

**9th International Conference on Environmental Science and Technology 2018**  
**June 25-29, 2018 • 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>25-June</b>	<b>26-June</b>	<b>27-June</b>	<b>28-June</b>	<b>29-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 26</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 02-04 Session 02-09	Aerosol Air Quality Assessment Transport of Air Pollutants Waste Gas Control Techniques Air Pollution Prevention and Management
	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 Session 03-05 Session 03-06 Session 03-07 Session 03-08 Session 03-09 Session 03-10 Session 03-11 Session 03-12 Session 03-13	Solid Waste Management On-site and Off-site Remediation Landfill Pemeable Reactive Barriers Waste Fuel Site Remediation Waste Recycling Radioactive Waste and Land Pollution Phytoremediation of Organic Pollutants Polymer Waste Recycling and Management Plants and eco/Soil Stabilization
Poster Room	7:00pm-9:00pm	Poster Session I	Sessions 01-01~01-11, 3, 4, 5, 6, 7, 8, 9, 10, 11
<b>Wednesday, June 27</b>			

Meeting Rooms	8:00am-6:05pm	Session 01-17	Nanotechnology Applications Ecosystem Assessment
	8:00am-6:05pm 8:00am-6:05pm		
	8:00am-6:05pm	Session 01-01 Session 01-02 Session 01-03 Session 01-04 Session 01-06 Session 01-07 Session 01-08	Rivers, Lakes and Estuary Systems Watershed Management Water Resources and Assessment Groundwater Wastewater Discharge Management In-Situ Measurement and Monitoring Drinking Water
	8:00am-6:05pm	Session 02-05 Session 02-06	Air Pollutant Monitoring Hazardous Gas Biofiltration Ilution
	8:00am-6:05pm	Session 02-07 Session 04-01 Session 04-02 Session 04-03 Session 05-01 Session 05-02 Session 05-03 Session 05-04	Catalysts for Reducing Emission Ecosystem Assessment Nutrients and Functions of Ecosystems03- Restoration of Ecosystem Human Exposure Bio-response and Ecotoxicology Bioavailability and Bio-accumulation Microbiology and Microbisl Degradation
	8:00am-6:05pm	Session 06-01	Wetland Conservation
	8:00am-6:05pm	Session 07-01	Assessment of Sediments
	8:00am-6:05pm	Session 07-02 Session 08-01 Session 08-02	Remediation of Contaminated Sediments Global Warming and its Impacts Carbon Discharge Reduction
	8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm	Session 09-03 Session 09-04 Session 09-05 Session 11-01 Session 11-02 Session 12-01	Speciation, Bioavailability and Accumulation Phytoremediation Metal Processing Environmental Simulation Water Quality Modeling GIS for Environmental Assessment
	8:00am-6:05pm	Session 12-02	Data Management and Statistics
	8:00am-6:05pm	Session 12-03	Environmental Remote Sensing Applications
	8:00am-6:05pm	Session 16-01	Water Energy Nexus
	8:00am-6:05pm	Session 16-02	Wind Energy
	8:00am-6:05pm	Session 16-03	Solar Energy
		Session 16-04	Bio-fuels
Poster Room	7:00pm-9:00pm	Poster Session II	Sessions 01-12 ~ 01-17, 02, 12, 13, 14, 15, 16
<b>Thursday, June 28</b>			
Meeting Rooms	8:00am-6:05pm 8:00am-6:05pm	Session 01-09 Session 01-10 Session 01-11	Water Quality Assessment/Management Nitrogen-Phosphorus Wastewater Biotreatment Sludge Treatment
	8:00am-6:05pm	Session 01-12 Session 01-13	Municipal Wastewater Biotreatment Industrial Wastewater Biotreatment
	8:00am-6:05pm 8:00am-6:05pm	Session 10-01 Session 10-02	Characterization of Organic Pollutants Degradation of Persistent Organic Pollutants
	8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm	Session 09-01 Session 09-02 Session 13-01 Session 13-02 Session 13-03 Session 13-04 Session 14-01 Session 14-02 Session 14-03	Metal Distribution Metal Removal and Remediation Environmental Analysis Field Measurement Technologies New Method Applications Environmental Monitoring Society and the Environment Environmental Ethics and Laws Environmental Education
	8:00am-6:05pm 8:00am-6:05pm 8:00am-6:05pm	Session 15-01 Session 15-02 Session 15-03	Environmental Quality and Planning Substainable Development Environmental Policy and Management

Conference Center	6:30pm-7:00pm	Award Announcement	Including <i>Student Paper Award, Young Scientist Paper Award, Conference Paper Award, and Poster Award</i>
<b>Friday, June 29</b>			
Meeting Rooms	8:00am-11:50am	Session 01-15	Physico-chemical Wastewater Treatment
	8:00am-11:50am	Session 01-16	Reactions and Degradation of Wastewater Contaminants

