861)

Chemical Reaction Mechanism of HCl and Mercury in Flue Gases

GAO Hongliang & FAN Xiaowei (865)

Fe<sup>3+</sup>-La<sup>3+</sup>Co-doped TiO<sub>2</sub> Photocatalyst for the Purification of Air

LIU Baojiang, CHENG Xubang & HE Jinxin (869)

Experimental and Simulation Study of SNCR Process with CO as Additive

LIANG Xiujin, ZHONG Zhaoping, JIN Baosheng, LI Weiling, WEI Hongge & GUO Houkun (873)

Biotransformation and Removal of 3-Nitrophenol in an Upflow Anaerobic Sludge Blanket Reactor

SHE Zonglian, SHI Jinhui, GAO Mengchun & FAN Yuqing (878)

Block Distributive Method of Regional Air Pollutant Total Permitted Emission - a Case Study in Deshan New Economic Development Area

ZENG Weihua, XUE Pengli & LI Yan (887)

Research of Pollution Levels of Atmospheric Particulates and Microelement Concentration Characteristic in Pingdingshan City

SHI Penghui & FENG Xinghua (893)

**Experimental Research on Filtration Performance with Different Media for Bag Filters** 

DU Liuliu & SHEN Henggen (896)

Influence of Radon Emission from Hot Springs Water on Hotel Rooms

SONG Gang, CHEN Diyun, TANG Zeping & YUE Yumei (902)

Attribute Recognition Model Based on Variation Coefficient Method and Entropy Method to Evaluate the Indoor Air Quality

DI Yanqiang, ZHAO Yu & DAI Hong (905)

Study of Rice Bran Biodiesel Engine Emissions Using Non-thermal Plasma Assisted Catalyst System

WANG Pan, CAI Yixi, WANG Jun & LI Xiaohua (910)

Simulation about Effect of the Air Quality on Person Density in Classroom

HU Yonghai, XU Wenqiang & TONG Zhengming (915)

**Experimental Study on Enhancing the Concentration of Ions Generated in the Electrostatic Precipitator** 

YI Chengwu, CHEN Peng, WU Chundu, CHEN Zhigang, DOU Peng & WANG Yanmin (919)

# **CONTENTS**

# Part B

## SECTION SIX: Water Pollution and Water Quality Control

EDCs/Carcinogenic Micropollutants APEOs/PAHs in Aqueous Environments: Implications for Sustainable Reuse Of Wastewater: the Case of Israel

Uri ZOLLER (927)

Management of Water Resources, the Challenges of Developing Countries (Case of Jordan)

Yousef ABU-RUKAH (930)

Study of the Decomposition in Carbofuran by Fenton and Ultrasonic Processes

MA Yingshih, LIN Jihgaw, KUMAR Mathava, SUNG Chihfang, YEH Chinhsiang,

CHANG Shihhan & HU Chuanpin (937)

Adsorption of Textile Dye by Organo-Bentonite

Ramazanali DIANATI TILAKI (943)

Field Measurement of Sediment Oxygen Demand—Case Study in Tidal Keelung River

LIU Wen-Cheng (948)

Conservation and Management of Water Environment in Metropolitan Areas – Focusing on the Development of Sewerage Systems and Waterfront Space –

Kayoko YAMAMOTO (954)

Removal of Cyanide by Ferrate(VI): Effect of Metals and Ethylenediaminetetraacetate

Khemarath OSATHAPHAN, Patarawan TIYANONT,

Ria A. YNGARD & Virender K. SHARMA (966)

Effects of Humic Acid, Calcium and Bicarbonate on Arsenic(V)Removal from Groundwater by Zero-Valent Iron

Mark S. H. MAK, Pinhua RAO & Irene M. C. LO (971)

Phase Change and Remobilisation of Heavy Metals in Floodplain Sediments of UK River Systems after Frequent Flooding

Yingkui ZHAO, Xiuqing ZHANG & Susan MARRIOTT (979)

Recovery of Phosphate Ions by Continuous Precipitation and Crystallization of Struvite in DTM Type Crystallizer with a Jet Pump

Andrzej MATYNIA, Nina HUTNIK, Krzysztof PIOTROWSKI,

Bogusława WIERZBOWSKA & Joanna KORALEWSKA (986)

Influence of Ecological and Biological Parameters on the Accumulation of Methylmercury and Trace Elements (Hg, As, Ag, Cd, Cu, Pb, Se) by the Liver of Dolphins from the Western South Atlantic Ocean

HA KEHRIG, TG SEIXAS, O MALM & I MOREIRA (994)

Mean Concentration of Fluoride in Drinking Water in Malaysla

MOHD SHAM Shaharuddin, YUSOFF Mohd Kamil, YAZIZ Mohammed Ismail,

RAMLI Mohammad Firuz, ABDULLAH Mohd Yunus,

OON Lee Wah, TAJARUDDIN Kamarul Faizal, DAUD Nooraziati,

JAAPAR Irwan, IDRIS Mohd Izam Syah,

MUKHTAR Muhd Mursyidi, HAJI KHALID Mohd Wazir,

MUSTAFA Mohd Nor Kidahus & SINANG Sumarlan (1000)

Organic Carbon and Ammonia Removal by a Bench-scale Attached-growth Porous System for Treating Synthetic Wastewater

FAN Chihhao & CHANG Huangyu (1003)

**Evaluation of Removal Efficiencies of Various Coagulants and Disposal of Sludge in Treatment of Arsenic Contaminated Ground Water Sources of West Bengal, India** 

Leena S. DESHPANDE (1008)

Improvement of Coagulation and Flocculation Process for Removal of Trihalomethane Precursor in Water Supply System

Pongsri PAOPUREE & Mallika PANYAKAPO (1018)

Synthesis and Properties of Starch Grafted Poly (acrylamide-co-acrylic acid) Copolymers

Beata SCHMIDT & Tadeusz SPYCHAJ (1026)

QSAR Applications for Environmental Studies: Predicting the Degradation Rate Constants of Aromatics by OH Radicals in Water

KUŠIĆ Hrvoje, RASULEV Bakhtiyor, LESZCZYNSKA Danuta,

LESZCZYNSKI Jerzy & KOPRIVANAC Natalija (1032)

Presence of CdSe/ZnS Core Shells Quantum Dots in Water Matrix: Pollutants or Catalysts for Water Treatment

KUŠIĆ Hrvoje, LESZCZYNSKA Danuta & KOPRIVANAC Natalija (1039)

Influence of Sulphate(VI) and Nitrate(V) Ions on the Quality of Struvite Crystals in a Continuous Reaction Crystallization Process for Removing Phosphates from Diluted Water Solutions

HUTNIK Nina, PIOTROWSKI Krzysztof,

WIERZBOWSKA Bogusława & MATYNIA Andrzej (1044)

Anaerobic Treatment of Strong Character Dairy Wastewaters in Sequential UASBRs: Adaptation Period COD Removal and pH/HCO<sub>3</sub>-/VFA Balance

GOKMEN Emine, PISKIN Funda & ERDIRENCELEBI Dilek (1050)

Study on the Decolorization and Degradation of Reactive Dyes Used in the Textile Industries of Tamil Nadu, India

Senthil Kumar SADASIVAM, Mohamed Jaabir M. SULTAN & Ravi Kumar RAMASAMY (1057) Biosorbents Used for Organic and Metallic Pollution Treatment

Benjamin YAO, Kopoin ADOUBY, Pierre DADLE,

Henry Bi BRITON & Soumahoro GUEU (1064)

