

**8th International Conference on Environmental Science and Technology 2016**  
**June 6-10, 2016 • Hilton Hotel • Houston, USA**

*(It should be noted that it is not the final version. The schedule is subject to change without notification)*

**Conference Schedule**

	<b>6-June</b>	<b>7-June</b>	<b>8-June</b>	<b>9-June</b>	<b>10-June</b>
Morning 8:00a.m. - 11:50a.m.	Registration	Plenary Meeting	Platform Sessions	Platform Sessions	Platform Sessions
Afternoon 1:30pm. - 6:00p.m.	1:00p.m-7:00p.m.	Platform Sessions	Platform Sessions	Platform Sessions	Visit NASA*
Evening 7:00p.m. - 9:00p.m.		Poster Session I	Poster Session II	Award Announcement, Dinner	
7:30a.m. - 6:00p.m.	Arrival / Registration	Registration	Registration	Registration	Registration**

\*There is an optional activity to visit NASA paid by participants (noon - 7pm). \*\* 8:00a.m – 11:50a.m.

**Presentation at a Glance**

<b>Tuesday, June 7</b>		<b>Session Number</b>	<b>Session Title</b>
Grand Meeting Room	8:00am-11:50am	Session 00-01	Plenary Meeting
Meeting Rooms	1:30pm-6:05pm	Session 01-14A Session 01-14B	Adsorption/Desorption for Wastewater Treatment Adsorption/Desorption for Wastewater Treatment
	1:30pm-6:05pm	Session 02-01 Session 02-02 Session 02-03 Session 02-04A Session 02-07	Aerosol Air Quality Assessment Transport of Air Pollutants Waste Gas Control Techniques (A) Catalysts for Reducing Emission
	1:30pm-6:05pm 1:30pm-6:05pm	Session 03-01 Session 03-02	Contaminants in the Subsurface Natural Attenuation of Contaminants
	1:30pm-6:05pm	Session 03-03	In-Situ Remediation
	1:30pm-6:05pm	Session 03-04	Solid Waste Management
	1:30pm-6:05pm	Session 05-01	Human Exposure
Poster Room	7:00pm-9:00pm	Poster Session I	Sessions 01-01~01-10, 02-1~06, 03-1~03-04, 09, 10, 11, 12, 13, 14, 15, 16
<b>Wednesday, June 8</b>			
Meeting Rooms	8:00am-6:05pm	Session 01-14C Session 01-10	Adsorption/Desorption for Wastewater Treatment Nitrogen-Phosphorus Wastewater Treatment
	8:00am-6:05pm	Session 01-11	Sludge Treatment
	8:00am-6:05pm	Session 01-12	Municipal Wastewater Biotreatment
	8:00am-6:05pm	Session 01-13	Industrial Wastewater Biotreatment
	8:00am-6:05pm	Session 02-04B Session 02-05	Waste Gas Control Techniques (A) Air Pollutant Monitoring
	8:00am-6:05pm	Session 02-06 Session 02-08 Session 02-09 Session 02-10	Hazardous Gas Biofiltration Ilution Fuel Gas DeSOx, DeNOx, and Metal Removal Air Pollution Prevention and Management Noise
	8:00am-6:05pm	Session 03-05	On-site and Off-site Remediation



Friday, June 10			
Meeting Rooms	8:00am-11:50am	Session 01-16	Reactions and Degradation of Wastewater Contaminants
	8:00am-11:50am 8:00am-11:50am	Session 08-01 Session 08-02	Global Warming and its Impacts Carbon Discharge Reduction
	8:00am-11:50am 8:00am-11:50am 8:00am-11:50am	Session 11-01 Session 11-02 Session 11-03	Environmental Simulation Water Quality Modeling Pollutant Estimation and Risk Assessment
	8:00am-11:50am 8:00am-11:50am 8:00am-11:50am 8:00am-11:50am 8:00am-11:50am	Session 16-01 Session 16-02 Session 16-03 Session 16-04 Session 16-05	Water Energy Nexus Wind Energy Solar Energy Bio Fuels (Methane, Ethanol, ...) Special Energy Development-B

### Sessions, Reference Numbers, and Presenters

(Including platform and *poster presentations*, not the final version)

(*Poster sessions* will be scheduled on June 7th and 8th)

(Presenters are listed, while some co-authors are not included)

## Plenary Meeting

991. *Geological and Anthropogenic Imprints on Ground Water Quality: Beware of the Anecdotal Models.* **Prof. Barry J. Hibbs** (California State University, Los Angeles, USA)
992. *Who is Responsible for the Environment?* **Prof. Erica Schoenberger** (The Johns Hopkins University, USA)
993. *The Future of Human Environment and Health: Sustainability through Integrated Approach.* **Prof. Momoh A. Yakubu** (Texas Southern University, USA)
994. *Manufactured Nanomaterials: New Emerging Contaminants and Their Potential Impact to Drinking Water Resources.* **Dr. Endakachew Sahle-Demessie** (U.S. EPA, USA)

## 01. Water Pollution and Water Quality Control

### 01-01 Rivers, Lakes and Estuary Systems

522. *Identification of suitable area for the establishment of riparian forest in Lower Saxony, Germany.* **Wei Jiang** and Rainer Marggraf
659. *Sustainable River bank Erosion Management by Soft Engineering Approach: A Case Study of the Brahmaputra.* **Prashanta Kumar Bordoloi**
888. *Freshwater Mussels of the Upper San Antonio River Watershed and Lower Cibolo Creek in Bexar, Guadalupe, Wilson, and Karnes Counties: Abundance and Densities.* **Larry Larralde**
952. *Bioaccumulation of Arsenic, Cadmium, Mercury, and Lead in Fishes of the Daliao River Estuary, China.* **Chunye Lin**, Kai Lei, Deqi Jiao, Mengchang He
1107. *Nitrification and Denitrification by Algae-Attached and Free-Living Microorganisms during Cyanobacterial Bloom in Lake Taihu.* **Xiaofeng Chen**, Haiyang Jiang, Liuyan Yang

### 01-02 Watershed Management

530. *Tailings Storage Facilities and Environmentally Sustainable Mining.* **Erica Schoenberger**
632. *State Approaches to Watershed-Based Permitting.* **Danielle Stephan**, Greg Currey
781. *Rain Harvesting for Sustainable Watershed Management – Local Water Supply and Regional Water Quality Improvement.* **Neal Shapiro**
804. *Impact of Watershed Management Activities in Land Use Pattern and People's Livelihood in Nepal.* Ajay Karki

### 01-03 Water Resources and Assessment

546. *Survey of Physical-Chemical Quality of Superficial Waters at the Surrounding Area of the Sebkhha Basin (Moknine, Tunisia).* **Taoufik Naamoun**
597. *Natural Attenuation of Indicator Bacteria in Natural Water Systems,* **Amin Kiaghadi** and Hanadi S. Rifai
637. *Fate and Transport of Pharmaceutical Residues in Three Mile Creek Mobile, AL.* **Darius Hixon**, Alison Robertson, Kevin White, Timothy Sherman and Shannon Mitchell
763. *Assessment of Water Balance in the South-West Coastal Region of Bangladesh.* **Nepal C Dey**, Mohmood Parvez, Nur A. Khondaker
954. (Moved to 01-15)

### 01-04 Groundwater

618. *Application of Water Quality Index for Groundwater Quality Assessment of Nanded Tehsil, (M.S.) India.* **Vasant Wagh**, Dipak Panaskar, Ranjitsinh Pawar, Aniket Muley and Shrikant Mukate
623. *Hydrochemical Characterization of Groundwater in Bhokar Taluka of Nanded District, Maharashtra, India.* **Dipak B. Panaskar**, Vasant M. Wagh and Ranjitsinh S. Pawar
717. *Occurrence of Fluoride from Deeper Aquifers (Granites) and Shallow Aquifers (Basalt) from Nanded, Maharashtra, India.* **Ramakant D. Kaplay**, S.S.Potdar, H.S.Patode, T.Vijay Kumar and H.Sangnor
809. *Groundwater Pollutant Loading in Urban Watersheds along Lined and Unlined Channels.* **Barry Hibbs**
849. *Water-Level Change as a Precursor of Groundwater Drought.* **Jae M. Lee**, Sunjoo Cho and Nam C. Woo
885. *Modelling of Arsenic Removal from Groundwater by Electrodialysis.* **Rose Marie O. Mendoza**, Meng-Wei Wan, Chi-Chuan Kan, Maria Lourdes P. Dalida
887. *Assessment of Groundwater Quality of Mulakalacheruvu Area, Chittoor District, Andhra Pradesh, South India Using Multivariate Statistical Techniques.* **Thejaswi Arveti**
891. *Multivariate Statistical Analysis of Groundwater in the Fluoride Affected Area of Jaggayyapalem, South India.* **Nagaraju Arveti**
916. *Phosphate Removal from Synthetic Groundwater by Mixed Algae Culture.* **Eda Tuna Öztürk**, Güneş Özden, and Serdar Göncü.

### 01-05 Non-point Sources

#### /01-06 Wastewater Discharge Management

813. *Analysis of Waste Water Treatment in Kaduna Refining and Petrochemicals Corporation (KRPC) (NNPC Kaduna) Nigeria.* **Bertha Abdu Danja**

### 01-07 In-Situ Measurement and Monitoring

#### /01-08 Drinking Water

588. *Association of Drinking Water Hardness and Endothelial Function in Children and Adolescents.* **Parinaz Poursafa**, Roya Kelishadi, Mohammad Mehdi Amin
622. *Simultaneous Nitrate and Phosphate Removal from Drinking Water Using Immobilized Polyethyleneimine.* **Enrico T. Nadres**, Debora F. Rodrigues
754. *Suspended Bacteria Community of Processing Units in the Typical Drinking Water Treatment Plant of China.* Weiyang Li, **Feng Wang\***, Junpeng Zhang and Wanqi Qi
758. *Willingness to Pay for Safe Drinking Water in the Coastal Area of Bangladesh: A Pilot Study in Tala Union, Satkhira*
760. *Full-Scale Studies of Factors Related to Biological Stability of Water Distribution System in South China.* Weiyang Li, **Junpeng Zhang\***, Feng Wang and Wanqi Qi.
777. *Arsenic Content in Drinking Water and Occurrence of Cancer in Nalbari and Kamrup District, Assam.* **Dipali Das Deka** and Jogen Chandra Kalita.
778. *Household Awareness and Willingness for Clean Drinking Water Supply: A Case Study of Islamabad, Pakistan.* Nazia Mehwish, Naila Saleh, Muhammad Khursheed
780. *Options for the Removal of Arsenic from Drinking Water in Rural Areas of Bihar, India.* Nityanand Singh Maurya, Astha Kumari, Sudhir Nigam
783. *Pond-Wetland Complexes as Processor of Drinking Water Source.* **Weidong Wang** and Chengqing Yin.
807. *Interaction between Hydrolysis and Flocculation, and Its Influence on Generation of Disinfection By-Products with Aluminum.* **Hong Shen** • Xin Chen • Hongbin Chen
842. *Defluoridation Potential of Vermiculite Modified with Hexadecyltrimethylammonium.* **Tayo Oladipo Ologundudu**, John Ogoni Odiyo, Georges-Ivo Ekosse.
861. *Modeling of Chlorine Decay Based on Initial Chlorine Dose, Reactant Concentrations and their Distributions.* **Ababu Teklemariam Tiruneh**, Amos O. Fadiran, Stanley J. Nkambule, Lwazi M. Zwane

868. *Assessing Drinking Water Quality at High Dependent Sources: Case Study in the Coastal Region Bangladesh.* Ratnajit Saha and Nepal C. Dey
915. *Performance Evaluation of Algal Alginate as a Potential Coagulant and Water Softener.* **P. Saranya**, S. T. Ramesh, S. Mohan
926. *Assessing Drinking Water Suitability in Rural Bangladesh: An Application of Water Quality Index.* Tahera Akter, Mahfuzar Rahman, and Md Akramul Islam