### Sessions, Reference Numbers, and Presenters

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

(*Poster sessions* will be scheduled on June 26th and 27th)

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

## Plenary Meeting

1001. *Engineering Applications in Food, Energy, and Water Nexus*. **Prof. Bahram Asiabanpour** (Texas State University, Texas, USA)
1002. *To See or Not To See the Shortcomings of Priority Pollutants - The Case of the 16 EPA PAHs*. **Prof. Dr. Jan T. Andersson** (University of Muenster, Muenster, Germany)
1003. *Production, Evaluation and Application of Commercial Grade Biochar and Activated Carbon for Contaminant Adsorption*, **Prof. Hafiz Ahmad** (Florida State University, Florida, USA)

## 01. Water Pollution and Water Quality Control

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

594. Distribution and Evaluating the Fate of Cyclic Volatile Methyl Siloxanes in a High Altitude Lake. **Junyu Guo** and Jianbo Zhang
633. Findings of Hyporheic Zone Studies in Coastal California Watersheds Dominated by Monterey-Modelo Formation Substrate. **Marissa DeHoyos** and Barry Hibbs
642. Phosphorous Removal in Eutrophic Surface Water to Control Algae Bloom Using Novel Sorption-Precipitation Based Natural Materials. **Chunlong Zhang**, Rio Carlo Lirag, Steven Wu, Richard H. Zhang
852. *Nitrate Source Proportional Contributions in the Feng River - Using Its Isotopic Ratios in Combination with a Mass Balance Mode*. **ZHI Jian-hui**, SONG Sheng-yu
853. *Study on Spectral Characteristics of Dissolved Organic Matter in Fen River of Taiyuan, West China*. **Jianhui Zhi**, Tingting Liu, Shengyu Song

### 01-02 Watershed Management

687. Analysis of Trends in Agricultural Tributary Phosphorus Loading to Lake Erie using Climate and Economic Variables. **Theodore Saltos**, Brent Sohngen

### 01-03 Water Resources and Assessment

577. Survey of physical-chemical quality of superficial waters at the surrounding area of the sebkha Basin (Moknine, Tunisia), **Taoufik Naamoun**
646. Factors in Developing Salt Balance Load Estimates in Aquifers. **Barry Hibbs** and Godina Ying
661. Assessment of the Water Supply Alternative for a Mining Prospect in the Western Region of Saudi Arabia: A Case Study. **Bassam Tawabini**, Abdulaziz Shaibani
727. *Water-Level Change as a Precursor of Groundwater Drought*. **Jae M. Lee**, Sunjoo Cho and Nam C. Woo
768. *Fate and Transport of Pharmaceutical Residues in Three Mile Creek Mobile, AL*. **Darius Hixon**, Alison Robertson, Kevin White, Timothy Sherman and Shannon Mitchell

#### 01-04 Groundwater

534. Quality Assessment of Groundwater by Graphical Models in Rural Provinces of Korea. **Jong Yeon Hwang**, Sunhwa Park, Moon-Su Kim, Hun-Je Jo, Ji-In Kim, Gyeong-Mi Lee, InKyu Shin, Sang Ho Jeon, Da Hee Song, Deok-Hyun Kim, Hyen Mi Chung, Hyun-Koo Kim
553. Gibberellic Acid Surface Complexation and Desorption Retention on the Ferrihydrite/Water Interface. **Li Zhang**, Liang Chen, and Fei Liu.
635. Arsenic and Selenium Redox Transformations in Groundwater Beneath a Drained Terrestrial Marsh. **Barry Hibbs**, Rachel Ridgway, and James Walker
662. Protection of the Columbia River from Contamination of the Hanford Site Nuclear Facility, Washington State. **Dibakar (Dib) Goswami**
675. Use of Electrical Resistivity Tomography for Prediction of Degree of Groundwater Contamination. **Debaprakash Parida**, Arindam Saha, and Ashim Kanti Dey
736. *Assessment of Groundwater Quality of Mulakalacheruvu Area, Chittoor District, Andhra Pradesh, South India Using Multivariate Statistical Techniques*. **Thejaswi Arveti**
738. *Multivariate Statistical Analysis of Groundwater in the Fluoride Affected Area of Jaggayyapalem, South India*. **Nagaraju Arveti**
787. *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

#### 01-05 Non-point Sources

##### /01-06 Wastewater Discharge Management

623. Challenges of Municipal Waste Management and Disposal Criteria. **Eyilachew Yitayew Abate**
697. Risk Reduction / Cost Savings by Effective Oil Spill Response and Spill Countermeasure Plans. **Steven Pedigo**, Diane Wagenbrenner, Cody Kaduce, Paul W. Sammarco
714. *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