**Emerging Options for Excess Sludge Minimization and/or Energy Generation Maximization** 

APOSTOL Tiberiu, FOLADORI Paola, ANDREOTTOLA Gianni, RAGAZZI Marco,

RADA Elena Cristina & ISTRATE Irina Aura (1069)

**Evaluation of Dispersion Pattern of Wastewater through Marine Outfall** 

DHAGE Shivani, VIJAY Ritesh & KELKAR Prakash (1079)

Water Turbidity Removal by Natural Coagulants

ŠĆIBAN Marina, KLAŠNJA Mile & ŠKRBIĆ Biljana (1085)

Treatment of Mixed Dye Wastewater Using H<sub>2</sub>O<sub>2</sub>/Pyridine/Cu(II) System

LIM Chooi Ling, MORAD Norhashimah, TENG Tjoon Tow & NORLI Ismail (1089)

Degradation of C.I. Reactive Red 45 by UV- S<sub>2</sub>O<sub>8</sub><sup>2-</sup> System-optimization of Key Operational Parameters

PETERNEL Igor, LONCARIC BOZIC Ana,

KOPRIVANAC Natalija & FLAMACETA Marina (1093)

A<sup>2</sup>O Process Coupled with Membrane Filtration for Better Wastewater Treatment and Effluent Reuse Potential in Macau

SUN Jie, PUN Laifung & SHIM Hojae (1099)

Potential Remediation of Waters Contaminated with Pesticides by Sorption on Recycled Organic Ma	tter
DE MARTINO Antonio, ADDORISIO Veria, SANNINO Fi	lomena,
IORIO Marianna & CAPASSO Renato	(1113)
Test of an Extensive System Combining Screen, Vermifilter, Macrophyte Lagoons, and Cons	tructed
Wetlands to Recover Nutrients from Fresh Manureand Recycle Water for Flushing in Pig Housi	ng
Philippe Morand, Paul Robin, QIU JiangPing, Li Yinsheng, LUTH, Daniel C	luzeau,
Gwenn Hamon, Charlotte Amblard, Sébastien Fievet, Didier	Oudart,
Anne-Marie POURCHER, Bernadette Picot & Brigitte Landrain	(1122)
Start-up of an Anaerobic Hybrid (UASB/Filter) Pilot Plant Treating Petrochemical Industrial Waster	vater
MEHRDADI N., MEHRDADI M. & JAFARZADEH M. T.	(1133)
Monitoring Method of Polar VOCs in Industrial Wastewater Using Ultrasound Coupled HS-SPME	
NIAN Hung-Chi, CHIU Kong-Hwa & LO Jiunn-Guang	(1137)
Occurrence and Determination of Volatile Fatty Acids in Wastewater of Different Origin	
ZYGMUNT Bogdan, BANEL Anna & ZABOROWSKA Agnieszka	(1142)
Membrane Filtration of Wastewater Effluent for the Reuse Potential in Macau	
CHAN Kwok Ho, MAK Kin Meng, PUN Laifung & SHIM Hojae	(1150)
Automatic Detection and Analysis of Polar Volatile Organic Compounds in Industrial Wastewater	r Using
Ultrasound Coupled Solid-Phase Microextraction	
FAN Fang-Jun, WU Ben-Zen, NIAN Hu	ng-Chi,
CHIU Kong-Hwa & LO Jiunn-Guang	(1156)
Water Quality Variation and Algae Succession in Integrated Fish Culture Ponds	
Chatree WIRASITH, Siripen TRAICHAIYAPORN & Boonsom WARAEGSIRI	(1162)
Degradation of Amino Acids in Water by Ferrate(VI)	
Erik CASBEER, Nadine NOORH	ASAN,
Bhavesh PATEL & Virender K. SHARMA	. ,
Application of Reactor with the Photoactive Refill for Decomposition of Organic Pollutants in Water	
Joanna GRZECHULSKA-DAMSZEL & Maria TOMASZEWSKA	(1176)
Photocatalytic Activity of Spherical Titanium Dioxide in Degradation of Methylene Blue Solution	
TSAI Ping-szu, TSAI Cheng-hsien, LAI Yu-feng & HONG Zi-ben	(1180)
Treatment of Coal Tar Wastewater and Electricity Production Using a Microbial Fuel Cell	
Ho Il PARK, Chenjie WU, Kung WANG & Lian-Shin LIN	(1185)
A Continual Flow System for Detection of VOCs in Industrial Waste Water	
LEE Ming-yi, LIU Hsin-wang, CHIU Kong-hwa & LO Jiunn-guang	(1191)
Start-up and Optimisation of the DEAMOX Process after a Long Storage of Sludge	
A. I. TRUKHINA, Sung HWA, M. A. GLADCHENKO, S. V. KALYUZ	ZHNYI,
Arnold MULDER & Bram VERSPRILLE	(1195)
Chemometric and Spectroscopic Characterization of Dissolved Organic Matter from Sewage Sludge	
MORAL R., MARHUENDA-EGEA F. C., MARTÍNEZ-SABATER E., BUSTAMANT	E M.A.,
	(1204)
Implementation of Chemical Precipitation, Bio-oxidation and Membrane System in Textile Indus Case Study	try – A
•	(1209)

Occurrence and Behavior of Polar Organic Contaminants in Croatian Municipal Wastewaters

Marijan AHEL, Ivan SENTA & Senka TERZIC (1104)

Aabha SARGAONKAR (1215)

Blending GIS and RS Technologies with Mathematical Tools for Agricultural Pollution Assessment

The History of Poultry Waste Contamination in the Illinois River Watershed as Determined from Sediment Cores Collected from Tenkiller Ferry Reservoir (Oklahoma, United States)

J. Berton FISHER, Roger. L. OLSEN, Frederick M. SOSTER,

Bernie ENGLE & Meagan SMITH (1222)

Estimates of the Mass Generated, Disposal Timing and the Spatial Distribution of Disposal Sites Within the Illinois River Watershed (Oklahoma and Arkansas, United States)

J. Berton FISHER, Robert L. HIGHT, Robert VAN WAASBERGEN,

Bernie ENGLE & Meagan SMITH (1238)

Adsorption of Acid Red on Na-bentonite and Activated Carbon

YU Chunli, REN Jianmin, WU Siwei & ZHANG Yongming (1248)

Hydraulic Characteristics and Processing Performance of Inclined-Baffle ABR

ZHANG Shoutong, YANG Fenglin, ZHANG Xin, MENG Lulu, YIN Ying,

GUO Haiyan & FEI Qingzhi (1253)

Removal of Ammonia Nitrogen from Wastewater by Modified Spent Grains

CHEN Yunnen & NIE Jinxia (1258)

Distribution Characteristics of Organochlorine Pesticides in Western Songnen Plain, China

YAN Baixing, CAO Huicong & LUAN Zhaoqing (1262)

BP Matrix Model Utilized for Grade Evaluation of Oil Spill Accidents

FU Min, GUO Qiang & LI Lanhua (1268)

Treatment of Printing and Dyeing Wastewater with Coagulant PSAF

SUI Zhihui, ZHAO Xin & QIAO Chengli (1273)

Isolation and Characteristics of Novel Calcium Chloride Tolerant Strain and Its Capable of Biodegrading Saline Diosgenin Wastewater

XIN Xin, WANG Yanxin, LIU Shengyu, YIN Hongling & HE Xin (1278)

Sono-photocatalytic Degradation of Azo Dye Reactive Brilliant Red X-3B

LI Fanxiu, LU Xiaohua & MEI Ping (1285)

Synthesis of Cationic High Polymeric Flocculants from Starch-Graft-Poly (DMDAAC-co-AM) and Application in Fine Coal Slurry

ZHU Shuquan, JIANG Linhua & ZHANG Huawen (1290)