#### 01-09 Water Quality Assessment/Management

547. *Contaminant Reduction by Pervious Concrete Pavement and Bamboo Bioretention Basin.* **Vincent Hwang**, Amber Masters, Evelyn Montalvo, Sangchul Hwang.
562. *Toxicology of Azo Dyes with Respect to Their Metabolically Produced and Chemically Related Aromatic Amines.* King-Thom Chung
602. *Fuzzy Pattern Recognition Method for Water Pollution Incidents Emergency Plan Evaluation in a River-Reservoir System.* Farzaneh Feizi, Abbas Afshar
619. *Significance and Application of the Global Drinking Water Quality Index: Lebanon Case Study.* **Mey Jurdi**, Sami Ramia, Samira Korfali, Nabil Amacha, Joumana Nasr, Rola Ajib and Sara Chehab
708. *Evaluation of Water Quality of the ASI (Orontes) River between 1997 and 2008.* **Hasan Goksel Ozdilek**, Mustafa Kemal Sangun, Ziya Sedat Çetiner
725. *Isolation and Characterization of Rhodanese Produced by Klebsiella edwardsii from Cyanide Polluted Stream.* **O. A. Adedeji**\*, O. T. Aladesanmi and M. K. Bakare.
772. *Restoring Water Quality for Municipal Water Supply through a Collaborative Liaison for Land Management.* **Joachim Ibeziako Ezeji**
805. *Water Quality Assessment for Melen Watershed in the Marmara Region, Turkey.* Atilla Akkoyunlu, **Ersin Orak**
886. *Analysis of Elevated Concentrations in Trace Elements and Nutrients in Urban Creek.* **Michael Harrison** and Barry Hibbs.
939. *Influence of Pollutant Process Uncertainty on the Prediction of Stormwater Quality in Urban Catchments.* **Buddhi Wijesiri**\*, Prasanna Egodawatta, James McGree, Ashantha Goonetilleke
975. *Coliform Counts and Plankton Species in Lawaye River, Batangas as Indicators of Pollution.* **Natividad F. Lacadan**, Jose Rafael L.Lopez, and Renz Michael F.Pasilan
983. *Performance Characteristics for Particles of Sand in A Newly Designed Ribbed Hydrocyclone.* **Gayatree Patra**, Sudipto Chakraborty and B. C. Meikap

#### 01-10 Nitrogen-Phosphorus Wastewater Treatment

563. *Effects of Supersaturation Control Strategies on Hydroxyapatite (HAP) Crystallization Process for Phosphorus Recovery from the Wastewater.* **Hongliang Dai** and Xiwu Lu.
575. *Study on the Effect of Different Fillers on Nitrogen Removal of Nitrifying Bacteria.* **Hu Xiaomin**, Liu Fang, Zhao Xin
605. *Phytoremediation of Nutrient-rich Wastewaters Using Duckweed.* **Summer Lentini**, **Emily Smith**, David Petrik, and Sara Arana
773. *Wastewater Nutrients Uptake by Chlorella Vulgaris in Mixotrophic Growth Mechanism.* **Muhammad Ilyas**, Shaikh Abdur Razzak
940. *Effect of Temperature on the Competition between Suspended and Attached Nitrifying Bacteria in MBBR System.* **Bin Dong**, Qunbiao He, Jundong Wang
958. *Removal of Nitrate from Domestic Wastewaters Using Algae.* **Selim L. Sanin**, Mohammad izhar, Aydın Akbulut

#### 01-11 Sludge Treatment

601. *Change of pH and ORP with Applied DC on Leachate Activated Sludge,* **Gülizar Kurtoğlu Akkaya**, Elif Sekman, Selin Top, Senem Yazici Guvenc, Ece Sagir, Mahir Ince and Mehmet Sinan Bilgili
641. *Combustion Characteristics and Kinetics of the Pulping Effluent Sludge using Thermogravimetric Analysis.* **Kanhaiya Lal**, Anurag Garg
675. *Reduced Sludge Growth at High Bulk Liquor DO Induced by Increased Maintenance.* **Anwar Khursheed**, Meena Sharma, Rubia Z. Gaur, Abid Ali Khan, Vinay Kumar Tyagi, A. A. Kazmi
722. *Improvement of Wastewater Sludge Settling Properties with A Novel Biological Method Using Aquatic Worms.* **Yalda Basim**, Nemat Jaafarzadeh and Parviz Mazaherian.
765. *Effect of Thermal-alkaline Pretreatment on Microbial Communities in an Anaerobic Digestion of High-solid Sludge.* **Wang Tao**, Gao Peng, and Dai Xiaohu
840. *Efficient Anaerobic Production of Volatile Fatty Acids from Sewage Sludge by Alkyl Polyglucose.* **Jingyang Luo**, Leiyu Feng, Yinglong Su, Yinguang Chen
898. *Field Application of Ultrasonic Washing on Oily Sludge Treatment.* **Yinxin Gao**, Ran Ding, Yu Zhang, Min Yang
970. *Effects of Anaerobic Digestion on the Combustion of Sewage Sludge.* **Emrehan Berkay Çelebi**, Ayşegül Aksoy and F. Dilek Sanin

## 01-12 Municipal Wastewater Biotreatment

532. *Dissolved Methane Recovery from Anaerobic Attached Growth Reactor Treating Synthetic Domestic Wastewater.* **Brian Crone**, George Sorial, Jay Garland  
(Also listed in Session 01-16)
599. *Pretreatment Performance of a Novel AWFR for Decentralized Domestic Wastewater.* **Juan-hong Li**, Xi-wu Lv
617. See 643
625. *Biological Degradation of Laundry Wastewater under Aerobic and Anaerobic Condition: A Kinetic Evaluation.* Keerthi K. and Debraj Bhattacharyya
643. *A Comparative Study on Light Grey Water from Buildings with Different Functions.* Giresunlu, E., **Beler-Baykal, B**, Afacan, E.
651. *Treatment of Rural Non-Point Source Domestic Water by Subsurface Wastewater Infiltration System (SWIS).* Binhui JIANG, Liping JIA, Haiyan WANG, Xiaomin HU
- 748 *A Pilot-Scale Study of a Modified Wastewater Treatment Process Using the Sludge Reduction Effect.* Chenyi Shi, Yushan Wang, Xiangge Wei, Wuzhen Guo, Meishan Lin, Jinxin Tan and Lianpeng Sun
836. *A Novel and Cost-Effective Sewage Treatment Process with Energy Recovery and Autotrophic Nitrogen Removal.* **Dawen Gao**
961. *Enrichment of Denitrifying Methanotrophic Bacteria of the NC10 Phylum from Activated Sludge.* **Shubham Singh** and Jih-Gaw Lin

## 01-13 Industrial Wastewater Biotreatment

673. *Surface Engineered Green Polymers for Enhanced Water Decontamination.* Moushumi Ghosh
744. *Decolorization of Anaerobically Digested Molasses Spentwash by Fungal Strain: Isolation and Screening of Strains.* **Mrityunjay Singh Chauhan**, Anil K. Dikshit
789. *Application of Response Surface Methodology for Optimization of Vat Blue 33 Removal from Synthetic Dye Wastewater Using a Bacterial Consortium.* Ogugbue Chimezie Jason, Ovbiagele Naomi
967. *Improvement of Bacterial Biodemulsifier Biosynthesis in Permeabilizing Agent-Enhanced Utilization of Rape Oil.* **Yuyan Zhang**, Kaiming Peng, Yansong Wei, and Xiangfeng Huang
1111. *Volatile Fatty Acid Production during Acidification of Olive Mill Wastewater, Havva BAG<sup>1</sup>, Secil ERDEM<sup>1</sup>, **Canan Can Yarimtepe**, Orhan Ince and Nilgün AYMAN OZ*
1112. Moved to 01-15

## 01-14 Adsorption/Desorption for Wastewater Treatment

506. *Surfactant Removal by Metal Oxides and Adsorbilization of Organics in Exhausted Material.* Suman Koner, Anjali Pal, **Asok Adak**
553. *Comparative Study of Adsorption of Dyes onto Activated Carbon and Chitosan Impregnated Activated Carbon.* Pratyusha Reddy Reddy\*, George A. Sorial
595. *Treatment of Wastewaters Contaminated with Cadmium Ions Using Date Palm Trunk Fibers as a Low Cost Adsorbent in a Fixed Bed Column.* **Waid Omar**
609. *A Comparative Study on Production of Activated Carbon from Hardwood Chips and Pellets.* Hafiz Ahmad, Jordan Mayers and Brandon Madden
610. *Molecular Simulation and Validation Studies of Resorcinol Adsorption on Ordered Mesoporous Carbon.* Bing Chao, **Zaki Uddin Ahmad**, and Daniel Dianchen Gang
611. See 610
630. *Natural Iron-Based Material As a Cost-Effective Solution for the Treatment of Arsenic Contaminated Waters from Gold Mine.* **Malgorzata Szlachta** and Patryk Wójtowicz
640. *Phenol Removal from Water Using Biochar and Activated Carbon from Albizia: An Invasive Plant Evaluation.* Hafiz Ahmad, Korhan Adalier, Brandon Madden and Douglas Brown
642. *Conversion of Black Liquor into Activated Carbon for Ciprofloxacin Removal from Wastewater.* **Anirudh Gupta**,
653. *Valorisation of Grape Pomace to Effective Biosorbent for Waste Water Remediation* **Arunima Nayak**, Brij Bhushan
685. *Experimental Study of Congo Red and Direct Red 80 Adsorption from Water onto Carbon Nanotubes.* **Madhu Agarwal**\* & Priti Kumari
692. *Feasibility Studies on the Removal of Iron and Fluoride from Aqueous Solution Using Shells of Limonia Acidissima as Adsorbent.* G. Anusha
716. *Copper (II) Biosorption Characteristics of A Novel Biosorbent Combination: Fungus and Agriculture Waste.* **Jingyao Wang** and Chongwei Cui
731. *Multiwalled Carbon Nanotubes as a Novel Solid-Phase Extraction Adsorbent for TPH Determination in Contaminated Water.* **Akinpelu A Adeola**<sup>a</sup>, Ilyas Muhammad <sup>a</sup>, Ahsan M Shemsi <sup>a</sup>
774. *Application of ANN for Modeling the Adsorptive Removal of Fluoride by Alumina Cement Granules.* **Ashok K. Gupta**, S. Ayoob, Partha S. Ghosal, Manoj K. Yadav

784. *Ammonia Nitrogen Adsorption by Zeolite and Wetland Soils Under Different Temperatures* **Wei Huang** and Weidong Wang
834. *Heterogeneous catalytic degradation of acetaminophen and simultaneous oxidation/adsorption of arsenite by Cu-Zn-Fe-LDH* **Hongtao Lu**, Zhiliang Zhu, Jianyao Zhu
867. *Electrospraying *Saccharomyces cerevisiae* Immobilized Onto Composite Nanofibrous Mats for Heavy Metals Adsorption.* **Hongbing Deng**, Xiaodan Qiu, Zhaoyang Zeng
914. *Sun-Coral Powder as Adsorbent for Phosphorus Removal in Wastewater.* **M.T.G Vianna\*** and Marcia Marques.
920. *Synergistic Adsorption and Degradation of Aqueous Contaminants Using Magnetic Mesoporous Adsorbent.* Yaocheng Deng, **Lin Tang**, Jingjing Wang