568. A Portable Microfluidic Sensor for Quantification of Environmental Sulfides with Polydimethylsiloxane Membrane Pervaporated Sampling and Optical Detection. **Ming Li**, and Hong-Hua Quan.
709. Improvement of Vacuum Membrane Distillation Desalination Performance by Micro-Nano Bubbles Aeration. **Yubing Ye**, Shuili Yu, Li'an Hou, Baosen Liu and Qing Xia
732. *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
746. *Performance Evaluation of Algal Alginate as a Potential Coagulant and Water Softener*. **P. Saranya**, S. T. Ramesh, S. Mohan
801. *Willingness to Pay for Safe Drinking Water in the Coastal Area of Bangladesh: A Pilot Study in Tala Union*, **Satkhira**
808. *Household Awareness and Willingness for Clean Drinking Water Supply: A Case Study of Islamabad, Pakistan*. **Nazia Mehwish**, Naila Saleh, Muhammad Khursheed
825. Formation of Disinfection Byproducts in Desalinated Drinking Water: An Assessment and Control Strategy. **Shakhawat Chowdhury**
831. Smart Sensing and Control of Thermoelectric Coolers for Atmospheric Water Generation. **Natalie Ownby**, Melina Mijares, Mark Summers, and Bahram Asiabanpour
832. Reduction of Power Consumption in Atmospheric Water Generation. *Reduction of Power Consumption in Atmospheric Water Generation*. **Natalie Ownby**, Melina Mijares, Mark Summers, Bahram Asiabanpour

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

567. *Quantifying Inland Surface Water Quality via Remote Sensing of Water Surface Reflectance*. **Rose S. Sobel**, Amin Kiaghadi, and Hanadi S. Rifai
583. *Chemical Leaching from Two Low Impact Development Techniques*. Musa Akther, Anton Skorobogatov, **Jianxun He**, Angus Chu, and Bert van Duin
584. *Riverine Water Quality Response to Hydro-Meteorological Conditions*. Sajjad Rostami, **Jianxun He**, and Quazi K. Hassan
590. *Levels of Polychlorinated Biphenyls in Water and Sediments of Ogun River, Nigeria*. **Akan Williams**, Adedunsola Adigun and Oladotun Bolade
591. *Levels of Polycyclic Aromatic Hydrocarbons in Water, Sediments and Fishes of Owo River, Nigeria*. **Akan Williams**, Sule Aminu and Oladotun Bolade
612. *Performance Characteristics for Particles of Sand in A Newly Designed Ribbed Hydrocyclone*. **Gayatree Patra**, Sudipto Chakraborty and B. C. Meikap
613. *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
619. *Framework for Developing Groundwater Protection Management Model for Saudi Arabia*. **M. S. Al-Suwaiyan**
641. *Tracking Nitrate Sources of Deep Groundwater in the Jeju Volcanic Island, Korea*
806. *Restoring Water Quality for Municipal Water Supply through a Collaborative Liaison for Land Management*. **Joachim Ibeziako Ezeji**
826. *Assessment of Water Quality Degradation in the Drinking Water Sources Based on 18 Years Data from 441 Water Supply Systems*. **Shakhawat Chowdhury**

### 01-10 Nitrogen-Phosphorus Wastewater Treatment

631. *Nutrient Recovery from Cow Urine by Struvite Precipitation*. **Nityanand Singh Maurya**, Amit Verma
685. *Strategies for Maintaining Nitrification in Membrane Bioreactors Operated under Long Solids Retention Time*. **Yishuai Jiang**, Leong Soon Poh, and Wun Jern Ng.
704. *Application of MgO Modified Diatomite for Simultaneous Recovery of Chlorella Vulgaris, Nitrogen and Phosphate: Interaction Mechanism*. **Jing Li** and Xuejiang Wang.
762. *Removal of Nitrate from Domestic Wastewaters Using Algae*. **Selim L. Sanin**, Mohammad izhar, Aydın Akbulut
814. *Nitrogen Removal by New-Type Rotating Biological Contactors with Anoxic Filter for Domestic Sewage Treatment in Rural Area*. **Xiao Zha**; Jun Ma; Xiwu Lu.
817. *Nitrification in the Gut of Tendipes*. **Liuyan Yang** and Xu Sun
835. *The Deammonification for Nitrogen Removal from the THP (Thermal Hydrolysis Process)'S Sidestream with Immobilization Technology*. **Yifeng Yang**, Yuan Li, Siqing Xia and Slawomir Hermanowicz