**Experimental Study on Reducing Leachate Production by Saw Powder Adding** 

YIN Jun, JIANG Baojun, WU Xiaoyan, LIANG Liang & LIU Xue (1296)

Influence Factors on the Water Sensitivity of the Sand Media

HAN Zhiyong, LI Kouchen, FENG Xin, ZHENG Quan & SUN Luqian (1301)

Assessment of Heavy Metals Pollution in Sediments of Foshan Waterway with Geoaccumulation Index

LI Feng, WEN Yanmao, SONG Weiwei & SONG Mingwei (1306)

Advanced Treatment of Landfill Leachate by Ozonation-Biological Aerated Filter

LIU Jianyu, WANG Xiaojun, WANG Kaiyan & CHEN Zhiwei (1311)

**Application of Water Pinch Technology on Petroleum-refinery Industry** 

ZHONG Dan, YUAN Yixing, GAO Jinliang & ZHAO Hongbin (1316)

Electrochemical Polymerization of Acid Blue 62 and Its Application for Catalytic Oxidation Bisphenol A

ZHANG Yan & ZHUANG Huisheng (1322)

Application of Particle Image Velocimetry Technique in the Flow Field of Reciprocating Baffled Flocculation Tank

ZHAN Yong, AN Rongyun & WANG Jiansheng (1327)

Studies on Adsorption Behaviors of Aniline onto γ-Cyclodextrin Polymer

LI Ning, XIONG Xiaoli & CHEN Shengming (1331)

Kinetics and Thermodynamics of Adsorption of Hexavalent Chromium from Aqueous Solution Using Microspheres Prepared by Rectorite and Humic Acid

TANG Yubin, YU Fang & CHEN Fangyan (1337)

Aerobic Degradation of Chlorobenzene by Acinetobacter calcoaceticus Isolated from Polluted Water Body

LI Mingtang, CUI Juntao, HAO Linlin, SHENG lianxi & XU Jingbo (1343)

Removal of Organic Pollutants in Landfill Leachate by Ozone Oxidation-UBAF

ZHANG Chunhui, ZHU Shuquan, HE Linna & WU Ping (1349)

Production of a Bioflocculant by *Pseudomonas fluorescens* C-2 and Its application in wastewater treatment MAO Yanli, LUO Shitian, ZHANG Kui, XIAO Xiaocun & YAN Yongsheng (1354)

Evaluation of Start-up Performance of Anaerobic Bioreactors withUnit Substrate Degradation Rate Constant

CHEN Ying & ZHAO Jianqiang (1360)

Treatment of Reactive Dye Wastewater by Transpiring-wallSupercritical Water Oxidation (SCWO)
Reactor

LI Fang, GONG Weijin, TIAN Qing, YANG Bo, CHEN Jihua & XI Danli (1365)

Process for Wastewater Treatment of Anion Exchange Fiber Preparation by Cleaning Production

DENG Qiong, ZENG Qingxuan & FENG Changgen (1370)

Research on the Driving Mechanism of the Surficial GroundwaterSystem Vulnerability in the Lower Liaohe River Plain

SUN Caizhi, LIU Yuyu & YANG Jun (1375)

Two-D Stochastic Water Quality Model Based on Mass Transfer Theoryfor Warning Emergency Water Pollution Accidents

WANG Yi, WANG Peng, GUO Liang, JIANG Jiping & WANG Dongmei (1380)

Performance of Combined Biological Purification Tank-Ecological Floating Raft System in the Treatment of High Urine Content Rural Sewage in Chongming Island

ZHANG Zengsheng, XU Gongdi, TIAN Qing, CHEN Jihua & XI Danli (1385)

Study on Backwashing of Two- Phase Biological Aerated Filter

WANG Jie, LIU Yang, ZHANG Danan, SUN Haocheng, YE Shufan,

QIU Chengshu & HU Xiaomin (1390)

Applied Research of Porous Ceramic Micro-filtration Membrane in Treatment of Landfill Leachate

GUO Jian, XIAN Ping, DENG Chaobing, WANG Xiaoying, JIANG Linling & LU Caiping (1393)

Design of tester for treating Domestic sewage by Using CASS Technique

LI Jing, JIANG Zhao, SUN Jian, PENG Xinran, MA Shuyan & ZHANG Ying (1398)

Removal Lead Ions from Solution by Nonliving Baker's Yeast

DAI Qunwei, DONG Faqin, M J Noonan, YAND Lijun & WANG Zhongqi (1402)

Effect of Permanganate Preoxidation on Enhancing Biofilter for Organics Removal

REN Zhijun, LIU Guifang, ZHU Linan, MA Jun & LI Yu (1408)

Adsorption of Cr (III) by Sodium Alginate in Aqueous Solution

CHEN Wenbin, WANG Liping & YANG Yunqiong (1413)

Study on Adsorption of Two Reactive Dyes by Natural Diatomite

HE Shaohua, GU Zhipan, ZHOU Yang, XIE Shuibo & LIU Jing (1418)

Decolorization of Zyo Dye Orange II with Copper (II)/Phenantroline/Hydrogen Peroxide Systems

LIU Jun, WANG Pingli, YANG Congming, LÜ Xiaomeng & XIE Jimin (1423)

Application of Chemical Mass Balance Model for Source Apportionment of PAHs in Estuarine Sediments from Yellow River, China

LANG Yinhai, ZHOU Hong & LIAO Shulin (1426)

Exp	erimental S	Study on A	Anaerobic	Biodegra	dability of	f Municir	oal Landfill	Leachate

XIAN Ping, LI Yinghua, WU Jiaqian, WANG Xiaoying & DENG Chaobing (1432)

Isolation of Atrazine-degrading *Arthrobacter* sp. AD30 and *Pseudomonas* sp. AD39 and Their Application in Biotreatment of Industrial Wastewater

ZHU Xikun, ZHENG Liuliu, YUAN Bo, LI Qingyan, NIU Shumin,

ZHAO Huabing & CAI Baoli (1436)

Adsorption of Pb(II) Ions on MnO2 Loaded D301 Resins

DONG Lijing, ZHU Zhiliang, MA Hongmei, QIU Yanling, DONG Binzhi & ZHAO Jianfu (1441)

Adsorption-Desorption of Chromium(VI) on Bentonites of Gansu Pingliang

WANG Yi, ZHANG Ting, FENG Huixia & QIU Jianhui (1446)

Study on Biological Characteristics of Up-flow Biological Aerated Filter Used for Urban Sewage Treatment

LI Simin, LIU Qiang, SHI Zhennan & TANG Fengbing (1452)

Simultaneous C and P Removal in a Hybrid CAST Reactor

BIAN Deju, GUO Haiyan & ZHANG Wenhua (1457)

Mineralization of Organic Phosphorus in Sediment of Urban Lake in Beijing

YU Yang & WANG Xiaoyan (1461)

Saccharomyces Cerevisiae as Adsorbent for Copper Removal

FAN Chunhui, QI Xiuyun, ZHANG Lixiang, ZHANG Yingchao, DU Juan & ZHANG Ying (1465)

Modification and Application a Phosphorus Index (PI) for Chao River Watershed

OU Yang & WANG Xiaoyan (1470)

Safety Evaluation of Wellhead Areas Based on Grey Correlation Analysis

XIONG Ying, WANG Hongqi, YAO Zhihua, LI Xianbo & WANG Shuai (1475)

Research on the Optimum Operational Cycle of the Biological Aerated Filter

LIU Yang, WANG Jie, LI Liang, SUN Haocheng, LIU Yi & SHI Hanchang (1482)