### 01-15 Physico-chemical Wastewater Treatment

525. *Target-specific Capture of Relevant Gaseous Pollutants Using Biodegradable Polymeric Nanoparticles.* **Fernanda Delbuque Guerra**, McKenzie L. Campbell, Daniel C. Whitehead and Frank Alexis
539. *Performance of MF and RO Processes for Water Recycling: Advanced Treatment after Conventional Wastewater Treatment.* **Jawad Al-Rifai**, Hadi Khabbaz and William E. Price
548. *Electrocoagulation to Strengthen the Treatment of Oil Shale Wastewater by A/O-MBR.* **Xiaomin Hu**, Guangsheng Qian, Wenxi Chen, Hui Wang
550. *Study of a Fluidized Bed Reactor for Phenol Photocatalysis.* **Guillermo Rincon** and Enrique La Motta.
579. *Clay Minerals-Based Eco-Materials for Organic Contaminants Transformation and Heavy Metal Removal.* Hanzhong Jia, Lan Wang, Xiaohuan Wang and **Chuanyi Wang**
604. *Development of BiVO<sub>4</sub> Photoanode for Degrading Pollutants.* **Qin Shi**, Hui Wang, and Zhaoyong Bian
631. *Optimization of Operating Parameters on Reactive Black 5 Dye Removal by Electrocoagulation Process and Energy Consumption.* Mook Wei Tze, Mohamed Kheireddine Aroua and **Malgorzata Szlachta**.
668. *Study of Washing Kinetics of Non-Polluting Anionic Lithographic Printing Inks.* Chandrakant S. Sarkar and Ashok N. Bhaskarwar
702. *Effect of Calcium Ions on Haloacetic Acid (HAA) Rejection by Nanofiltration (NF) Membranes.* **Linyan Yang**, Victor W.-C., Chuyang Y. Tang
709. *Quartz Sand Filter Medium for Oily Wastewater by Hydrophobic Modification.* **Wei Bigui**
718. *Mineralization of Quinoline in Aqueous By Microwave-Enhanced Catalytic Wet Peroxide Oxidation System: Optimization and Modeling Using Central Composite Design.* Zhongzhe Yang, You Hong\* and Zhang Bo
735. *Magnetic Nano Ferrites as Catalyst for Proficient Removal of Organic Pollutants and Toxic Dyes from Synthetic Wastewater.* Santosh Bhukal, Sonal Singhal
743. *Dephenolization of NF Concentrates Streams from Pretreated Olive Mill Wastewater through a Fixed-Bed Resin Reactor and Polyphenols Recovery.* Jacques Romain Njimou and **George Elambo Nkeng**, Marco. Stoller, Agnes Ciccì, Angelo Chianese and Marco Bravi
749. *Applying Activated Carbon/Silver Catalyst with Ozonation to Decompose Wastewater of Tetra-Methyl Ammonium Hydroxide (TMAH).* **Chang, Cheng-Nan**, Li-Wei Lu and Wen-Chih Hsu
756. *Persulfate activation in the Presence of Formic Acid for Carbon Tetrachloride and Chromium (VI) Removal.* **Xiaogang Gu** and Shuguang Lu
790. *Oxidative Transformation of Refractory Benzothiazoles with PMS/CuFe<sub>2</sub>O<sub>4</sub> Process.* **Tao Zhang** and TorOve Leiknes. Tao Zhang
795. *Construction of Fe-TAML Activator Systems to Degrade Sulfur-Containing Contaminants in Waters.* **Qingquan Liu** and Xiyun Cai.
810. See 743
828. *p-Agl Anchored on n-Bi<sub>2</sub>O<sub>2</sub>CO<sub>3</sub> Sheets by Co-Crystallization with Excellent Photocatalytic Performances under Visible Light.* **Lili Zhang**, Chun Hu
844. *Cost Analysis of Electro Dialysis Cell for Desalinating Brackish Water.* Naglaa M. Eid
845. *Mixed Metal Oxides Derived from Ce-Doped Zn-Al Layered Double Hydroxide: Synthesis, Characterization and Photocatalytic Activity.* **Jianyao Zhu**, Zhiliang Zhu, and Hongtao Lu
852. *Effect of Persulfate (S<sub>2</sub>O<sub>8</sub><sup>2-</sup>), Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>) and Microwave Irradiation Pretreatments on the Biochemical Methane Production Potential of the Wastewater Sludges.* **E. Özön**, A. Erdinçler
884. *A Novel Process by A Small Molecule Enhanced Effective Degradation for Methyl Orange Dye in Aqueous Solutions under UV-VIS Irradiation.* Jingjing Wang, **Renbi Bai**
897. *Physico-Chemical Qualities of the Treated Final Effluent Discharges of Some Wastewater Treatment Plants in Buffalo City Municipality, Eastern Cape, South Africa.* T Kulati, OO Okoh and AI Okoh
945. *Comparison of Fenton and Photo-Fenton Removal Efficiencies during Ampicillin Degradation.* Afsoun Nikravan, **Selim L. Sanin**
951. *Comparison of Ballast Water Treatment by Ultraviolet Radiation and Electrolysis.* **Donghai Wu** and Guanghua Lu, Ran zhang and Hong You
954. *Properties of CuO Nanoparticles-Humic Acid Flocs and Membrane Fouling: Influence of Aluminum Species and pH.* Yongbao Chu ,Xue Wang, **Yan Wang** and Nan Xue

963. *Enhanced Settling of Suspended Solids in Olive Mill Wastewater by Application of High Frequency Ultrasound*. Alev Cagla Uzun, Nilgün Ayman Oz and **Canan CAN YARIMTEPE**
1112. *Application of Electrohydrolysis Process for Vinegar Wastewater and Municipal Wastewater Mixture*. **Faruk Hakan Canbaz**, Canan Can YARIMTEPE, Rabia ERARSLAN, Elif ERDOGAN and Nilgun Ayman OZ

### 01-16 Reactions and Degradation of Wastewater Contaminants

509. *Acute Toxicity of Graphene Nanoplatelet to Bacterial Communities in Activated Sludge*. **Hang Ngoc Nguyen** and Debora Frigi Rodrigues
556. *Isolation of Bacteria from Lake Waters Associated with Wastewater Effluents Capable of Degrading Various Pharmaceuticals*. **Noreen Gallagher** and Dr. Jeff Lodge
606. *Characterization and Quantification of DOM in Wastewater and its Interaction with Pharmaceuticals*. **Sanjeeb Mohapatra**, Neha Sharma, Suparna Mukherji and Lokesh P. Padhye
607. *Removal and Degradation Pathway of Sulfamethoxazole from Municipal Wastewater Treatment by Anaerobic Membrane Bioreactor*. **Chun-Hai Wei**, Claudia Sanchez Huerta, and TorOve Leiknes.
883. *OH Radical Formations in Phyto-Fenton Reactions: Detection and Application*, **Shigeki Nara**, Yoshihiko Inagaki and Yutaka Sakakibara
902. *Continuous Treatment of Wastewaters Containing PPCPs by an Electrochemical Advanced Oxidation Process*, **Junya Suzuki**, Eiji Kawada, Taiki Maehata and Yutaka Sakakibara
923. *Utilization of Torula Yeast *Zymomonas Mobilis* as Main/Reciprocal for Degradation of Municipal Organic Waste as Feed for Goats*. **Kanu Chikezie N.**, Anigbogu N. M, and Ezike J. C
935. *Deep Insights into the Mechanism of 2,4-Di-tert-butylphenol(2,4-D) Degradation by Using UV/persulfate with a New Model*. **Qiongfang Wang**, Yisheng Shao, Naiyun Gao and Xiang Shen.
532. See Session 01-12.

### 01-17 Nanotechnology Applications

510. *Characterization and Effect of Nanoparticles (*Trigonilla foenum*) on Waste Water Treatment*. **Mai A Elobeid** and Manal A Awad
533. *Removal of Estriol in Water Using Sequentially Coupled Membrane Filtration/TiO<sub>2</sub> Photocatalytic Processes*. **Irwing Ramirez<sup>1</sup>**, Ashantha Goonetilleke<sup>2</sup>, Erick R. Bandala<sup>\*1</sup>
559. *Interaction of Engineered Materials with Microbial Biofilms and Its Potential Applications*. **Hengye Jing**, George A. Sorial, and Endalkachew Sahle-Demessie
582. *Study on the Influence of Addition of Acids on Particle Size and Surface Area of Titanium Dioxide Photocatalyst*. Padmini Ellappan<sup>a</sup> and **Lima Rose Miranda<sup>a\*</sup>**
592. *Understanding the Formation of Naturally Occurring Silver Nanoparticles in Aquatic Environment*. **Nathaniel F. Adegboyega**
603. *Optimized Synthesis of Polymer-based Graphene Oxide Nanocomposites for Heavy Metal Adsorption using Response Surface Methodology*. **Jem Valerie D. Perez** and Maria Lourdes P. Dalida, Debora F. Rodrigues
664. *Cadmium Removal from Groundwater Using Magnesia and Alumina Nanoparticles*. **Xin Song** and Neel Kamal Koju.
674. *Photocatalytic Degradation of Congo Red Dye by Nano Zinc Oxide*. Amjed Mirza Oda,<sup>A</sup> Alaa Rasheed Omran,<sup>B</sup> Ahmed Saleh Al-khafaji,<sup>C</sup> Abbas Jassim Attya,<sup>C</sup> Rahma Hashim,<sup>D</sup> Luma Ahmed Alnakash<sup>C</sup>
715. *Organic Radical Intermediate-Sparked Highly Fenton-Catalytic Efficiency of Dandelion-Like TiCuAl-SiO<sub>2</sub> Nanospheres from Organic Contaminant Degradation*. **Lai Lyu**, Lili Zhang, and Chun Hu.
737. *Electrospun Rectorite/TiO<sub>2</sub>/Polymer Nanofibrous Mats for Adsorption of Heavy Metals*, **Yingfei Zhan** and **Hongbing Deng**
759. *Estimation of TPHs in Oil Contaminated Wastewater by Adsorption on MWCNTs Using Solid-Phase Extraction Coupled With GC-FID*. **Ilyas Muhammad<sup>1</sup>**, Akeem Akinpelu<sup>1</sup>, Ahsan M Shemsi<sup>1</sup>
817. *Multifunctional Graphene-Based Nanocomposite Modified Membrane Filters for Heavy Metals and Bacteria Removal from Water*. **Yvonne Ligaya F. Musico** and Maria Lourdes P. Dalida, Debora F. Rodrigues and Catherine M. Santos
968. *Selective and Simultaneous Determination of Dihydroxybenzene Isomers Based on Green Synthesized Gold Nanoparticles Decorated Reduced Graphene Oxide*. Mohamed Soliman Elshikh
1000. *Study on the Photocatalytic Degradation of Microcystins by TiO<sub>2</sub> Immobilized on Fiberglass Cloth*. **Deqiang Chen**, Yiqun Chen
1115. *Electrospun Carbon Nanofibers with Zero Valent Iron Nanoparticles (ZVINPs@ECNFs) for Heavy Metals Remediation in Ground and Wastewater*. Nikhil. R. Mucha, **Ramesh Ravella**, Muchha, R. Reddy, Lifeng Zhang

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### 02-01 Aerosol



776. *Chemical Constituents at Rural Site, Agra in Indo-Gangetic Plain: Sources and Transport*. **Aparna Satsangi**, Nidhi Verma, Anita Lakhani, K. Maharaj Kumari
921. *Study on Aerosol Formation Properties in Ammonia-based WFGD Processes*. **Huang Rongting**, Pan Danping, and Yang Linjun
949. *Chemical Characterization of Carbonaceous Component of Fine Aerosols over Jaipur, India*. **Navdha Khera**, Annada Padhi, Swati Sharma, Gazala Habib, Nivedita Kaul and Dipankar Saha
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### 02-02 Air Quality Assessment