### 01-11 Sludge Treatment

579. *The Correlation between Moisture Distribution and Macromolecular Substances in Anaerobic Digestion*. **Wei Zhang**, Bin Dong, and Xiaohu Dai
620. *Research on Interchange Ratio (IR) Parameter Optimization and Mechanism of A<sup>2</sup>/O-MOSA Process with Source Sludge Reduction Characteristics*. **Yuji Lin**, Zhixiong Fan, Weibin Guo, Chenyi Shi, Tingjin Ye, Wuzhen Guo, Lianpeng Sun
656. *The Efficiency of the Multi-Plate Screw Press in the Sludge Dewatering Process, Is It the Best Solution?* **Anne Wambui Mumbi** , Li Fengting
672. *A Novel Sludge Anaerobic Digestion Configuration with Post-Thermal Hydrolysis and Recirculation of Liquid Hydrolysate*. **Donghai Yang**, Bin Dong and Xiaohu Dai.
684. *Impact of Reported Flocculative and Deflocculative Conditions on Laboratory Cultivated Sludge Flocs*. **Akshaykumar Suresh**. Wun Jern Ng, Ewa Grygoliowicz-Pawlak, Leong Soon Poh
689. *Bioreached Sludge Composting: A Case Study*. **Lixiang Zhou**, Weitong Hu, Lixiang Zhou

### 01-12 Municipal Wastewater Biotreatment

503. *Demonstration Projects of Rural and Happy Farmhouse Sewage Treatment in Anji County in China*, **Wang Yunlong**, Shen Alin, Yu Man and Luo Ancheng
504. *Isolation and Optimization of Native Microorganisms for the Aerobic Treatment of Oil and Grease Wastewaters*. **Zhiwei Liang**, Guofang Liu and Ancheng Luo.
767. *Biological Degradation of Laundry Wastewater under Aerobic and Anaerobic Condition: A Kinetic Evaluation*. **Keerthi K.** and Debraj Bhattacharyya
820. *Dissolved Methane Recovery from Novel Anaerobic Attached Growth Reactor Treating Synthetic Domestic Wastewater*. **Brian Crone**, George Sorial, Jay Garland.

### 01-13 Industrial Wastewater Biotreatment

513. *Comparative Analysis of Persistent Organics Removal Based on the Aeration Source Supplied to Biological Treatment of Textile Industry Wastewater.* **Ninad Oke** and S. Mohan.
544. *Potential Study of Colocasia Esculenta Root for Waste Water Treatment.* Shilpi Biswas, Abhijit Mondal, **Soma Nag**
581. *A Novel Double-Cathode Microbial Fuel Cell for Treatment of Hexavalent Chromium Wastewater.* Zhuyuan Liang, Hang Yu, and **Qingliang Zhao**
598. *Synthesis & Characterization of PDMS (Polydimethylsiloxane) Membrane and Enhance its Dye Degradability Property by Incorporating the Silica Nanoparticle.* **P.Kumar**, Naresh K. Sethy, Zeenat Arif, P.K. Mishra
622. *Inhibition of Nitrification and Degradation of the Heavy Metal Precipitation Agent Dimethyldithiocarbamate by Activated Sludge.* **Stephan Wasielewski**, Ralf Minke, Peter Maurer, Bertram Kuch, Harald Schönberger
673. *Assessing the Effects of Operational Parameters on Membrane Fouling in Ultrafiltration of ASP Flooding Wastewater by Membrane Fouling Structure Model.* **Liumo Ren** and Shuili Yu
707. *Experimental Study on Treating and Recycling of Steel Rolling Wastewater by Constructed Wetland Enhanced with Sulfur Autotrophic Denitrification.* **Xiaohu Lin**, Jingcheng Xu, and Jie Ren
764. *Selective and Simultaneous Determination of Dihydroxybenzene Isomers Based on Green Synthesized Gold Nanoparticles Decorated Reduced Graphene Oxide.* **Mohamed Soliman Elshikh**
839. *Decolorization Azo Dyes by Fungus Isolated from Industrial Sewage Contaminated Soil.* Patel Bhavinee, Mehra Bhavna K, **Tank Shantilal K**
840. *Biodegradation of Phenol by Bacterial Strain Isolated from Industrial Sewage.* Desai Jigna, Mehra Bhavna K, **Tank Shantilal K**
842. *Efficient Biodegradation of Azo Dye Acid Blue 113 by Bacterial and Yeast Consortium and Molecular Analysis of Bacterial Biodegradative Pathway.* Chaeyoung Rhee, Aalfin Emmanuel, Hong-gi Kim, and **Sung-Cheol Koh**
843. *Metagenomic Analysis of Relationships between Carbon and Denitrification Metabolisms in Tannery Wastewater Treatment Plant Bioaugmented with Novel Microbial Consortium BMS-1.* Aalfin Emmanuel, Chaeyoung Rhee, **Sung-Cheol Koh**, Woo-Jun Sul and Hoon-Je Seong
850. *Chemical Fixation of Automotive Industry Coating Sludge Containing Nickel and Zinc Using Silica Fume as Alternative Binder to Portland Cement.* **Gizem EKER**, Vedat PINARLI