Determination of Microcystins-LR in Aquatic Products Stocked in the Lake Taihu Using High Performance Liquid Chromatography

YU Ruipeng, WANG Zhongchan, YAN Jianxiu, CHEN Shangwei,

ZHU Song & SONG Qijun (1486)

Annual Distribution Variation of Sediment and Its Driving Factors in the Mainstream of Red River

LI Yungang, HE Daming & FU Kaidao (1491)

Pretreatment Study of the Chemical Industrial Organic Wastewater by Reduction and Oxidation of  $\mathrm{Fe^{2^+/Fe^{3^+}}}$ 

GUO Jifeng & LU Yanjun (1498)

Phosphorus Distribution and Its Balance Analysis in Lake Nansihu

YANG Liyuan, SHEN Ji, LIU Enfeng & LI Yanhong (1501)

Chemical Embedding Immobilization Technique of Microorganism Used in Oil Contaminated Wastewater Remediation

XU Xinyang & CHEN Xi (1507)

Research on Mechanism and Pathway of p-CNB Degraded by Ultrasound/Fe<sup>0</sup>

TIAN Kaixun & DAI Youzhi (1512)

Influencing Factors and Product Analysis of Synthetic Tobermorite-seeded Crystallization of Calcium Phosphate for Phosphorus Removal and Recovery

ZHENG Hong, ZHENG Yan, ZHANG Beibei & ZHANG Hongmei,

MA Hongwen, LIU Zhe & LIANG Shuping (1516)

Applied Study of Ecological Fibre Padding and Ceramic in Micro-Polluted Water Treatment

ZHANG Xiaodong, CHEN Jihua & XI Danli (1523)

ZHANG Jin	(1529)
Analyses of Desizing Wastewater and Related Compounds during Anaerobic Biodegradation	
LIU Rongrong, YANG Bo, TIAN Qing & CHEN Jihua	(1534)
Quick Startup of Microaerophilic EGSB Reactor for Simultaneous Removal of Carbon and Nutri	ents (N
and P) Treating Actual Domestic Sewage under Ambient Temperature	
DONG Chunjuan, WANG Haihui, LIU Xiao, WANG	Yanxia,
ZHAO Qingliang & LU Bingnan	(1538)
Study on Purifying-Tank for Household Sewage Treatment with Shock Resistance and High Efficience	ey
WANG Chang, DU Xiaoxue, Yuji SAKAI, JIA Qingzhu & LI Guiju	(1542)
Lab Study on In-situ Sediment Aeration for Sulfide Odor Control of Tidal River	
YU Guangwei, LEI Hengyi, YU Qiang, BAI TAO & LI Zhong	(1547)
Removal of High Concentration NH <sub>4</sub> <sup>+</sup> -N by NanoChem Zeolite Ion Exchange Technology	
ZHANG Yi, SUN Peide, SONG Yingqi, FANG Jin & MA Wanggang	(1551)
$Removing\ Cadmium\ from\ Cadmium-containing\ Electroplating\ Wastewater\ by\ Biosorption-flotation$	
DAI Shujuan, WEI Dezhou, BAI Limei, CUI Baoyu & ZHANG Yiqing	(1558)
Oxidation of Tetracycline by Potassium Ferrate (VI) under UV Irradiation	
LI Guoting, WANG Ninggai, LIU Bingtao, WANG Hairong & ZHANG Xiwang	(1563)
Study on Intelligent Controlling Sequencing Batch Biofilm Reactor for Treatment of Domestic Waste	water
JIN Yunxiao, FENG Chuanping, GAO Yu & HAO Chunbo	(1569)
Degradation of M-xylene Solution Using Ultrasonic Irradiation	
XIE Weiping, QIN Yan, JIANG Chengchun & HE Dewen	(1573)
Wastewater Treatment Technology of Highly Efficient Hydrolysis-acidification with an Anaerobic	Baffled
Reactor	
WANG Heli, HAN Xiangkui, JIANG Nan & CHENG Li	(1579)
Sludge Reduction Induced by Tubifex in Wastewater Treatment Plant	
GUO Maoxin, SHEN Xiaoming, SUN Peide, V	
LOU Juqing & SONG Yingqi	` ′
Preparation of Water-based Fe <sub>3</sub> O <sub>4</sub> Magnetic Fluids via Chemical Co-precipitation as Precur Complex Adsorbent	sors of
BAO Zhenglei, WANG Jingsong, LIU Huijun, XIE Shuibo & LIU Liping	(1586)
Treatment of Wastewater Resulted from Gas Extraction in Gas Field	
LIU Nairui, SHA Yu, TIAN Xiaoli & LIU Guiqiu	(1592)
Synthesis and Application of Water-soluble Polyaniline	
FENG Huixia, ZHANG Miao, CHEN Nali, MA Jianjun & WEI Yun	(1596)
Investigation on the Possibility of Dyed Salt Water Simulation about Heavy Gas Dispersion	
ZENG Qiang, DONG Hua & LV Mou	(1600)
Role of Irradiance and Temperature on the Algae Bloom of Typical Algae in Three-Gorges Valley	
LIU Xinan, CHAI Xiaoying, ZhAN Min & ZHANG Youhe	(1604)
Modeling Vertical Migration of the Cyanobacteria in the Static Water	
LIU Xin'an, ZHANG Youhe, ZHAN Min & CHAI Xiaoying	(1609)
Characteristics of Chlorella Vulgaris under Different N/P Ratios in Reclaimed Water Body	
WU Shan, ZHANG Xiaoping & ZHANG Fuping	(1614)
Preparation and Selection of New-type Visible Light Photo-catalyst Iron Nitrogen Complex	
GENG Chunxiang, GUO Meng, ZHANG Xiuxia & ZHAO Chaocheng	(1617)

Study on Optimization of Coupling Effect of Oxidation and Flocculation in Removal of Algal Pollution with

Reagent of Fe<sup>2+</sup>-H<sub>2</sub>O<sub>2</sub>

Study on Stabilization of Shortcut Nitrification-Denitrification in Domestic Water Treatment Applying **Real-time Control Strategy** MA Tao, ZHAO Chaocheng, PENG Yongzhen, LIU Xiuhong & ZHOU Li (1623) **Applied Analysis of Nanofiltration Technology in Drinking Water Treatment** YU Haiqin, YANG Chengyong, ZHANG Shuying & LI Yonghua (1629) Decentralization Treatment of Papermaking Wastewater by a Sequential Biological Fluidized Bed XU Gongdi, LI Chong, IMAIZUMI Hiroshi, KANO Naoki & CHEN Jihua (1635) Microwave-Assisted Preparation of TiO<sub>2</sub>/Activated Carbon CHEN Fangyan, ZHU Jiao, TANG Yubin, YIN Lei & YANG Siyun (1641) Experimental Study on the Treatment of Molasses Distillery Wastewater Using Micro-aerobic Biological **Treatment Process** YOU Shaohong, XIE Qinglin, MA Lili, LI Yawei, LI Yanhong & JI Hongda (1646) Simulated Experiment on Removing Nitzschia Closterium in Ballast Water by Combination of Micro-pore Filtration and UV Radiation ZHANG Manxia, LIU Shengjie, CHANG Jing, FENG Yan, NING Yinping & ZHU Yimin (1650) Adsorption of Phosphorus from Water by Iron Oxide Coated Pumice PAN Yongzhang, ZHU Feng & YE Yang (1655) New Biological Technology for Treating Wastewater of Washing Sweater LUO Jianzhong, DAI Qin, YAN Ping, QIAN Wei, CHEN Guanghua & CHEN Ping (1660)Study on Adsorption of Cr<sup>3+</sup> on Steel Slag by Using Batch Experiments LIU Shengyu, GAO Jin, QU Bin, YANG Yijin & XIN Xin (1663) Response Surface Methodology for Optimization of Nitrate Removal Efficiency in Sulfur-Coral Stone **Autotrophic Denitrification Packed-Bed Reactors** RUAN Yunjie, TAN Hongxin, LUO Guozhi, WANG Chenyao & SUN Dachuan (1668) Study and Applications of Unsteady One-dimensional Water QualityModel in the Lower Yellow River ZHANG Fangxiu, WANG Yanping & XU Xiaoliang (1674) Study on High-salinity Oil Extraction Wastewater Treatmentwith Immobilized Microorganism Particles LI Yanhong, XIE Qinglin, WANG Dunqiu, YOU Shaohong & LEI Yun (1680) Hydrological Studies for Watershed of Chao Lake in China Using the WARMF Model LUO Dinggui, ZHANG Wei, LI Di, ZHENG Yi, KELLER Arturo A & WANG Xuejun (1685) Preparation, Polymerization, and Its Micro-structure of Water Treatment Agent of Polyacrylamide WANG Fenghe & WANG Liyou (1691) Study on High-grade-spread and High-mass-transfer Aeration System in Treating Tanning Waste Water WANG Heli, JIANG Nan & CHENG Li (1695) Microbes from Waste Mining Water and Bioleaching of Complex Copper-Bearing Sulfide XIE Xuehui, XIAO Shengmu, & LIU Jianshe (1699)Microbial Ecology in Acid Mine Water Samples and IscA in Acidithiobacillus Ferrooxidans