503. *Integrated Assessment of Particulate Matter in KPK and Baluchistan by Using GAINS- South Asia Model*. **Sheikh Saeed Ahmad** and Aisha Khan
519. *Heavy Metals in Road Dust from Xiandao District, Changsha City, China: Haracteristics, Health Risk Assessment and Integrated Source Identification*. Jingdong Zhang, **Fei Li** and Jun Yang
554. *Air Flow Simulation around Aircraft*. Jianfeng Liu\*, Baoqing Wang\*, Ronghui Chen and Zihui Ren
565. *Chlorinated Paraffins in Canadian House Dust and NIST SRM 2585 (Organic Contaminants in House Dust)*. **Xinghua Fan**, Hongtao Shang, Cariton Kubwabo, and Pat E. Rasmussen
573. *Ultra and Fine-Particle Size Distributions from Domestic Coal Combustion in Top-Lit Updraft Ignition (TLUD)*. **D. Masekameni**, **L.R Masondo**, **K.N. Mohapi**, **T. Makonese**, **H.J. Annegarn**, **J. Maseki**, **M.Gulumian**
581. *Assessment of Ambient Air Quality at Ekurhuleni Metropolitan Municipality, South Africa, 2011 to 2014*. **Themba Sigudu**, Daniel Masekameni and Sindiswa Lukhele
587. *The Relationship of Air Pollutants with Biomarkers of Endothelial Dysfunction in Cord Blood*. **Parinaz Poursafa**, Roya Kelishadi, Mohammadhasan Tajadini
590. *Trends in Health Burden of Ambient Particulate Matter Pollution in Iran, 1990-2010*. **Roya Kelishadi**, **Professor**, Parinaz Poursafa, Mostafa Qorbani
655. *Measurement of PAHs in the Ambient Air*. Elham Eslami
677. *Black Carbon and Size-resolved Particle Number Concentrations during Open-field Burning of Corn Straw*. **Yu-Hsiang Cheng\*** and Li-Sing Yang
684. *A Comprehensive PM<sub>2.5</sub> Air Quality Study in Delhi, India: Measurements and Source Apportionment*. **Pavan Kumar Nagar**, Mukesh Sharma
687. *Beijing Dust Storm in Spring Season and Its Source Apportionment*. **Yan-Ju Liu**
736. *Observable Characteristics of Cloud-To-Ground Lightning Induced NO<sub>x</sub> and O<sub>3</sub> over the PRD Region, China*. **Yonglin Liu**, Xinhui Bi, L. Y. Chan, Qin hao Lin, Leilei Fei, Xinming Wang, Ping'an Peng and Guoying Sheng.
797. *Air Pollution Source Apportionment Using Tracer Inorganic and Organic Species as Markers*. **Tarun Gupta\*** and Dharmendra Kumar Singh
799. *Aerosol Pollutants Transport Over Hindu Kush–Himalayan Sites and Its Implication on Glacier Snow-Melt Processes*. **Shubha Verma**, Charu Joshi, O. Boucher
800. *Evaluating Black Carbon Aerosol Induced Radiative Forcing over Bengal Hooghly River Basin*. **Shubha Verma**, Shantanu Kumar Pani
870. *Analysis of Meteorological Conditions on a Persistent Haze Process in Yangtze River Delta*. **Rui Han**, Shuxiao Wang, Wenhai Shen, Mingnong Feng
901. *Characterization of Odor Emissions at Organic Chemistry Production Process*. **Ilker AKMIRZA**, Kadir ALP, Ugur GULER and Merve YILMAZ
911. *Atmospheric Aerosol Compositions and Sources at Two National Background Sites in Northern and Southern China*. **Qiao Zhu**, Ling Yan He and **Xiao Feng Huang**
936. *Decreasing Emission Factor of Pollutants in Abadan Refinery by Renovating the Furnace Design*, **Abbas Zabih** and Mohammad Raazi Tabari.

### 02-03 Transport of Pollutants

751. *Numerical Modeling of Air pollution particles Transport and Deposition in Human Lung*. **V.K. Katiyar**
752. *Air Pollutant Dispersion over a Hill from a Line Source*. **V. K. Katiyar**, Virendra Kumar.
822. *Modelling Ground-Level Ozone Concentration Using Improved Data-Mining Algorithms*. **S. MOHAN** and P. SARANYA
900. *Commuter's Exposure to PM<sub>2.5</sub>: A Case Study of BRTS Corridor in Delhi*. Rajeev Kumar Mishra and **Amrit Kumar\***

### 02-04 Waste Gas Control Techniques

543. *Catalytic Oxidation of VOCs and CO over Octahedral Layered Birnessites Synthesized by Different Methods*. Zhidan Fu, Qing Ye\*, Heng Lu, Shuiyuan Cheng, Wang Dao
560. *Advanced Buffer Materials for CO<sub>2</sub> Control: Improved Air Quality and Energy Conservation in Commercial Buildings*. Pavithra Rajan, Glenn Morrison, **Fateme Rezaei**

686. *Fabrication, Characterization and Sulfur Dioxide Adsorption of ZnAl<sub>2</sub>O<sub>4</sub> Nanospheres*. Ling Zhao, Xinyong Li and Ji Zhao
697. *Photocatalytic Oxidation of Fuel Vapors: A Novel Method for Reducing Fuel Vapor Emissions from Automobiles*. Dr. Catherine B. Almquist
750. *The Typical Technologies for Ultra Low Emission from Coal -fired Power Plant in China*. **Jianyi LU**, Bingyi XU, Lili FU, Yihai LU
808. *Synthesis of LiAl<sub>2</sub>-layered Double Hydroxides for CO<sub>2</sub> Capture over a Wide Temperature Range*. Liang Huang, Junya Wang, Yanshan Gao, Yaqian Qiao, Qianwen Zheng and Qiang Wang, Zhanhu Guo, Yufei Zhao, Dermot O'Hare
863. *Novel DeNO<sub>x</sub> and DeSO<sub>x</sub> Technologies for Flue gas Treatment for Boilers and Furnaces*. **Jian Luo** and Qiiuhua Zhang
879. *Immobilization of Self-Stabilized Plasmonic Ag-Agl on mesoporous Al<sub>2</sub>O<sub>3</sub> for NO Elimination under LED Illumination*. **Chun He**, Xiuqin Tan, Jiawei Zeng, Yaohua Hou, and Dong Shu
896. *Simultaneously Removal of NO<sub>x</sub> and Diesel Soot Particulates over Different Perovskite-Type Oxides Catalysts*. **Ganesh Chandra Dhal<sup>1</sup>**, Subhashish Dey<sup>1</sup>, Devendra Mohan<sup>1</sup> and Ram Prasad<sup>2</sup>
925. *Target-specific Capture of Relevant Gaseous Pollutants Using Biodegradable Polymeric Nanoparticles*. **Fernanda Delbuque Guerra**, McKenzie L. Campbell, Daniel C. Whitehead and Frank Alexis.
930. *Hopcalite Group (CuMnO<sub>x</sub>) Catalysts for Carbon Monoxide Oxidation at Low-Temperature Conditions*. Subhashish Dey<sup>1</sup>, Ganesh Chand Dhal<sup>1</sup>, Ram Prasad<sup>2</sup>, **Devendra Mohan<sup>1\*</sup>**
973. *Water Scrubbing of H<sub>2</sub>S Gas in Dual-Flow Sieve Plate Column Scrubber*. **Swamy Kurella**, Pavan Kishan, Bhukya and B. C. Meikap
976. *Amine Impregnated Activated Carbon is a Novel Material for CO<sub>2</sub> Capture*. **Dipa Das**, Debi Prasad Samal, and B. C. Meikap

### 02-05 Air Pollutant Monitoring

515. *Potential health impact of RF Radiation on Riggers in Telecommunication Industry in Ghana*. **Owusu Akyaw Kwarteng** and Lydia Michelle Tawiah.
558. *Industrial Air Pollution in Saudi Arabia and the Influence of Meteorological Variables*. Jamal A. Radaideh
679. *Monitoring of Hazardous Atmospheric Releases under Emergency Situation by Radar Tracer Method*. **Boris S. Yurchak**
707. *An Alternative On-Line Method for Evaluating Brown Carbon in the Atmosphere*. Guohua Zhang, Xinhui Bi\*, Xinming Wang, and Guoying Sheng
739. *Trifluoroacetic Acid Level in the Atmosphere of Beijing and Its Relationship with PM<sub>2.5</sub>*. **Junyu Guo**, Jianbo Zhang. **Junyu Guo**, Jianbo Zhang
741. *Environmental Impact of Biomass Burning For Civil Uses onto a Mountain Area*. F. Petracchini, C. Balducci, M. Perilli, A. Cecinato, F. Liotta, V. Paolini, L. Paciucci.
755. *Seasonal Control on Shape Modification of Suspended Particulate Matter from Northern Indo-Gangetic Alluvial Plain*. **Munmun Chakarvorty\*** and Jayanta Kumar Pati.
764. *Anthropogenic Spherules as a Major Pollution Indicator in Urban Area*. **Ambalika Niyogi**
782. *A Preliminary Assessment of Major Air Pollutants in the City of Urumqi, China*. Francesco Petracchini, Angelo Cecinato, Lucia Paciucci, **Valerio Paolini** and Flavia Liotta
786. *Methodologies for a Better Interpretation of the Preliminary Assessment: IAPMS Pančevo*. **Lucia Paciucci**, Francesco Petracchini, Angelo Cecinato, Paola Romagnoli, Valerio Paolini, Flavia Liotta, Francesca Vichi and Micol Biscotto
802. *Regional Air Pollution Monitoring by Ground-based Remote Sensing*. Jianguo Liu, Wenqing Liu, and Pinhua Xie
999. *An Innovative Approach to Use MODIS AOD Data for PM<sub>2.5</sub> Monitoring*. **Zhiming Yang**, Harris Williams

### 02-06 Hazardous Gas Biofiltration

551. *Biological Treatment of Chloroform in a Controlled Aerobic Trickle Bed Biofilter*. **Keerthisaranya Palanisamy\***, Bineyam Mezgebe and George A. Sorial, Endalkachew Sahle-Demessie
552. *Effect of Methanol and Toluene on Removal of Trichloroethylene in a Fungi seeded Biotrickling Filter*. **Dhawal Chheda** and George Sorial
557. *Evaluations of the Removal of Trihalomethanes by Two independent Bio-trickling filters under Different Operating Conditions*. **Bineyam Mezgebe**, George Sorial, Keerthisaranya Palanisamy, Endalkachew Sahle-Demessie
918. *Removal of Vapour Phase Methanol in the Presence of Thiosulphate Using Anaerobic Biotrickling Filter*. Mekonnen Maschal Tarekegn, Eldon Raj Rene· Jack van de Vossenbergn and Piet N. L. Lens

### 02-07 Catalysts for Reducing Emission

585. *Interface Effects for CO<sub>2</sub> Hydrogenation on Pt<sub>4</sub>/γ-Al<sub>2</sub>O<sub>3</sub>*. **Yulu Liu**, Wanglai Cen and Jianjun Li.
871. *A Novel SnO<sub>2</sub>-CoO<sub>x</sub> Catalyst for NO Oxidation with H<sub>2</sub>O*. **Huazhen Chang**, Mingguan Li, Junhua Li

937. *Environment-Friendly and Highly Efficient Rare Earth Based Catalyst for Selective Catalytic Reduction of NO<sub>x</sub>*. Shemin Zhu, Yuesong Shen, Zhiwei Xue, Zhimin Wang

#### 02-08 Fuel Gas DeSO<sub>x</sub>, DeNO<sub>x</sub>, and Metal Removal

613. *Influence of Fe Loadings on Desulfurization Performance of Activated Carbon Treated By Nitric Acid*. **Jiaxiu Guo**, Song Shu and Xiaoli Liu

#### 02-09 Air Pollution Prevention and Management

688. *How Do Plant Leaves Remove Dust and its Attached Metals on the Roadside of Beijing?* **Zheng Yang**, Yan-Ju Liu  
869. *Future Perspective and Mitigation Options for Atmospheric Mercury (Hg) Emissions in China*. **Qingru Wu**, and Shuxiao Wang  
881. *Economics Impact of Traffic Congestion and Urban Transportation in Chennai City*. B.P Chandramohan and Lunghar Jajo  
980. *Performance of Venturi Scrubber for the Removal of Dust Particle*. **Manisha Bal** \*, and B. C. Meikap  
990. *Minimizing Environmental Pollution and the effects in Nigeria through Green Design and Green Buildings*. **Iwuagwu, Ben Ugochukwu**; Onyegiri, Ikechukwu; Iwuagwu, Ben Chioma  
1110. *Enhancing the Algal Biohydrogen Production using Flue Gas Derived Bicarbonate and Nutrient Limitation Methods*. **Sai Sameer Pusapaty**\* and K.Sata Sathasivan

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583. *Noise Exposure and Noise-Induced Hearing Loss in Young People Listening to Music Using Earpiece*. **Chagok, N.M.D.**, Gadong, E.P., and Dakok, K.K.