#### 01-14 Adsorption/Desorption for Wastewater Treatment

514. *Application of Carbon Nanotubes to Remove Polycyclic Aromatic Hydrocarbons from Contaminated Water: Current Technologies, Challenges and Prospects.* **Adeola A. Akinpelu**, Md. Eaquab Ali, R. Saidu, Shemsi A. Mushir, Muhammad Qurban
529. *Evaluation of Adsorption Process for Heavy Metals Removal found in Pharmaceutical Wastewater.* **Jamal A. Radaideh**
542. *Landfill leachate Treatability by Powder Activated Carbon (PAC) Addition on Membrane Bioreactor (MBR).* **Raheleh Fallahfard**, Rouhallah Mahmoudkhani
565. *The Effect of Conditioning on Improving Ammonium Removal Capacity of Clinoptilolites.* **Bilsen BELER-BAYKAL**, Ahu YURTOGLU
570. *Irreversible Adsorption of Sulfonamides Antibiotics on Luffa cylindrica fiber and Its Bioavailability.* Lan Zhang, **Yun Liu** and Yuan-hua Dong.
582. *Synthesis and Properties of Magnetic Graphene Oxide/Fe<sub>3</sub>O<sub>4</sub> Nano-adsorbent for Dye Wastewater Purification.* **Shengyan PU\***, Shengyang XUE, Yaqi HOU, Zeng YANG and Rongxin ZHU.
586. *A Comparative Study of COD Removal from wastewater using Biochar and Activated Carbon from Hardwood and Pine Tree.* **Hafiz Ahmad**, Korhan Adalier, Brandon Madden, Douglas Brown and Andres Rodrigues.
599. *Kinetics, Isotherm Studies, and Uptake Mechanisms of Anionic and Cationic Heavy Metal Adsorption onto Polymer-based Graphene Oxide Nanocomposite Beads.* **Jem Valerie D. Perez** and Maria Lourdes P. Dalida, Debora F. Rodrigues
644. *Kinetics and Equilibrium Study of Resorcinol Adsorption onto Surface Modified Ordered Mesoporous Carbon.* **Zaki Uddin Ahmad**, Mark E. Zappi, Daniel Dianchen Gang
663. *Adsorption of Lead(II) onto Phosphate Modified Ordered Mesoporous Carbon: Kinetics, Equilibrium and Thermodynamic Study.* Qiyu Lian, **Zaki Uddin Ahmad**, Mark E. Zappi, Daniel Dianchen Gang
664. *Statistical Optimization of Adsorption Parameters for Removal of Glyphosate Using Response Surface Methodology.* **Gayana Anjali Dissanayake Herath**, Richard D. Webster, Wun Jern Ng
679. *External Phosphorus Adsorption and Immobility with the Addition of Amend Calcium Peroxide Material.* **Jing Zhou**, Dapeng Li, Shutong Chen
698. *Reduced Graphene Oxide as an Efficient Adsorbent in Waste Water Treatment.* **Meena Ejjada**, Ravi K. Biroju, P. K. Giri, Chandan Mahanta
770. *Valorisation of Grape Pomace to Effective Biosorbent for Waste Water Remediation* **Arunima Nayak**, Brij Bhushan
780. *Feasibility Studies on the Removal of Iron and Fluoride from Aqueous Solution Using Shells of Limonia Acidissima as Adsorbent.* **G. Anusha**
794. *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>

807. *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
838. *Removal of Long and Short Chain Perfluoroalkyl Substances via Granular Activated Carbon Adsorption.* **Eric Forrester** and Ralph Franco
856. *Bromate Reduction and Reaction-Enhanced Perchlorate Adsorption by FeCl<sub>3</sub>-impregnated Powder Activated Carbon.* **Jianhong Xu**, Naiyun Gao and Dongye Zhao