XIAO Shengmu, XIE Xuehui & LIU Jianshe (1706)

Impact of RTD on NH<sub>3</sub>-N Removal Efficiency by Three-Phase Internal Fluidized Bed

JIANG Nan & WANG Heli (1711)

Study on Dynamics and Thermodynamics for Removal of Pb(II) from Aqueous Solution by Ion-Imprinted Sorbent

WANG Limin & ZHOU Meihua (1714)

Study on Biosorption of Cu<sup>2+</sup>, Cr<sup>6+</sup> and Ni<sup>2+</sup> by Waste-activated Sludge

WANG Zhilou, XIE Xuehui, LIU Jianshe, LIU Guizhen, XIAO Shengmu & SHI Qili (1720)

Diversity	of of	Surface	Aquatic	Bacteria	from	<b>Dongting</b>	Lake,	China

QIAN Lin, YANG Yu, DAI Qinyun & LIU Jianshe (1724)

**Testing Study on UASB Process for Treating Furfural Wastewater** 

JIA Dan, GUAN Xiaohui, YANG Chunhua & ZHANG Yanfu (1731)

**Identification and Characteristics of Flocculent Strain** 

ZHAO Xiaoxiang, XIA Lili & LIU Jia (1735)

**Biodegradation Strain and Degradation Kinetics for Tetrachlorobiphenyl** 

ZHAO Xiaoxiang, ZHENG Qingfeng & ZHUANG Huisheng (1739)

Kinetic Study on Cometabolism Degradation of Phenol and 2-Chlorophenol under the Influence of Pseudomonas Aeruginosa

LIU Xingping (1744)

Preparation and Properties of PVDF Ultrafiltration Membrane Improved with -Cyclodextrine

HUANG Jianping, LUO Yan, XI Danli & RONG Jing (1750)

Organic Carbon and Nitrogen Removal from Nylon-6 Wastewater Using an A/O<sub>1</sub>/O<sub>2</sub> Biofilm System

LIU Guohua, LIU Fang & CHEN Jihua (1756)

Immobilization of Laccase on Modified Chitosan and Its Use for 2, 4-Dichlorophenol Degradation

ZHANG Haisi, WANG Ying, PEI Yuansheng,

GUO Xuejun & FENG Chenghong (1765)

Study on Anaerobic Fermentation Biohydrogen Production from Molasses Wastewater

LI Yongfeng, HAN Wei, CHEN Hong, WANG Lu & YANG Chuanping (1770)

En route to Control Pharmaceutical Residues and Pathogens in Water Environment Security

WANG Li, ZHOU Zhen, A Lina, ZHOU Xiangtong & ZHANG Hao (1775)

Preparation and Characterization of Encapsulated Potassium Ferrate as an in Situ Oxidant for Remediation of Ground Water

LIN Sifa, YUAN Baoling, LI Yunqin & ZHOU Hairui (1779)

Application of Constructed Wetlands for Non-point Wastewater Treatment in Shanghai of China

JI Bing & CHEN Jihua (1784)

Occurrence of Trihalomethanes in Chlorinated Tap Water: a Case Study of the Water Supply System of Nakhon Pathom Municipality

Mallika PANYAKAPO & Pongsri PAOPUREE (1789)

#### SECTION SEVEN: Soil Pollution and Remediation

Soil Organic Carbon Stocks and Dynamics in Long-term Experimental Grassland plots

HOPKINS D. W., WAITE I. S. & O'DONNELL A. G. (1801)

Developing New in-situ Land Remediation Technologies: from Laboratory to Field Scale

CUNDY A. B., HOPKINSON L. & AGNEW K. (1808)

**Evaluation of Bioremediation Potential of Local Plants to Contaminated Soil with Nonvolatile Fraction of Crude Oil** 

SHARIFI Mozafar, AKBARPOUR Mariam & AFKARI Farah (1814)

Accumulation of Heavy Metals in Soil and Uptake by Plants Species with Phytoremediation Potential

Bahareh LORESTANI, Mehrdad CHERAGHI & Nafiseh YOOSEFI (1819)

Metal Extraction Kinetics and the Speciation of Metal and EDDS in the EDDS-enhanced Soil Flushing Process

Theo C M YIP, Daniel C W TSANG & Irene M C LO (1827)

**Environmental Legacy and the Persistence of Heavy Metals from Gold Mining Operations in Mpumalanga Province, South Africa** 

Bob WILSON & Brian PYATT (1835)

The Use of the Collembola Reproduction Test in Bioassays of Polluted Soils

Yves CROUAU, Laurent CAZES & Thomas BUR (1843)

Studies on the Electrochemical Behaviour and Differential Pulse Stripping Voltammetric Determination of Isoproturon, a Herbicide Using Nano-Composite Modified Glassy Carbon Electrode

Paramasivam MANISANKAR & Palaniappan ABIRAMA SUNDARI (1846)

Metal Deficiencies and Imbalances in Wetland Plants from a Manganese-Enriched Wetland in Southern Guam: a Preliminary Investigation

Gary R.W. DENTON, H. Galt SIEGRIST & Jeanette P. JANO-EDWARDS (1853)

Occurrence of Polycyclic Aromatic Hydrocarbons in a Wide Variety of Soils Worldwide: a Chemometrical Approach

B. ŠKRBIĆ, J. E. JOHANSEN, N. ĐURIŠIĆ-MLADENOVIĆ & V. IVANIĆ (1859)

Artificial Alteration of Soil Organic Matter by Microwave Irradiation

Min-Chan KIM & Han S. KIM (1869)

Does the Existence of Obstructions Help the Treatment Efficiency? Case Study in the Guandu Constructed Treatment Wetland, Taipei, Taiwan

YANG Sheng-Chi, SHIH Shang-Shu, SU Tsung-Min, LEE Hong-Yuan & CHEN Jian-Chih (1875)

Surficial Bitumen in the Athabasca Oilsands Region, Alberta, Canada

FLEMING Matthew, FLEMING Ian, HEADLEY John, DU Jinglong, PERU Kerry (1882)