### 03. Land (Soil, Solid Waste) Pollution and Remediation

#### 03-01 Contaminants in the Subsurface

512. *Reexamining the Spatial Distribution of Fluoride in Groundwater of Sri Lanka: A Field Study at Nochchiyagama, Anuradhapura*. A.T.Cooray, T. De Fonseka, and S.P Deraniyagala  
538. *Variable Behaviour of Mass Transfer Coefficient with Velocity, Length and Dispersion of Reactive Solute*. **Deepak Swami**, Abhimanyu Sharma  
540. *Preliminary Study of Heavy Metal Pollution in Soil of Industrial Zone of Surat – India*. **Tank Shantilal K\***, Mehra Bhavna K.  
825. *Polycyclic Aromatic Hydrocarbons in Soils from the Central-Himalaya Region: Distribution, Sources, and Risk Assessment*. **Wei Luo**, Xiang Bi, and Jiajia Gao.  
855. *Assessment of Soil Contamination Due to Kota Stone Slurry Effluents in Kota Region of Rajasthan*. **Er. Sachin Maurya**, Er. Urvasi Maheshwari, and Prof. A K Dwivedi  
866. *Transport and Adsorption of Colloids in Soils: A MRI Approach*. **Alizée P. Lehoux**, Eric Michel, Paméla Faure, Denis Courtier-Murias, Stéphane Rodts, Philippe Coussot  
907. *Improving Soil Chemical Properties and Maize Growth in Southeastern Nigerian Ultisol Using Spent Grain Ash*. **Ogbonna, Emmanuel Ahamefula** and Osodeke, Victor Emmanuel.  
953. *Vertical Distributions of Elements in the Soil (Albic Luvisol) of Sanjiang Plain in China*. Wei Ouyang, Hongguang Cheng\*, Chunye Lin  
1106. *Effects of Long-Term Fertiliser Application on Peanut Yield and Quality and on Heavy Metal Accumulation in the Soil-Plant System*. **Xiaobing Wang**, Wuxing Liu, Xiaofeng Chen, and Zhen'gao Li.

#### 03-02 Natural Attenuation of Contaminants

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531. *Effects of Arbuscular Mycorrhizal Fungi on the Growth and Ce Uptake of Maize Grown in Ce-Contaminated Soils*. **Wei Guo\***, Fang Wang, Pengkun Ma and Liang Pan  
580. *Innovative In-Situ Oxidation Technologies for Treating Groundwater Contaminated by Chlorinated Solvents and 1,4-dioxane*. **Hua Zhong**, Mark Brusseau, Ni Yan, Lina Zhang, and Peng Cui.  
658. *Modified Fenton's Oxidation for Pallikaranai Wetland Remediation*. Ambika Selvaraj  
841. *An Efficient Consortium of Biosurfactant Producing Bacterial Strains for Remediation of Hydrocarbon*. **Suresh Dekka** and Kaustubhmoni Patowary

872. *Utilizing Plants to Limit the Migration of Contaminants from Fracking-Water Spill Sites.* **Amanda Shores**, Brittany Hethcock, Dr. Melinda Laituri

### 03-04 Solid Waste Management / Polymer Waste Recycling and Management

504. *E-Waste Management and Their Importance of Environmental Protection and Sustainable Development Approach to Environmental Education.* **Seyed Mohammad Shobeiri**, Batoul Nazari
529. *Assessment of the Effect of Dumpsite on Soil Quality, Ogun State, Nigeria.* **Ojekunle Z. O.**, Bada B. S., Ejimkoye O. G and Oyebanji F.F
633. *The Effects of Different Condensation Temperatures on Waste Tire Pyrolysis,* **Neslihan Doğan-Sağlamtimur**, Ahmet Bilgil, Tuğçe Aykanat, Öznur Çalıřkan, Funda Yolcu, Elif Dilan Yıldırım, **Türkan Vural**, Halime Ötgün and Büřra Arıcan
721. *Municipal Waste Generation and Their Possible Management System in Dhaka City Corporation: Commercial Approaches.* **Md. Iftakharul Muhib** and M. Khabir Uddin.
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742. *The Impact of Saw Dust Biochar on Soil PH and Crop Yields for Climate Change Mitigation.* Lukong Pius Nyuykonge and **George Elambo Nkeng**, Lenzemo Wirnkar Venasius
746. *Bio-drying of Green Wastes.* **Ertan Durmusoglu**, Mutala Mohammed, and Ismail Ozbay.
770. *Effect of Coal Fly Ash on Different Anatomical Changes of Helianthus Annuus L.* Kailash Patel, Parimal M. Patel and Vrajesh D. Patel
779. *Assessment of Stability and Maturity of Compost Made of Municipal Solid Waste and Different Types of Bulking Agents by Chemical and FTIR Method.* Nabam Rich, Ajay Bharti
796. *The Genotoxic Effect of Thermal Power Plant Coal Fly-Ash on Raphanus sativus L (Radish).* Kailash Patel, Parimal M. Patel and Vrajesh D. Patel
803. *Review of Solid Waste Management in Indian Towns – From Conservation Perspective of River Ganges.* **Nadeem Khalil**, Mohammad Bilal
811. *A New Concept for Utilization of Industrial Solid Wastes in Building Structures.* Arunima Shukla and Ashok N. Bhaskarwar
812. *Life Cycle Cost Assessment of Solid Waste Disposal for a Medium Sized Indian Town – A Case of Aligarh City.* Nadeem Khalil, Mohammad Bilal, Roopak Varshney
814. *Impacts of Waste Disposal Methods on Household Health Conditions in Kenya.* **Emmanuel Donkor**, Stephen Onakuse, Joe Bogue
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835. *Biodrying Technology for Municipal Solid Waste Treatment.* Asha P Tom, Ajit Haridas, **Renu Pawels**
873. *Opportunities and Constraints of Low Carbon Waste Management Technologies for South Africa.* **Fannie Machete**
892. *Characterization and Leaching Assessment of Toxic Metals in Municipal Solid Wastes in Southwest, Nigeria.* Adebola Abosede Adeyi, Adewale Muyiwa Adeyemi
893. *Leaching Assessment of Toxic Metals in Solid Wastes Generated in Tertiary Institutions in Ibadan, Nigeria.* Adebola Abosede Adeyi, Victoria Ekaniyere Ojeabulu
908. *Waste: A Raw Material for Soil Amendment and an Employer of Labour.* **Ogbonna, Emmanuel Ahamefula** and Isinguzo, Nnadozie Sunday
969. *The Challenges of Sustainable Management of Electronics Waste and the Risk Assessment of Improper Management Practices.* **E. Sahle-Demessie**, Teri' Richardson, Joshua Dietrich

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516. *On-Situ Remediation of Nitro Compound Contaminated Soil by Biological-Ecological Method.* **Quanlin Zhao**, Zhengfang Ye, Zhongyou Wang and Zengxiong Li.
665. *Treatment of Steel Rolling Mill Effluents Using Semi – Batch Foam Flotation.* Varun Sharma and **Ashok N. Bhaskarwar**
714. *Benzo(a)pyrene Biodegradation by Bacterial Candidate Paenibacillus sp HD1PAH and Arthrobacter Nicotianae HD2PAH.* **Hemen Deka**
853. *Fenton Oxidation of Polycyclic Aromatic Hydrocarbons in the Concentrates Obtained From the Decontaminated Soil.* **Malika Bendouz**, Lan Huong Tran, Lucie Coudert, Guy Mercier and Jean-François Blais

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693. *Environmental Monitoring of Landfills by a Downscaling Approach.* Mei Alessandro, Manzo Ciro, Paciucci Lucia, Allegri, Alessia, Petracchini Francesco, Romagnoli Paola, Bassani Cristiana

701. *Dredged Material as Restoration Substrate in Landfill Surface Sealing Systems* Gert Morscheck, Gert, Astrid Lemke, Michael Henneberg
747. *Enhancing Soil Productivity through Biochar Application to Heavy Metal Polluted Soil.* **O. O. Awotoye**, Olofinjana Olubukola
860. *Anaerobic Landfill Leachate Characteristics in Dry Climate.* **Rouhallah Mahmoudkhani**, Lobat Taghavi, Zahra Saadat Yeganeh, Reza Naghavi

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514. *Performance of Vegetative Bioretention System for Greywater Reuse in the Arid Climates.* **Rezaul Chowdhury**, Taoufik Ksiksi, Mohamad M A Mohamed and Jameelu Abaya
544. *Utilization of Woodwaste as Container Media by Accelerated Composting.* Hoda Bakhshizadeh, **H. Borazjani**, R. C. Sloan, and S. S. Worthey
574. *Novel Coupled Surface Modification and Froth Flotation Separation of Halogenated Plastics from Hazardous Waste (ASR/ESR) Plastics with Nanoscale Metallic Calcium Composite.* **Srinivasa Reddy Mallampati**, Je Haeng Heo and Min Hee Park
591. *Characterization of Carbon-Based Biochar from Grapeseed Pyrolysis.* **Nathaniel F. Adegboyega**, **Nathaniel F. Adegboyega** & William C. Hockaday, Chris Cunningham & Mark Kelm
670. *Effect of Tire Rubber Ash on Bituminous Mixes Used for Roadway Pavement.* Tapash Kumar Roy
695. *Struvite Recovery from Wastewater and Reuse as Amendment for Heavy Metals Immobilization in Soil.* **Hao Wang**, Xuejiang Wang, Jing Zhang, Jingke Song
700. *Bio-Waste Recycling in Germany.* M. Nelles, A. Schüch, A. Lemke, G. Morscheck
824. *Bio-Ethanol from Pretreated Food Waste Hydrolysate Using Immobilized Saccharomyces Cerevisiae under Photo and Dark Fermentation.* **Martin Gundupalli Paulraj** and Debraj Bhattacharyya
829. *Recycling Spent Lithium-Ion Battery for Function Material Development.* Fu-Shen Zhang\*, Meng-Meng Wang
830. *Technological and Life Cycle Assessment of Organics Processing Odour Control Technologies,* Navin Bindra, Brajesh K Dubey and Animesh Dutta
874. *Direct Shear Testing of Sand Reinforced with Pellets Recycled from Polyethylene (Plastic) Bag Waste Material.* Faridah Chebet and Denis Kalumba
880. *Capacitive Performance of Heteroatom-Enriched Activated Carbon Prepared from Waste Plastic Bottles.* **Dong Shu**, Yulan Huang, and Chun He
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947. *SrFe<sub>12</sub>O<sub>19</sub> Powders Synthesis from Oily Cold Rolling Mill Sludge by Hydrothermal Process.* Shengen Zhang\*, Bo Liu, Yunji Ding
955. *Environmental and Economic Assessment for Waste Rare Earth Phosphor Recycling By Dual Hydrochloric Acid Dissolution.* Shengen Zhang <sup>a,\*</sup>, Yifan Liu <sup>a,\*</sup>, Bo Liu <sup>a</sup>, Hu Liu <sup>a</sup>, Alex A. Volinsky
977. *Experimental Study on Characterization and Pollution Potential of Contaminated Chromium Hazardous Waste.* M. Gopal Naik, Madhusudhan Rao, Aadhi Naresh
978. *Reducing Air Pollution by Using Hot in Place Recycling of Asphalt and the Constructal Law.* Masoud Asadi
1117. *Recycling Mercury-Impacted Scrap Metal: Key Issues and Research Needs.* **Molly E. Finster** and Corrie E. Clark