### 01-15 Physico-chemical Wastewater Treatment

546. *Efficient Degradation of Organic Pollutants by a Dual-Reaction-Center Fenton-Like Process over 4-Phenoxyphenol-Functionalized Reduced Graphene Oxide Nanosheets.* **Lai Lyu**, Yumeng Wang, Wenrui Gao and Chun Hu
596. *Reinvestigating the Role of Reactive Species in the Oxidation of Organic Co-Contaminants during Cr(VI) Reactions with Sulfite.* **Hongyu Dong**, Xiaohong Guan, and Timothy J. Strathmann
616. *Treatment of Leachate from Open Dumping of Municipal Solid Waste through Advanced Oxidation Process.* **Gokul. D** and S. Mohan
667. *Removal of COD from Pigment Industrial Wastewater by Fenton Oxidation Process.* **Vishnu Tejani**, Nibedita Pani, Dr. Anantha Singh TS
671. *Evaluation of Membrane Fouling Characteristics and Maintenance Chemical Cleaning Protocol in Seawater Reverse Osmosis Process Using Hot Wastewater from Power Plant.* **Kitae Park**, Pooreum Kim, Minjin Kim, Jewan Yoo, Hyungsoo Kim
691. *Membrane Technologies for Brackish Water Desalination.* **Naglaa.Eid**
692. *The Effect of Sodium Hypochlorite(NaOCl) on RO Membrane Surface During Backwashing in Seawater Desalination Process.* **Minjin Kim**, Jayeong Seong, Nayoung Park, Hyungsoo Kim
728. *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
758. *Comparison of Fenton and Photo-Fenton Removal Efficiencies during Ampicillin Degradation.* Afsoun Nikravan, **Selim L. Sanin**
760. *Properties of CuO Nanoparticles-Humic Acid Floccs and Membrane Fouling: Influence of Aluminum Species and pH.* Yongbao Chu, Xue Wang, **Yan Wang** and Nan Xue
783. *Effect of Calcium Ions on Haloacetic Acid (HAA) Rejection by Nanofiltration (NF) Membranes.* **Linyan Yang**, Victor W.-C., Chuyang Y. Tang
789. *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
811. *Oxidative Transformation of Refractory Benzothiazoles with PMS/CuFe<sub>2</sub>O<sub>4</sub> Process.* **Tao Zhang** and TorOve Leiknes. Tao Zhang
815. *Oxidant Dependent Photocatalytic Activity of Polypyrrole towards the Degradation of Rose Bengal Dye.* **Mukulika Jana Chatterjee**, Sk. Taheruddin Ahmed, Anup Mondal and Dipali Banerjee.

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

523. *Remediation of Polluted Wetlands through Phytoremediation.* S Mohan and Abhishek Tippa. **S. Mohan**, Abhishek Tippa
538. *Enhanced Catalytic Ozonation Oxidation Using Magnetic Carbon Nanotubes Composites for Removal of Bisphenol A With Coexistence of Humic Acid in Aqueous Solution.* **Yajing Huang**, Qing Zhang, Chun He \*, Wenjun Xu, Lingling Hu.
560. *Accelerated Photocatalytic Degradation of Organic Pollutant over Metal-organic Framework MIL-53(Fe) under Visible LED Light Mediated by Persulfate.* **Yaowen Gao**, Chun Hu, and Hui Zhang
571. *Efficient Catalytic Ozonation of Bisphenol-A with Three-Dimensional MnO<sub>2</sub> Porous Hollow Microspheres and an Insight into Probable Catalytic Mechanism.* **Lingling Hu**, Qing Zhang, Wenjun Xu, Yajing Huang, Chun He
659. *Elimination of Micro-Organisms and Micro-Pollutants by Advanced Wastewater Treatment Technologies.* **Claudia Gallert**
668. *Influence of Polyelectrolyte Modification on Nanoscale Zero-Valent Iron (nZVI): Aggregation, Sedimentation, and Reactivity with Ni(II) in Water.* Liu Jing, **Liu Airong**, Zhang Wei-xian
693. *Micropollutant Removal Efficiency in an Activated Sludge System Operated at Low Sludge Retention Time.* Maggie Green, **Emel Topuz**, Gülten Yüksesek, Emine Ubay Cokgor, and Didem Okutman Tas
749. *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

### 01-17 Nanotechnology Applications

510. *Fabrication of Cu-Ni/graphene Catalysts for Electrochemical Degradation of Chloramphenicol.* **Xiaozhe Song**, Hui Wang, and Zhaoyong Bian.