Complete Desulfurization of Dibenzothiophen (DBT) and the Crude Oil by Local Bacterium (ISA4) Isolated from the Oil-Polluted Soil of Ahvaz

S. AMIRI, GH. EBRAHIMIPUOR & J. FAKHARY (1887)

Effect of Copper Contamination on Soil Quality and Transport to the Environment

HE Zhenli, FAN Jinghua, YANG Xiaoe & STOFFELLA Peter J. (1892)

Evaluation of the Sustainability of Natural Attenuation for the Remediation of Contaminated Sites

Catherine N. MULLIGAN, Masaharu FUKUE and Raymond N. YONG (1899)

Substituting Chemical Fertilizers with Microbial Fertilizers for Increasing Productivity of Faba Bean (*Vicia faba* L.) in Arid Lands

Ahmed Mohamed Elhasan RUGHEIM & Migdam Elsheikh ABDELGANI (1910)

Effects of Different Fertilization Practice on Use Efficiency and Gaseous Losses of Labeled Fertilizer <sup>15</sup>N

LU Caiyan, MA Jian, ZHANG Xudong, CHEN Xin, SHI Yi & ZHAO Muqiu (1919)

Response of Soil Microbe Quantity and Active Carbon in Wetland to CO<sub>2</sub> Elevation during Growth Phase

ZHAO Guangying, LIU Jingshuang, Wang Yang & Chen Yanmei (1923)

Enhanced Electrokinetic Remediation of Polluted Soil for Retrieving Nickel by Laboratory Study

ZHU Kun, LU Jing, HOU Bin & ZHAO Yanfeng (1929)

Growth and Accumulation Response of Panicum maximum on Cd Pollution

GE Chengjun, YU Huamei & HUANG Zhanbin (1934)

Study on the Feasibility of Three Solutions for Removing Cu from a Soil

LIN Zhenzhu, DU Congyuan & WANG Guo (1940)

Sloping Distribution of Labile Organic Carbon in Eroded Brown Soils in Northwest of Liaoning Province, China

WANG Lianfeng, CAI Yanjiang, WEN Liyan, XIE Hongtu & ZHANG Xudong (1945)

Effects of Elevated CO2 on Soil Organic Carbon Stabilization in a Typical Rice-wheat Rotation System

MA Hongliang, ZHU Jianguo, XIE Zubin, GAO Ren, LIU Gang & ZENG Qing (1949)

Study on Principles of Liquid Gasoline Transfer in Soil

WANG Xi, CHEN Honghan & LIU Fei (1957)

Spatial Distribution and Sources of Heavy Metals in Soil of Dongguan City, Pearl River Delta Economic Zone, Guangdong Province, China

DOU Lei, DU Haiyan, HE Junmei, YOU Yuanhang,

ZHOU Yongzhang, LIU Zining & ZHU Xing (1962)

Concentration and Pollution Assessment of Heavy Metals in Urban Topsoils of Lishui City, China

WANG Hongyan, GUO Junling & LU Shenggao (1968)

Leaching Experiments on Cd Releasing from Some Factory-bearing Soils of Changsha-Zhuzhou, Hunan, China

LONG Yongzhen, DAI Tagen, YANG Mu & WU Qianhong (1973)

Prediction of the Content of  $^{238}$ U in Soil near Uranium Mine Exhaust Outlet Based on Grey Prediction Theory

ZHONG Yongming, YE Yongjun, DING Dexing,

LI Xiangyang & ZHOU Xinhuo (1979)

Study on Alkali Soils Reclamation with By-product from Flue Gas Desulfurization

LI Guangbi, WANG Chang, Yuji SAKAI, XIA Lin & LU Xiaocui (1983)

Bioaccumulation of Heavy Metals by Dominant Plants Growing in an Abandoned Manganese Mine in Guangxi, South China

ZHANG Xuehong, WANG Dunqiu, LIU Jie, ZHANG Aili & WEN Kang (1988)

**Effect of Key Soil Properties on Dinoseb Adsorption to Soils** 

ZHANG Danrong, YE Bin, GUAN Yiqing & LEI Niming (1992)

Heavy Metals Accumulation in Four Grasses Planted on Copper Mine Acid Waste Rock Dump

ZHU Yibin, ZHOU Lianbi, LIN Hai, GAO Wenqian,

PAN Bin & ZHAN Yuhong (1996)

**Experimental Research on Remediation of Soil Contaminated by Heavy Metal** 

HU Hongtao & CHENG Jinping (2001)

Study on Treatment of Petroleum-Contaminated Soil by Lignite Adsorption

LI Ru and & WANG Ende (2005)

Study on Absorption of Heavy Metal by Capsicum Annuum Linn and Brassica Chinensis in Contaminated Soil

JIANG Binhui, JIANG Li, CHEN Zhongyu, ZHONG Yu & WANG Li (2009)

Effects of UV-B and UV-A Radiation on CO<sub>2</sub> Emission from Farmland Soils

HU Zhenghua, CHEN Shutao, JIANG Jingyan & LIU Qiaohui (2014)

### SECTION EIGHT: Waste Solid Pollution and Remediation

Rehabilitation of Bauxite Residue (Red Mud) Ponds Using Indigenous Bacteria

KRISHNA Pankaj, BABU A. Giridhar & REDDY M. Sudhakara (2021)

Study and Analysis of the Structure Situations of the Workers Employed in Hamadan Cities Solid Waste Management

REYAHI KHORAM Mahdi & MAHJUB Hossien (2028)

Magnitude and Frequency of Pesticide Residues in Farmgate Samples of Cauliflower in Punjab, India

K. MANDAL & B. SINGH (2032)

Phenol Adsorption onto Fly Ash from Aqueous Solution-Kinetic, Equilibrium and Thermodynamic Studies
S. GHOSH, T. K. NAIYA, A. K. BHATTACHARYA & S. K. DAS (2034)

Adsor	ntion	of Zn	II).	Cd(l	II) and	Pb(II)	onto	Fly A	<b>Ash</b>

Tarun Kumar NAIYA, Ashim Kumar BHATTACHARYA,

Sailendranath MANDAL & Sudip Kumar DAS (2041)

Role of Acinetobacter spp. in Solid-Liquid Separation in Activated Sludge Process

Kimchhayarasy PHUONG, Kazuo KAKII & Toshiyuki NIKATA (2052)

Regulation of Pesticide Residues in Food in India

B SINGH & RS BATTU (2060)

Stability Analysis of the Slope of Municipal Solid Waste Sanitary Landfill

LIU Zhibin, MA Juan & LI Jingming (2062)

Control of Heavy Metals Contamination from Coal Wastes through Microbial Sulfate Reduction Process

MA Baoguo, BIE Fengxi & ZHANG Jie (2068)

Study on Ecological Drought Identification and Control in Baiyangdian Wetland

CHENG Wuqun, AN Xiurong, REN Yilei & SHENG Lili (2072)

Application of Dipole Method in Landfill's Leak Detection and Location

GUAN Shaopeng, NAI Changxin, DONG Long & WANG Yanwen (2077)

Study on Modes of Occurrence of Mercury in Coals and Mercury Removal during Coal Preparation

FENG Lipin, LU Maixi, LIU Hongying & LV Fangli (2080)

Research on Migration and Transformation of Leaches from Solid Wastes in Underground Medium

HU Hongtao & CHENG Jinping (2084)

Research on Phosphorus Slag Powder Used as Admixture in Hydraulic Concrete

LIN Yuqiang, LI Jiazheng, YANG Huaquan & YANG Huamei (2088)

Distribution of Organochlorine Pesticides in Surface Sediments of Intertidal Zone from Gaoshaling, Tianjin