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705. *Potentially Useful Plants for Phytoremediation of Hydrocarbons in Subtropical Zone: Cameroon Case.* Matsodoum N. P. , Wanko N. A., Ndemba Etim S. G., Djumyom Wafo G. V., Djocgoue P. F., Kengne Noumsi I. M.
738. *Enhanced Phytoremediation Using Endophytic Microbes.* ANYASI, RO., ATAGANA, HI.
798. *Ex-Situ Phytoremediation of Hydrocarbon Contaminated Soil with Crotalaria Pallida Ait.* **Partha Pratim Baruah**, Plabita Baruah, and Suresh Deka
919. *Assessment for Removing Multiple Pollutants by Plants in Bioretention Systems Based on ISPA Model.* Xiaohua Yang, Yi Ye, Meishui Li
1103. *Synthesis and Properties of Biodegradable Polyesters Based On Biomass Monomers.* **Yang Zhang**, Jun Xu, Baohua Guo
1104. *The Potential of Effective Microorganism (EM) to Promote the Phytoremediation of Uranium Polluted Water.* Jing Zhu, **Ke Chen**, Renhua Huang, Xiaoming Chen, Gangxue Luo
1105. *Grass and Microbial Combined Remediation to Uranium-Contaminated Soil,* **Xiaoming Chen**, Xuegang Luo, Xichao Hao, Ke Chen

## 04. Ecosystem Assessment and Restoration

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541. *Fertigation Control System Using CAN Based Embedded System.* Lad Hiteshkumar J., **Joshi Vibhulikumar G.**, Rameshchandra Makavana
569. *The Elbe Estuary: Balance between a High Frequented Waterway and the Provision of ESS.* **Carolin Schmidt-Wygasch**, Uwe Schröder, Elmar Fuchs, Rainer Marggraf, Jan Barkmann, and Uta Sauer
589. *Association of Serum Mercury Level with Metabolic Syndrome in Adolescents.* **Roya Kelishadi**, Parinaz Poursafa, Nasrin Saberi Shahr Babaki
593. *Hyporheic Biodiversity and Ecosystem Health of Upper Ganges, Garhwal Himalaya, India.* **Ramesh C. Sharma**
699. *Ecosystem Level Carbon Source-Sink Analysis Using EC Data and LUE Model.* **S.P.S. Kushwaha**, T. Watham, N.R. Patel, and S. Nandy
703. *An Ecological Study of Reproduction in Coringa Mangrove Forest, Andhra Pradesh, India.* Prof. Aluri Jacob Solomon Raju
710. *Diversity of Novel Alkaline Protease Producing Bacteria from Chilika Lake, Odisha, India.* **Ananta Narayan Panda\***, Samir Mishra, Lopamudra Ray, T.K. Adhya, Mrutyunjay Suar, Vishakha Raina.
711. *A Spatiotemporal Analysis of Bacterial Diversity in the Macrophytes Covered Region of A Brackish Water Lake-Chilika.* Samir R. Mishra, **Ananta Narayan Panda\***, Lopamudra Ray, Tanmaya Nayak, Neha Sahu, Mrutyunjay Suar and Vishakha Raina
768. *Sustainable Housing and Building Performance Assessment Systems.* **Deepa G. Nair** and Santhosh John
785. *The Environmental Impacts of Wind Farms.* Lu Wen, Li-Xin Wang\*, Yi Zhuo, Zhi-Bin Jia
792. *Novel Taxa Are Dominant in Mangrove Swamp of Niger Delta, Nigeria.* **Chika Christiana Nwankwo.**, Gideon Chijioke Okpokwasili
793. *Phylogenic Diversity of Microorganisms in the Mangrove Swamp under Crude Oil Perturbation.* Onyinyechika Christiana Nwankwo
794. *Bounties of a Bleak Landscape!* **Joystu Dutta and Arun Kumar Roy Mahato**
806. *Seasonal Influence of Glyphosate Herbicide Application on Soil Bacteria in Benue State, North Central Nigeria.* Iheukwumere, C.C, **Ella, A.B\***, Oluma, H.O.A and ELLA, F.A
826. *Contamination and Risk of Emerging Pollutants in Rapidly Urbanization Coastal Areas along the Bohai and Yellow Seas, China.* **Tieyu Wang**, Jing Meng, Pei Wang, Yonglong Lu.
889. *Stress Factors to Fish Habitat in Urban Rivers.* **Yuta Yamauchi**, Tetsuya Nakata, and Yutaka Sakakibara.
959. *Microcosm Evaluation of Greenhouse Gas Emission Potentials of a Eutrophic Lake.* **Selim L. Sanin**, Ezgi Ogun, Aysegul Aksoy
966. *SaudiVeg Ecoinformatics: Ecological Distribution of Endemic and Threatened Species of Hotspot Shada Mountains, Saudi Arabia.* **Jacop Thomas, Mohamed Abdelraouf El-Sheikh\* and Abdulrahman Abdullah Alatar**
971. *The Impact of Different Growth Media on the Algae Development: An Association with Atmospheric Dust.* **Adeleh Rashidi**, Aydın Akbulut, A. CemalSaydam
979. *Some Risk Assessments at Nuclear Power Plants (NPP).* **Alexander Valyaev**, Gurgun Aleksanyan, Alexey Valyaev, Oleg Arkhipkin
1113. *Moved to 13-04*

### 04-02 Nutrients and Functions of Ecosystems

570. *The Impact of Alternative Measures of Riverbank Fixation on Climate Change and Water Quality.* **Lars Symmank**, Katharina Raupach, Mathias Scholz and Christiane Schulz-Zunkel

### 04-03 Restoration of Ecosystems

512. *Reexamining the Spatial Distribution of Fluoride in Groundwater of Sri Lanka: A Field Study at Nochchiyagama, Anuradhapura.* A.T.Coaray, T. De Fonseka, and S.P Deraniyagala
614. *State Transitions and Feedback Mechanisms during Ecosystem Development in the Constructed Catchment 'Chicken Creek'.* **Wolfgang Schaaf**, Christoph Hinz, Werner Gerwin, Markus K. Zaplata, Reinhard F. Huettl
854. *Ecosystem Assessment and Restoration.* Elvis Obeng Boateng

### 04-04 Urban Ecosystems

564. *Developing Ecological Thermal Indices Based on Satellite Imagery Data.* Kim-Anh Nguyen<sup>1,2</sup>, Yuei-An Liou<sup>3\*</sup>, and Ming-Hsu Li<sup>1</sup>
656. *Causes of Dampness in Residential Building Walls in Jos Metropolis, Plateau State, Nigeria.* **Kalada Itelima**

## 05. Bio-Assessment and Toxicology

### 05-1 Human Exposure

598. *Work Environment Contamination in Oncology Setting: Protection of Healthcare Workers against Antineoplastic Agents.* **Maryamalsadat Alehashem**, Shadi Baniasadi and Iman Bahramali
648. *Carcinogenicity and Mutagenicity Assessments of Dietary Exposure to PAHs in Imported Fish Products in Nigeria.* **Nsikak U. Benson**, Akan B. Williams, Winifred U. Anake, Kelechi P. Eke, Adebunayo E. Adedapo and Abaas A. Olajire
657. *The Incidence of Hepatitis B and C in Jos, Plateau State, Nigeria .* Janet Itelima, Michael Elujoba and Chinyere Ihemenandu
682. *Dose Response Curves Derived from Clinical Ozone Exposures Can Inform Public Policy.* Sabine Lange, Ge Tao, Lorenz Rhomberg, Julie Goodman, Michael Dourson, Michael Honeycutt
706. *Mitochondrial Injury-Regulated Joint Hepatotoxicity Induced by Combined Exposure of PCB77 and Cd. Mitochondrial Injury-Regulated Joint Hepatotoxicity Induced by Combined Exposure of PCB77 and Cd.* **CUI Jiansheng GAO Yu WANG Lixin**
719. *Residues of Hexachlorocyclohexane Isomers and Metabolites in the Agricultural / Industrial Soil and Water Samples of Orissa and Evaluation of the Toxicity of These Compounds in Human Breast Cancer Cell Line.* Lopamudra Ray, Purushottam Mohapatra, **Ananta Narayan Panda\***, Samir Mishra, , Chanakyanath Kundu, Mrutyunjay Suar and Vishakha Raina
733. *Protective Role of Cichorium Intybus against Manganese Toxicity in Liver and Kidney.* Ram Prakash
761. *Exposure to Drinking Arsenic, Iron and Salinity Contaminated Water in the Coastal Area of Bangladesh: A Pilot Study in Tala Union of Satkhira District.* Nepal C Dey, **Ratnajit Saha**, M Parvez, M Rahman, M K Barua and A Islam and MR Chowdhury
762. *Knowledge and Perceived Health Effects from Exposure to Indoor Air Pollution: A Population-based Cross-Sectional Survey in Rural Bangladesh.* **Nepal C Dey**, MR Chowdhury
775. *Respiratory System Emergency Service Visits in Adana, Turkey (2007-2011).* Ertan KARA, Hasan Göksel ÖZDİLEK, Emine Erman KARA
831. *Exposure Pathways and Human Health Risk Assessment from Arsenic Exposure in Bangladesh.* Tijo Joseph, Brajesh K Dubey and Edward A. McBean
847. *Urinary Metabolomics Revealed Arsenic Exposure-Related Metabolic Alteration: A Proof-Of-Concept Study in a Chinese Male Cohort.* Jie Zhang, Weipan Xu, Heqing Shen
876. *Assessing Occupational Exposure in Black Hair Salons.* **Sarah Lemelman, Raymond Trott**, Anna Abrams, Allison Marill, Alexis J. Cooper, Ramya Ramakrishna, Jay Feinstein, Teleah Slater, Annie Fortnow, Cassidy Tatun, Omkar Kulkarni, Sandra Watemberg, Laura J. Goldin, Theodore A. Myatt, Joseph G. Allen, James H. Stewart, Matthew A. Fragala
877. *Dioxin-like Rather Than Non Dioxin-Like PCBs Promote the Development of Endometriosis through the Stimulation of Immune-Endocrine Interaction.* **Qiansheng Huang**, Yajie Chen, Sijun Dong.
913. *Bactericidal and Antioxidant Properties of Essential oils of the Fruits Dennettia tripetala G. Baker.* **Sunday O. Okoh\***, B.C. Iweriegbor, O.O. Okoh and U.U. Nwodo and A. I. Okoh