511. *Effects of Fabrication and Modification Method of Magnetic Nanomaterials on Green Algae Capture Performance.* **Pei-rui Liu**, Yu Hong
521. *Kinetics, Mechanisms and Pathways of Sulfadiazine Photodegradation by ZnO/ZnFe<sub>2</sub>O<sub>4</sub>/g-C<sub>3</sub>N<sub>4</sub> Composite.* **Guanglan Di**, and Zhiliang Zhu
528. *Effect of HCO<sub>3</sub><sup>-</sup> on Physicochemical Properties of Silver Nanoparticles and Toxicity to E.Coli.* **Bojie Yuan** and Minghao Sui
548. *Epitaxial Branched WO<sub>3</sub>/TiO<sub>2</sub> Nanostructures for Highly-Stable and Efficient Photoelectrocatalytic Wastewater Treatment.* **Qingyi Zeng**, Chun Hu, and Baoxue Zhou.
681. *Continuous Treatment of Emulsion Effluents of Steel-Rolling Mills Using Magnetite (Fe<sub>3</sub>O<sub>4</sub>) Nanoparticles.* **Parsanta**, and Ashok N. Bhaskarwar
694. *Green, Environmentally Benign and Biogenic Fabrication of SnO<sub>2</sub>-CNT Nanohybrids and Their Multifunctional Vivacity as an Efficient, Recollectable and Reusable Material for Complete Water Decontamination.* **Dipyaman Mohanta**, Md. Ahmaruzzaman, Abhijit Nath, Partha Pradip Adhikari
700. *Plasmonic Photocatalysts for Environmental Applications in Detection and Treatment of Organic Pollutants.* **Jai Prakash**
703. *Effect of Environmental Factors on Interaction between Tetracycline and Copper Oxide Nanoparticle.* **Jun Ma** and G. Daniel Sheng
708. *Physico-chemical Approach of Harvesting Chlorella Sorokiniana and Scenedesmus Obliquus with Magnetic Ferrite Nanoparticles Containing Mn.* **Louie Lapenas**, Mark Daniel De Luna, and Debora Rodrigues
779. *Photocatalytic Degradation of Congo Red Dye by Nano Zinc Oxide.* **Amjed Mirza Oda**, Alaa Rasheed Omran, Ahmed Saleh Al-khafaji, Abbas Jassim Attya, Rahma Hashim, Luma Ahmed Alnakash
802. *Estimation of TPHs in Oil Contaminated Wastewater by Adsorption on MWCNTs Using Solid-Phase Extraction Coupled With GC-FID.* **Ilyas Muhammad**, Akeem Akinpelu, Ahsan M Shemsi

## 02. Air Pollution and Air Quality Control

### 02-01 Aerosol

759. *Chemical Characterization of Carbonaceous Component of Fine Aerosols over Jaipur, India.* **Navdha Khera**, Annada Padhi, Swati Sharma, Gazala Habib, Nivedita Kaul and Dipankar Saha

### 02-02 Air Quality Assessment

506. *Trend Analysis of Air Pollutants from Non-Conventional Emission Sources in the North Texas Region.* **Guo Quan Lim**, Kuruvilla John
507. *Assessment of PM<sub>2.5</sub> and Noise Level at Transport Corridors of Delhi during Odd-Even Episode.* **Amrit Kumar**, Anmol Vishwakarma
550. *Episodic Air Pollution Events in Delhi during Crop Residue Burning: A Comprehensive Study of Multiple Pollutants.* **Pavan Kumar Nagar**, Mukesh Sharma
564. *Evaluation of PM<sub>2.5</sub> Emissions and PAHs Concentration in PM<sub>2.5</sub> from the Exhausts of Diesel Vehicles.* **Kassian T.T. Amesho**, Ya-Ching Li, Feng-Chih Chou, Syu-Ruei Jhang, Yu-Chieh Lin, and Yuan-Chung Lin
625. *Analysis of Land Use on Air Quality in Pennsylvania Using Geospatial Technologies.* **Alex Criswell** and **Rachel Hodgins**
733. *Analysis of Meteorological Conditions on a Persistent Haze Process in Yangtze River Delta.* **Rui Han**, Shuxiao Wang, Wenhai Shen, Mingnong Feng
744. *Characterization of Odor Emissions at Organic Chemistry Production Process.* **Ilker AKMIRZA**, Kadir ALP, Ugur GULER and Merve YILMAZ
755. *Decreasing Emission Factor of Pollutants in Abadan Refinery by Renovating the Furnace Design,* **Abbas Zabihi** and Mohammad Raazi Tabari.
771. *Measurement of PAHs in the Ambient Air.* **Elham Eslami**

### 02-03 Transport of Pollutants

592. *Reducing Emissions from Gasoline Engines Using Hydrogen.* **Yu-Chieh Lin**, Syu-Ruei Jhang, Kang-Shin Chen, Sheng-Lun Lin and Yuan-Chung Lin
743. *Commuter's Exposure to PM<sub>2.5</sub>: A Case Study of BRTS Corridor in Delhi.* Rajeev Kumar Mishra and **Amrit Kumar**
798. *Numerical Modeling of Air pollution particles Transport and Deposition in Human Lung.* **V.K. Katiyar**
818. *Fine particulate matter (PM<sub>2.5</sub>) at a Rural Site in North Central India: Its Characterization and Source Apportionment.* **Aparna Satsangi**, Anita Lakhani and K. Maharaj Kumari
819. *Occurrence and Health Risk Assessment of Phthalate Esters in Road Dust in Parks of Tianjin City during Spring and Winter.* **Yaqin Ji**, Lei Zhang, Shibao Wang