LIU Xianbin, SUN Lianna, NIE Lihong, JIANG Shengping & TIAN Shengyan (2094)

**Oily Sludge Biodegradation** 

ZHANG Xiuxia, SHAN Baolai, WU Weilin, ZHANG Jianjie & ZHAO Chaocheng (2098)

Medical Waste Management and Disposal in Zhaotong

QING Shan, WANG Hua, MA Lingzhuan, YAO Gang & WU Zhenfen (2103)

### SECTION NINE: Waste Disposal and Comprehensive Utilization

**Recycling and Reuses of Scrap Tires for Waste Minimization** 

GU Roy R. (2109)

Use the Electrical Resitivity Image as a Non-Invasive Method to Study the Characterization of Landfills

Ramachandra R. MADDUR & Yee-chung JIN (2118)

Utilization of Industrial Waste as an Additive to a Ceramic Wall Tiles Mixture

M.M. EL-SHAFEI, T. A. OSMAN & N. F.YOUSSEF (2127)

**Use of Flyash in Cement Stabilized Soil Blocks** 

Prakash PARASIVAMURTHY, S.C.SHARMA, Veena JAWALI & V. ANANTHARAMA (2136)

KMnO<sub>4</sub> Oxidation of DNAPL<sub>PCE</sub> in Saturated Porous Media

Marius DRAGA, Aurora FERNANDEZ & Radu BARNA (2143)

**Development of Indian Electronic Waste Management Policy** 

Amitava BANDYOPADHYAY (2151)

Effects of 4-Chloro-Aliphatic Hydrocarbons on Microbial Activities of Anaerobic Landfill Leachate Digestion

Dilek ERDIRENCELEBI & Izzet OZTURK (2159)

Waste to Energy Conversion by Integrated Pyro-Gasification Process	
Cosmin MARCULESCU, Adrian BADEA, Tiberiu APOSTOL & Cristian DINCA	(2166)
Reuse of Melamine Waste in Fiber Reinforced Lightweight Concrete	
PANYAKAPO Phaiboon, PANYAKAPO Mallika & SOMPOLWATTANA Phongphan	(2170)
Use of Composted Sewage Slugs and Winery-distillery Wastes as Substrate in Intensive Tomato Crop	ping
S. GARCÍA-MARTÍNEZ, A. GRAU, M. A. BUSTAMANTE, E. AC	GULLÓ,
C. PAREDES, R. MORAL & J. J. RUIZ	(2177)
Organic Matter Removal Kinetics and Sulfide Inhibition Pattern of Young Landfill Leachate Treatm	ent
Dilek ERDIRENCELEBI & Izzet OZTURK	(2181)
Solid Waste Management Status of Khulna CityA Comparative Analysis between Public and Private	Sector
Md. Sohel RANA	(2186)
Co-stabilization of Waste Containing Heavy Metals	
Kamil P. BANASZKIEWICZ & Tadeusz A. MARCINKOWSKI	(2191)
Recycling of Slag and Fly-Ash from MSW Incineration for a Zero-ing Landfilling Strategy	
RAGAZZI Marco, RADA Elena Cristina, ISCHIA Marco & DAL MASCHIO Roberto	(2197)
Epoxy Materials Hardened with the Solvolysis Product from Waste Poly(ethylene terephthalate) PE	Γ
Ryszard PILAWKA, Tadeusz SPYCHAJ	(2206)
Reuse of PC Plastic Aggregates in Cementitious Materials	
Kinda HANNAWI, Siham KAMALI-BERNARD & William PRINCE	(2211)
Feasibility of Using Sewage Sludge as Construction Materials	
MEHRDADI N. & HAGHOLLAHI A.	(2220)
Studies on Kinetics of Anaerobic DigestionI of Solid Waste (Sinews) from Gelatin Indu	stry in
Semi-Continuous Reactor	
C.RAGHUNATHAN, B. VELMURUGAN, R.A. RAMANUJAM & M. VELAN	(2226)
Recycling of Household Organic Waste in Malaysia: The Challenges	
FAUZIAH S.H. & AGAMUTHU P.	(2234)
Phosphorus Release Mechanism in Phosphorus-Rich Waste Activated Sludge under Anoxic Condition	ns
BI Dongsu	(2241)
Experimental Study and Simulations of Infiltration in Landfill Soil Covers with Evapotranspiration	
WANG Kang & WU Jingfeng	(2246)
Biodegrading Polycyclic Aromatic Hydrocarbons by Composting of Municipal Sewage Slud Rapeseed Meal	ge and
PAN Fei, CHEN Wu, LIUYang, ZHANG Yaqing, YING Caoming & ZENG Qingfu	(2251)
Comparative Economics Analysis on Waste Incineration Power Generation by Using Grate-CFB at	` /
Incinerators	iu ci b
LI Qinghai, MENG Aihong & ZHANG Yanguo	(2257)
Study on Environmental Safety of Thermal Treatment of MSWI Fly Ash	(2231)
ZHANG Haiying, ZHENG Yi, ZHAO Youcai & QI Jingyu	(2263)
Test Study of Pulverized Strontium Slag Used as Addition to Cement	(2203)
TIAN Wenyu, TANG Boming & YU Zhilong	(2268)
	(2200)
Effect of Aspergillus Niger on Weathering of Phosphorite in Laboratorial Conditions  CHEN Shu, CHEN Hai Van & HUANG Shang	(2272)
CHEN Shu, CHEN Hai Yan & HUANG Sheng  Experimental Study on Cement-Based Composites with High-Titanium Slag	(2273)
SHI Yan, YANG Huamei, YANG Huaquan, LI Jiazheng & WANG Yingchun	(2280)
Effects of Iron Hydroxide Addition on the Performance of Membrane Bioreactor	(2200)

JI Shifeng, GAO Chunmei, XI Danli & GAO Yuhong (2286)

Performance	Comparison	of	Biofilm	and	Suspended	Sludge	Treatment	<b>Processes</b>	in	Sequencing	Batch
Reactor											

JIANG Feng, LIANG Rui & ZHAO Xia (2292)

Application of TTC-ETS and INT-ETS Activities to Characterizing Bioactivity of Sludge in MUCT Process

YIN Jun, WANG Xiaoling, WU Xianghui, LIU Haiyan & YE Long (2296)

Application of Sewage Sludge on Growth of Soybean Seedlings Grown in Aluminum Toxicity Soil

LIU Qiang, HE Genhe & WANG Ning (2300)

Glutathione Fermentation by Saccharomyces Cerevisiae to Reclaim Scrap Rubber

ZHANG Cuiru, WANG Yaqin, ZHAO Suhe, JIANG Guangming & HUO Ruiming (2304)

Cleaner Production Technologies Assessment and Energy Audit Study in Textile Industry

ZHANG Zhizong, QIN Yan & LU Shuyu (2310)

Alternative Approach to Better Municipal Solid Waste Management in China

LI Xiaoge, LU Xujie, XI Danli, WANG Yanli, LI Jing & LIU Lin (2317)

**Investigation on Waste Disposal of Several Typical Construction Projects** 

LUO Qinghai, CHEN Xiaoming, WANG Yanjin & LING Xiao (2321)

New Utilization Technology: Producing Compound Amino Acids from Sewage Sludge by Acid Hydrolysis

KONG Sifang, LIU Yangsheng, ZENG Hui, WANG Junjian & ZHONG Xiuping (2324)

Dioxins Biodegradation in the Bagasse Solid Medium by White Rot Fungi

XU Xiaofeng, LIN Lu, JIANG Liping, HE Beihai & SUN Runcang (2331)