### 05-2 Bio-response and Ecotoxicology

518. *Bio-Assessment and Toxicological Effects of Biolarvicides on Target and Non-target Organisms in Rivers State, Nigeria.* Wachukwu, C.K., Ollor, O.A., Ganabel, C.B, and Azike, C. A.
524. *Neurotoxicity of Benzotriazole in Rare Minnow (Gobiocypris rarus) Based on a Proteomic Approach. Neurotoxicity of Benzotriazole in Rare Minnow (Gobiocypris rarus) Based on a Proteomic Approach.* **Xuefang Liang**, Jinmiao Zha, Christopher J. Martyniuk
624. *Aflatoxin Contamination of Some Edible Grains from Lagos and Ota Markets, Nigeria.* Mary Oloyede, **Akan Williams**, and Nsikak Benson
678. *Genotoxic Effects of Coal Fly Ash in Trigonella Foenum Graceum (L.).* **Rucha U. Raval**, Kailash P. Patel and Mariya J. Jairajpuri
694. *Therapeutic Efficacy of Andrographis Paniculata on Altered Steroidogenesis and Oxidative Impairment in Ovary of Mice Subjected to Arsenic Intoxication.* Dimple Damore
723. *Toxicological Assessment of Pharmaceutical Effluent to Clarias Gariepinus (Burchell, 1822).* O. A. Eleyele,\* and O. T. Aladesanmi
724. *Genotoxic and Haematological Response of African Catfish, Exposed to Sublethal Concentrations of Glyphosate.* **Salman Mubarak Mayowwa, Omolara Titilayo and Femi Awodiran**
726. *Bacteriology of Opa River, Ile-Ife, Nigeria and its Influence on Public Health.* **Vera Onana**, Omolara Aladesanmi, Kayode Adepoju and O.T. Afolabi
757. *Enantioselective Phytotoxicity of  $\gamma$ -Hexabromocyclododecane Enantiomers to Maize.* **CUI Jiansheng**, LIU Ying, WU Tong

766. *Enzymes as Biomarkers of Environmental Stress in African Catfish (Clarias Gariepinus) Burchell, In Osun State, Nigeria.* O. T. Aladesanmi\*, F. K. Agboola and R. E. Okonji
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851. *Effects on Length, Weight and Orientation Responses of Earthworms Exposed to Man-Made Electromagnetic Noise.* **Şükran Yalçın Özdilek**, Sevil Yalçın and Rukiye Altaş
865. *Assessment of Pollution Biomarker and Stable Isotope Data in Mytilus Galloprovincialis Tissues.* **Şükran Yalçın Özdilek** and Neslihan Demir
895. *Role of Purslane oleracea against Manganese Toxicity in Hepato-Renal Tissues.* A. C. Verma
912. *Graphene Induced Epithelial-Mesenchymal Transition in A549 Cells In Vitro.* Yanyan Liao, Ziyang Zhang
944. *Histological Effects of Bisphenol A on Gills, Digestive Glands and Adductor Muscles of Laboratory-Reared Corbicula fluminea Linn.* **Kimberly B. Benjamin**, Jessmine L. Competente and Dyan Gabrielle H. de
956. *Developing an Association Network from Proteome Changes to Root Phenotypic Properties for Aluminum Tolerance in Switchgrass.* **Mahesh Rangu**, Zhujiya Ye, Theodore W. Thannhauser, Sarabjit Bhatti, Suping Zhou
989. *Acute and Chronic Effects and Multi-biomarker Assessment of Metal Nanoparticles on Carassius auratus.* Jun Xia, Guanghua Lu, **Jun Hou**

### 05-3 Bioavailability and Bio-accumulation

634. *Site-Specific Soil Arsenic Bioavailability: the 21<sup>st</sup> Century Nexus between Site Characterization and Risk Assessment.* **N.T. Basta**, S.D. Whitacre, V. M. Hanley, P. Myers, A.L. Foster, and S.W. Casteel.
635. *Comprehensive Evaluation of in vitro Bioaccessibility Methods to Predict Bioavailability of Arsenic in Contaminated Soils.* **Brooke N Stevens**, Nicholas T Basta, Shane D Whitacre, Aaron R Betts, Kirk G Scheckel, and Karen D Bradham
815. *Bioconcentration of Diclofenac in Crucian carp and Its Influence Factors.* **Guanghua Lu\***, Jiannan Ding, and Zhenghua Zhang
974. *Interactive Effects of UV Filters, nTiO<sub>2</sub> and BP3, on Crucian Carp (Carassius carassius).* **Zhenhua Yan** and Guanghua Lu

### 05-4 Microbiology and Microbial Degradation

507. *Molecular Detection and Characterization of **Fusarium sporotrichioides** Based on ITS2 rDNA Polymorphism.* Ekram A. M. Al-Sanae, Afaf I. Shehata, Ali H. Bahkali, Mohammed Abdo Yahya and Amal A. Al Hazzani
577. *Decolourization of Textile Dyes and Biodiesel Production by Micro Algal Isolates.* **Mohan Rasu. K\***, Arun. A, Siva Prakash. G and Ananthi. V
654. *Bacterial Community Structure Corresponds To Performance in A Microaerophilic Sulfate and Nitrate Co-Reduction System* Xi-Jun Xu, **Chuan Chen\***, Ai-Jie Wang, Duu-Jong Lee, and Nan-Qi Ren
712. *Biodegradation of Chlorpyrifos by Microbes Isolated from Agriculture Soil.* **Tanmaya Nayak\***, Tapan Kumar Adhya, Mrutyunjay Suar, and Vishakha Raina.
823. *Increased Enzyme Activity during Antagonistic Invasion Interaction of Fungi Grown on Corn Cob.* Grace Nkechinyere **Ijoma**, Memory Tekere.
856. *A New AHL Molecule Generated by Nitrite-oxidizing Bacteria.* **Jie Gao**, and Guoqiang Zhuang
878. *Down-regulation of MicroRNA-192 Increased Sterol Regulatory Element-binding Protein 1 (SREBF1) Expression in Hepatocytes: a Novel Mechanism for BPA-triggered Hepatic Steatosis.* **Yi Lin**, Dongxiao Ding, Jie Wei, and Sijun Dong
903. *Anaerobic Biodegradation of Para-Toluene Sulfonic Acid, Sulfanilic Acid and Thiophene-2-Acetic Acid by the Sulfate Reducing Bacterium Desulfovibrio psychrotolerans, Strain JS1<sup>T</sup> in Liquid Cultures, Soil and Sludge Microcosms.* Sasikala, Ch., Sasi Jyothsna, Ch. V Ramana
917. *Microbial Community Analysis of Anaerobic Digesters during Biotransformation of Nonylphenol Diethoxylate.* Fadime Kara Murdoch and F. Dilek Sanin
924. *Quantification of Salmonella in Turkish Biosolids by Culture-Based and Molecular Methods.* Begum Aytaç and **Robert W. Murdoch.**
931. *Evidence of Quorum Quenching and Inhibition of Biofilm Formation in Sphingomonas Spp.* **Parul Gulati** and Moushumi Ghosh
941. *Identification of Fungal Endophytes from Maize Shoots with Biotechnological Potential in Agriculture.* Mashiane R.A and **Adeleke R.A**, Bezuidenhout C.C
972. *Pectinase from Bacillus subtilis strain Btk-27: Optimization of Cultural Conditions and Application in Coffee Processing.* Oliyad Jeilu Oumer\* and Dawit Abate
997. *Relation among Triphenyltin Recognition, Degradation, Ion Metabolism and Effective Proteins of Bacillus Thuringiensis.* **Jinshao Ye** and Linlin Wang

## 06. Wetlands



## 06-1 Wetland Conservation

596. *Restoration of a Tropical Wetland through Low-Cost Technology.* **Shadananan Nair**
666. *Spatial Distribution of Wetland Vegetation and its Ecological Function on Riparian Zone of Riverscape.* **Lixin Wang**
910. *Impact of Urban Sprawling on East Kolkata Wetland and on the Ecosystem Functioning of Sundarbans Mangrove Ecosystem, India.* **Susanta Kumar Chakraborty**, Poulami Sanyal, Nandan Bhattacharyya, Ratnadip Roy and Sumana Bandhopadhyay

## 06-2 Wetlands for Wastewater Treatment

567. *Behavior of Antibiotics with Corresponding Resistance Genes in Constructed Wetland Coupled with Microbial Fuel Cell.* **Shuai Zhang** and Hai-liang Song

## 07. Sediments

### 07-1 Assessment of Sediments

568. *The Elbe Estuary (Germany): Resistance of the Sediments to Hydrodynamic Forces on Microscale.* Nina Stoppe, Thomas Neugebauer, Rainer Horn, Uwe Schröder, Elmar Fuchs, and **Carolin Schmidt-Wygasch**.
647. *Development and Evaluation of New Indices for Sediment-Associated Contaminants.* **Nsikak U. Benson**, Adebusayo E. Adedapo, Omowunmi H. Fred-Ahmadu, Akan B. Williams and Abaas A. Olajire
649. *Geochemical Speciation and Risk Assessment of Trace Metals in Sediments from Coastal Ecosystems off Equatorial Atlantic Ocean.* **Nsikak U. Benson**, Essien D. Udosen, Winifred U. Anake, Akan B. Williams, Oyeronke A. Akintokun, Adebusayo E. Adedapo and Abaas A. Olajire
857. *Milling Conditions Effect on Contaminated Sediments Treatment by Pozzolanic Materials.* **Rabah Hamzaoui**, Othman Bouchenafa, Abdelkrim Bennabi, Johan Colin
987. *Surface Water and Sediment Quality Assessment in the Gbaran-Ubie Integrated Oil & Gas Project, Niger Delta, Nigeria.* **Seiyaboh, E.I.**, Gijo, A.H and Sikoki, F.D

### 07-2 Remediation of Contaminated Sediments

626. *Distribution of Organochlorine Pesticide Residues in Epipelagic and Benthic Sediments from Lagos Lagoon, Nigeria.* **Akan Williams**, Nsikak Benson and **Egbenya** Shaibu-Imodagbe (moved to Session 10-1)
875. *Development and Testing of Next Generation Sorbent Polymer Extraction and Remediation from Sediments (SPEARS) Technology.* **Robert DeVor**, Phillip Maloney, and Jacqueline Quinn

## 08. Global Change

### 08-1 Global Warming and its Impacts

501. *Statistically Analysis of Parameters Causing Climate Change at Ikeja and Lagos, Nigeria.* **Adenike Boyo\*** and Aifegha Omokhoa
502. *Polynomial Regression Models for Mapping Atmospheric Conditions in Western Nigeria.* Ade Umar, Adenike Boyo and Olaleye Akinwole
523. *Enhancement of Wastewater Facilities for Long Term Global Climate Changes.* **Amirthaganth Amithalingam**, and D. S. Mahamah
586. *Energy Security and Climate Change in Southeast Asia (Sea).* **Forough Shadman**, Mahmoud Moghavvemi
767. *An Integrated Assessment of Low Carbon Emission Scenarios proposed in Climate Policy.* Sascha Hokamp and **Mohammad Mohammadi Khabbazan**
816. *Impacts of Climate Changes on the Natural Disasters of Bangladesh.* M. A. Sattar
850. *Forest Fire - A Global Scenario Identification and Sustainable Management Using Geo Information Technology.* **Jose T. M.**, Subin K. Jose, G. Madhu
864. *Climate Variability and Groundwater Table in the Coastal Region of Bangladesh: A Chronological Analysis.* Ratnajit Saha
981. *Numerical Simulation of Environmental Impact Assessment in the Bayelsa State of Nigeria: Policy Implication.* E.N. Ekaka-a, A.O. Nwaoburu, K. K. Omonibeke
982. *Quantifying the Vulnerability of the Bayelsa State Environment in Nigeria to Climate Change Driven-Biodiversity Loss: The Role of Early Mitigation Sustainable Development Strategy (EMSDS).* A.O. Nwaoburu, K. K. Omonibeke, E.N. Ekaka-a
995. *Reducing Global Warming In Africa through Traditional African Architecture: Challenges and the Way Forward.* **Iwuagwu, Ben Ugochukwu**; Onyegiri, Ikechukwu; Iwuagwu, Ben Chioma

## 08-2 Carbon Discharge Reduction

536. *The Role of New Discovered Algal Species Ulva paschima Bast and Cladophora Goensis Bast in Reducing Greenhouse Gases.* Seema dwivedi
667. *Leapfrogging Carbon Capture Sequestration.* Adel J. Al-Khalifah
839. *Sequestration and Storage Capacity of Carbon in the Mangrove Vegetation of Sundarban Forest, Bangladesh.* Towhida Rashid, Sirajul Hoque, Anupa Datta
894. *Aerobic and Nitrite-Dependent Methane Oxidizers in the Zoige Wetland of the Tibetan Plateau.* **Anzhou Ma**, Guoqiang Zhuang, Mengmeng Cui
899. *Energy Conservation Helps in Mitigation of Adverse Effects of Climate Change.* **Mehboob Alam Khan**

## 09. Metals

### 09-1 Metal Distribution

528. *Evaluating Surface Water Quality Indices and Ecological Risk Assessment for Heavy Metals in Scrapyrd Neighbourhood.* **Ojekunle Z.O.**, Ojekunle V.O., Adeyemi A.A., Taiwo G.A., Sangowusi R.O., Taiwo A.M., Adekitan A.A.
545. *Vertical Distribution and Chemical Behavior of Uranium in the Tailings Material of Schneckenstein (Germany).* Taoufik Naamoun and Broder Merkel
727. *Synergetic Effects of Cd<sup>2+</sup> and Cu<sup>2+</sup> on Chlorophyll Fluorescence of Microcystis Aeruginosa.* **Cui Jiansheng**, Song Yanyan
946. *Characteristics of Heavy Metal Pollution from Antimony Mining, Ore Dressing and Smelting Process in China.* Mengchang He
1114. *Spatial and Temporal Distribution of Heavy Metals in Coastal Red Sea Sediments.* **Bandar Almur**, Andrew Quicksall, Ahmed M. Al-Ansari

### 09-2 Metal Removal and Remediation

513. *"Trapa Natans" a Better Future Alternative for Phytoremediation of Waste Water.* **Anil K Mathur**, Sachin Maurya, Saket Mathur
555. *An Approach to Decontaminating Chromium Induced Soil with Pilea Cadierei under Amended Monitoring.* Agamuthu, P.<sup>1</sup> and **Alaribe, F.O.**<sup>1</sup>
561. *Citric Acid Enhanced Metal Uptake in Reed Seedlings in Acid Mine Drainage Solutions.* **Lin Guo**, Teresa J. Cutright
600. *Assessment of Heavy Metal Bioremediation Potential of Bacterial Isolates from Landfill Soils.* **Olofinjana Olubukola**, O. O. Awotoye and A. O. Oluduro
652. *Study on the Adsorption of Zn<sup>2+</sup> and NH<sub>4</sub><sup>+</sup>-N by Corncob Biochar.* **Yan Zhao**, Bin-hui Jiang, Liang Li, Ze-hua You
729. *Polymer Inclusion Membrane for the Detection of Chromium (VI).* **Gurijala Ramakrishna Naidu**\* and Kalyan Yakkala
771. *Biosorption of Heavy Metal Lead Using Dried Biomass of Brown Algae (Sargassum).* Kailash P. Patel, Honey V. Parekh and Vrajesh D. Patel
827. *Ameliorative Effects of Rosmarinus officinalis Leaf Extract and Vitamin C on Cadmium-Induced Oxidative Stress in Nile Tilapia Oreochromis niloticus.* **Promy Virk**, Mai Elobeid
922. *Removal of Hg(II) By Encapsulated Thiophosphinic Extractants.* **Janette Alba**, Ricardo Navarro, Imelda Saucedo, and Eric Guibal
927. *Silver Recovery: Silver Ion Toxicity.* **S. Syed**
934. *Fast Microwave-Assisted Preparation of EDTA Dianhydride Modified Jute Fiber for Heavy Metals Removal.* Zhaolin DU \*, Tong ZHENG \*, Peng WANG
942. *Technologies for Reducing Uptake and Transport of Heavy Metals into Rice Grain.* **Yongchao Liang** and Tingqiang Li, Alin Song, Zhaojun Li, and Fenliang Fan, Xionghui Ji
1116. *Conservation: Calixarene from Fenol Secang and Aldehyde Coffee to Reduce Metal Ion Pollution in Maritime with Electronic Synthesis.* **Arief Kumia Miharja**, Artati Mardhyah, S. Si., Sutan Adjamsyah

### 09-3 Speciation, Bioavailability and Accumulation

890. *Levels of Heavy Metals in Organs of Oreochromis Niloticus from Great Kwa River, South-East Nigeria*

### 09-4 Phytoremediation

542. *Studies on Effect of Mixed Cropping Technique on the Phytoextraction Potential of Vegetables over Hyperaccumulators.* **Tank Shantilal**
787. *Effect of Selected Heavy Metals on the Germination and Early Seedling Growth of *Jatropha Curcas* (Linnaeus).* Ogunbanjo O.R., Akintola O.O. and Awotoye O.O.
791. *Comparative Evaluation of *Jatropha curcas* L as a Phytoremediating Agent on Soils of Three Selected Dumpsites in Ibadan, Oyo State, Nigeria.* Awotoye O.O., Ogunbanjo O.R., Okanlawon F.B and Akinyeye O.A.

## 10. Chlorinated and Other Persistent Organic Compounds

### 10-1 Characterization of Organic Pollutants

626. *Distribution of Organochlorine Pesticide Residues in Epipelagic and Benthic Sediments from Lagos Lagoon, Nigeria.* **Akan Williams**, Nsikak Benson and **Egbenya** Shaibu-Imodagbe
645. *Biological and Instrumental Analysis of Emerging Contaminants of Concern: In Single and Multiple Profiling.* Momoh A. Yakubu\*, Nina Brinkley, Syntia Kwende, Sara Munyu, Chioma Ihemadu, Fatemeh Bidabadi, Bhavin Rena, Joan Tran, Naga Naidu, and Gloria Okome
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848. *Bioaccumulation and Trophic Transfer of Tetrabromobisphenol-A Flame Retardant in an Aquatic Food Web.* **Jiang-Ping Wu** and Bi-Xian Mai
928. *Analysis of Nonylphenol Compounds in Aquatic Environment Using Gas Chromatography-Mass Spectrometry.* Seçil Ömeroğlu, Fadime Kara Murdoch and Faika Dilek Sanin

### 10-2 Degradation of Persistent Organic Pollutants

566. *Photolytic and Photocatalytic Decomposition of Pharmaceuticals in Water by Ultraviolet Light-Emitting Diode.* **Burhanuddin Khuzema Zaveri**, Mohammad Reza Eskandarian, Mostafa Fazli, Mohammad Hossein Rasoulifard, Hyeok Choi
584. *The Potential of Spore Forming Bacteria in Heavy oil Spill Clean Up.* **Biji Shibulal**, Saif Al-Bahry, Yahya Al-Wahaibi, Abdulkadir Elshafie, Ali Al-Bemani, Sanket J
621. *In-situ Decomposition of Biological Toxins on Nitrogen-Doped Nanostructured TiO<sub>2</sub> Films under Solar Radiation.* **Hesam Zamankhan Malayeri** and Hyeok Choi
732. *Separation of Polybrominated Diphenyl Ethers in Fish for Compound-Specific Stable Carbon Isotope Analysis.* **Yanhong Zeng**, xiaojun Luo\* and Bixian Mai
819. *Dechlorination of DDT and its Products Using Palladized Bacterial Cellulose in a Reactor.* **Sumathi Suresh** and Vyjayanthi J. P.
846. *Biosurfactant Facilitated Biodegradation of Naphthalene by *Pseudomonas aeruginosa* SR17.* **Rupshikha Patowary**, Kaustuvmani Patowary & Suresh Deka, Mohan Chandra Kalita

## 11. Modeling

### 11-1 Environmental Simulation

520. *A Linear Genetic Programming Approach for Discharge Forecasting.* Jonathan Barge and **Hatim Sharif**, Jonathan Barge and **Hatim Sharif**
521. *Design Optimization of Gas-To-Liquid Biosludge Management Systems.* **Rana Abbass**, Emad Imam,
612. *Probing the Water Quality Transformation of Underground Caverns in a Tropical Region Using ELCOM-CAEDYM Model.* Ming Chen, Jian Li, and **Xiaosheng Qin**
629. *CFD Modelling of Cylindrical Vortex Flow Regulators Performance - Simulation and Experiments.* **Patryk Wójtowicz** and Małgorzata Szlachta
663. *Shadow Detection and Removal with Analysis Techniques for Object Tracking.* Sameer Ali
676. *A Novel Index to Derive Chlorophyll-a Concentrations in Turbid Lakes Using MODIS Data.* **Yuchao Zhang**, Hongtao Duan and Ronghua Ma
689. *Vulnerability Assessment of the Central Gulf of Mexico Coast using a Multi-dimensional Index Approach.* David E. Dismukes and **Siddhartha Narra**
691. *Predicting the Long-Term Leaching Behavior of Coal Ash Deposits in Mine Site: A Column Study.* **Mina Mohebbi**, Farshad Rajabipour, and Barry E Scheetz
820. *Modeling of Reference Evapotranspiration Variables Using Fuzzy Interference Systems.* **Akinola Ikudayisi** and Josiah Adeyemo

905. *Estimation of Continuous Water Supply Distribution System Using H2OMap Software*. G. Rameshwar Rao and M. Gopal Naik
998. *Depth Filtration through Porous Media*. **Hooman Fallah**
1108. *Environmental Quality and Foreign Trade in Turkey: A Cointegration Analysis with a Structural Break*. **Nilgün Çil**.
1109. *Environmental Kuznets Curve Hypothesis and Structural Breaks: Evidence from Turkey*. **Burcu Kiran**.

## 11-2 Water Quality Modeling

### /11-3 Pollutant Estimation and Risk Assessment

505. *Integrated Water Resources Management in Ghezeloan-Sefidrud Basin in Iran*. **Keyvan Kimiaie**
616. *Investigation, Modeling and Prediction of Triclosan and Carbamazepine in Surface Waters: A Case Study in the Shahe Stream*. **Xiao Yuan**, Shiyu Li, Jiatang Hu, Yuying Li, Ziyun Wang and Jia Huang.
636. *Space/Time Geostatistical Estimation of Chloride along Maryland Rivers Using a Covariance Model with River Distances*. **Prahlad Jat**, Marc L Serre
639. *Comparing the Kriging and Bayesian Maximum Entropy Approaches when Estimating Chloride in Maryland Surface Waters Using Censored Data*. **Prahlad Jat**, Marc L Serre
740. *Modeling of Spreading of Submarine Mine Tailings in a Norwegian Fjord*. Øyvind Leikvin, **Venkat Kolluru**, Guttorm N. Christensen, Magdalena Kempa, Torulv Tjomsland

## 12. GIS, Database, and Remote Sensing

### 12-1 GIS for Environmental Assessment

#### /12-2 Data Management and Statistics

#### /12-3 Environmental Remote Sensing Applications

571. *Estimation of Crop Coefficients using Remote Sensing and GIS: A Case Study of Khuskera-Bhiwari Neemrana Investment Region, Rajasthan, India*. **Rohit Goyal**, Kuldeep Tiwari and Priyamitra Munoth
628. *Development and Application of the Integrated Water Distribution Management System*. **Patryk Wójtowicz**, Andrzej Ziółkowski and Janusz Studziński
713. *Groundwater Exploration in Fiji: A Remote Sensing, GIS Approach*. Akash Dutt Dubey and S. N. Shashtri, C.K. Singh
788. *A GIS Based DRASTIC Modeling for Assessment of Groundwater Vulnerability in and Around SIPCOT- Perundurai, Erode, Tamil Nadu, India*. S.Durgadevagi, and R.Annadurai.
904. *Geospatial Mapping of Groundwater Quality Using GIS*. Prachi Singh, Raj Mohan Singh
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996. *Forest Fire a Global Scenario- Identification and Sustainable Management Using Geo Information Technology* **Jose T. M**, Subin K. Jose, G .Madhu

## 13. Environmental Analysis and Measurements

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862. *Sustainability Evaluation of Food and Bioplastic Waste Management Options*. **Shakira R. Hobbs**, Prathap Parameswaran, and Amy E. Landis.
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