Adsorptive Removal of Fluoride from Aqueous SolutionUsing Modified Fly Ash

LI Caihong, GAO Huimin, LU Jun & WANG Peipei (2339)

Beneficial Effects of Crop Residues and Manure Mixture Compost in Greenhouse on Vegetable Production and Environment Protection

DU Shaoting (2345)

### **SECTION TEN: Miscellaneous**

Production of Hydrogen from the Reforming of Methane Using a Plasma-Catalyst Approach

TSAI Cheng-Hsien, CHANG Wan-yu, WANG Ya-fen & JOU Chih-Ju G. (2353)

Assessing Energy Saving and Atmospheric Emission Reduction Opportunities in Marine Shipping Sector: an Empirical Result from Container Liners

HUA Jian & WU Yihsuan (2357)

Simulation of Stomatal Conductance of Soybean in Western Semi-arid Region of Heilongjiang Province

FU Yao, GUO Yafen & ZHANG Zhongxue (2362)

Germicidal Effect and Kinetics Using Nonthermal Argon Plasma

LIU Hongxia & CHEN Jierong (2367)

**Urban Environmental Noise Pollution Prediction Model and its Application** 

XIE Zhengwen, WU Chao, YUAN Changming & YUAN Qiao (2372)

Adsorbent & Flocculation Treatment for High Yield Pulp Effluents of Cotton Staff by Coke

LIU Tingzhi, DUAN Xilei, ZHENG E, DUAN Weijiang & HU Huiren (2378)

Characteristics of Urinary Monohydroxy Polycyclic Aromatic Hydrocarbons Metabolites (OH-PAHs) in Pregnant Women

ZHOU Jing, ZHANG Xiaolan, YU Zhiqiang, WU Minghong,

YANG Zujing, SHENG Guoying & FU Jiamo (2384)

Discussion on Rule of Environment Adaptability on Miners' Physical Ability in Underground Coal Mines

ZHANG Chao, MA Shangquan, WANG Yibo & YANG Lina (2390)

Design of Oil Fume Cleaning System	with Flue Cleaning, Fin	re Proofing and	Extinguishing
------------------------------------	-------------------------	-----------------	---------------

YUAN Changming, DUAN Yue, CHE Huizi & YUAN Yin (2396)

Estimating the Feasibility of Rainwater Use for High-rise Residential Buildings in Australian Cities

ZHANG Yan, CHEN Donghui, CHEN Liang,

GRANT Andrew & SHARMA Ashok (2399)

Rethinking of Non-traditional Water Resources in Residential Developments of Rural Towns, Western Australia

ZHANG Yan, CHEN Donghui, CHEN Liang, GRANT Andrew & SHARMA Ashok (2403)

Preparation of Antibacterial Glass Fiber and Its Antibacterial Characteristics

ZHOU Fei, WANG Qinqin, SUN Yuhan & ZHANG Jianhua (2409)

Computation of Thermal Environment of Lightweighted Steel Temporary House in Natural Ventilation

ZHANG Xiaoying & LIANG Zhitao (2414)

Simulation on Leakage and Proliferation Model of High-pressure Long-distance Natural Gases Pipeline Based on Matlab

WU Xiaoying, WANG Qiang & YUAN Changmin (2421)

Responses of Total Flavonoid Yield in *Erigeron Breviscapus* (Vant.) Hand.-Mazz. to Enhanced UV-B Radiation

FENG Yuan, ZU Yanqun, ZHU Yuan, YANG Shengchao, HE Yongmei & LI Yuan (2426)

Molecularly Imprinted Microspheres for Selective Recognition and Binding of Bisphenol A

GONG Jianlong, ZHOU Meihua & WANG Limin (2432)

Batch Culture Isolation of Fermentative Hydrogen Production Bacteria *Ethanologenens* sp. R3 in Sucrose Substrate

LI Yongfeng, JIAO Anying, YANG Chuanping LIU Xiaoye & JIANG Ying (2438)

Physical Chemistry Mechanism of Fermentative Hydrogen Production by Mixed Bacteria Culture

XIONG Xiaojing, LI Yongfeng, XIONG Wei, JIANG Ying,

SHEN Yingying & XU Jingli (2442)

**Development Trend of Retail Commercial Environment Design** 

SHEN Le & YUAN Lingjie (2448)

**Safety Management of Business District Environment** 

SHEN Le & ZHANG Yushi (2451)

Synthesis and Toxicity of Polyoxometalates Containing La and 5-fluorouracil

WANG Shuaishuai, LIU Xia & FENG Changgen (2456)

Research on the Monitor System of the Humiture for Multimedia Buildings

ZHANG Xinhua, ZHAO Lianghong, ZHAO Weiqiang & ZHU Liefeng (2461)

Optimal Transfer between Extensive Wastewater Treatment Systems Combining Vermifiltration, Macrophyte Lagoons and Constructed Wetlands

LI Yinsheng, Paul ROBIN, QIU Jiang Ping, Philippe MORAND,

LUTH, Brigitte LANDRAIN & Daniel CLUZEAU (2464)

Integration of Photolysis and Biodegradation for the Degradation of Polychlorinated Biphenyl Mixture

WONG Kin Hang & WONG Po Keung (2470)

Determination of Volatile Organic Compounds (VOCs) in the Downtown of Kocaeli, Turkey

DURMUSOGLU Ertan & COKELEK Emrecan (2480)

Recycling of on- and off-farm Plant Biomass in Organic Rice Production at Subtropical Hill Ecosystem of North Eastern Indian Himalayas

Anup DAS, Pankaj BAISWAR, D P Patel, G C Munda, P K Ghosh,

S V Ngachan, A S PANWAR & Satish CHANDRA (2484)

### **SECTION ELEVEN: Abstracts**

The Role of Hydroxyl Radicals in Advanced Oxidation Processes

Stéphane BARBATI (2493)

sugE-like Gene: a Gene Involved in TBT Resistance in Aeromonas molluscorum Av27

CRUZ Andreia, SUZUKI Satoru & MENDO Sónia (2494)

DARAMEND<sup>TM</sup> - Bioremediation of Organochlorine Pesticides via *In-Situ* Chemical Reduction

Fayaz LAKHWALA, David HILL & Alan SEEC (2496)

EHC<sup>TM</sup> and EHC-M<sup>TM</sup> - *In Situ* Chemical Reduction (ISCR) Technology for Treatment of Chlorinated Solvents and Metals.

Fayaz LAKHWALA, Jim MUELLER, Josephine MOLIN,

John VALKENBURG & Ravi SRIRANGAM (2497)

Evaluation of DNA Extraction Methods as Well as the Specificity of Two Primer Sets in the Detection of VBNC form of *Escherichia coli* in the Recreational Waters of the Southern Caspian Sea

LANGAROODI G H Zohre, SOUDI Mohammad Reza,

GHARAVI Sara & SEPEHR Shayesteh (2498)

Food Chemical Safety and Environmental Health: A Global Perspective

Laurie Hing Man CHAN (2499)

Pollution Caused by Ships and Searching the Waste Water of Some Ships Coming to Trabzon Seaport of Turkey

Muhammet BORAN & Fatih YIGIT (2500)

Phosphorus-Binding Capacity of Hydrated Ca-rich Oil-Shale Ash: Removal Capacity and the Mechanisms.

Riho MÕTLEP, Margit KÕIV, Martin LIIRA, Ülo MANDER,

Christina VOHLA & Kalle KIRSIMÄE (2502)

Approach the Mechanism of Energy Supply in Tilapia (*Oreochromis mossambicus*) after Acute Cd Exposure

WU S M, LIN Y S & HSU C W (2504)