## 02-04 Waste Gas Control Techniques

585. *Adsorptive Removal of Formaldehyde from Indoor Air using Mixed-Metal Oxides.* **Fateme Rezaei**, Anirudh Krishnamurthy
652. *Pb and SO<sub>2</sub> Poisoning Effect on CeO<sub>2</sub>-WO<sub>3</sub>/TiO<sub>2</sub>-SiO<sub>2</sub> Catalyst for SCR.* **Yue Peng\***, Dong Wang, Jun-hua Li, John Crittenden and Ji-ming Hao
653. *The Dechlorination Effect of Chlorobenzene on Vanadium-based Catalysts for Low-temperature NH<sub>3</sub>-SCR.* **Dong Wang**, Yue Peng\*, Jun-hua Li and Ji-ming Hao
753. *Hopcalite Group (CuMnO<sub>x</sub>) Catalysts for Carbon Monoxide Oxidation at Low-Temperature Conditions.* Subhashish Dey<sup>1</sup>, Ganesh Chand Dhal, Ram Prasad, **Devendra Mohan**
797. *The Typical Technologies for Ultra Low Emission from Coal -fired Power Plant in China.* **Jianyi LU**, Bingyi XU, Lili FU, Yihai LU

## 02-05 Air Pollutant Monitoring

621. *Air Pollution Distribution, Modelling and Development of an Air Quality Index based on land use profiles, Trinidad, WI.* **Himawatee Baboolal** and Valerie Stoute.
628. *Characterization of Volatile Organic Compound Emissions from A Wastewater Treatment Plant.* **Hakan Pekey**, Kadir Ulutaş, Selami Demir, Faruk Dinçer.
630. *GHG Emissions from Various Sanitation Options: a case of Patna Municipal Corporation Area, India.* **Dineshwar Prasad Singh**, Nityanand Singh Maurya
634. *Insight into the Sources of PM<sub>2.5</sub> at Roadside Micro-Environment in Tianjin, China.* Shi-Bao Wang, **Ya-Qin Ji**, Lei Zhang
639. *Characterizing Spatial Distribution of Coarse Particle Concentrations Using Passive Aerosol Sampler in Kocaeli, Turkey.* **Beyhan Pekey**, Robert D. Willis
800. *Seasonal Control on Shape Modification of Suspended Particulate Matter from Northern Indo-Gangetic Alluvial Plain.* **Munmun Chakarvorty\*** and Jayanta Kumar Pati.
803. *Anthropogenic Spherules as a Major Pollution Indicator in Urban Area.* **Ambalika Niyogi**
828. *Characteristics of PAN Pollution during 2015 Winter Haze Episode in Beijing.* **Boya Zhang** and Jianbo Zhang

## 02-06 Hazardous Gas Biofiltration

748. *Removal of Vapour Phase Methanol in the Presence of Thiosulphate Using Anaerobic Biotrickling Filter.* **Mekonnen Maschal Tarekegn**, Eldon Raj Rene- Jack van de Vossenber and Piet N. L. Lens
849. *Degradation of Ternary Mixture of Trihalomethanes in a Biotrickling Filter Seeded with Biosurfactant and Fungi.* **Sanaiya Islam**, George Sorial, and Bineyam Mezgebe

## 02-07 Catalysts for Reducing Emission

509. *A Novel Cu<sub>w</sub>Mg<sub>2-w</sub>Mn<sub>y</sub>Al<sub>1-y</sub>O<sub>x</sub> Catalyst from LDHs for NH<sub>3</sub>-SCR Catalyst and Resistance to Its SO<sub>2</sub> and H<sub>2</sub>O.* **Qinghua Yan** and Qiang Wang
517. *Effect of Si/Al Ratio on Catalytic Performance of Hydrothermally Aged Cu-SSZ-13 for the NH<sub>3</sub>-SCR of NO in Simulated Diesel Exhaust.* **Jin Cheng**, Shuai Han, **QingYe**, Shuiyuan Cheng, Tianfang Kang
526. *The Effect of Copper Exchange Level on the Hydrothermal Stability of CuSSZ-13 Catalysts for NH<sub>3</sub>-SCR.* **Shuai Han**, Jin Cheng, **Qing Ye\***, Shuiyuan Cheng, Tianfang Kang
688. *Effects of Nanoparticle Based Fuel Additives on Diesel Engine Performance and Emissions.* **Asanga Wijesinghe**, Fanxu Meng, Carolyn LaFleur and Richard Haut

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

### 02-09 Air Pollution Prevention and Management

601. *The Role of Building Materials and Architectural Spaces on Urban Health Quality in Nigerian Cities: A Case Study of Aba Urban Informal Settlements.* **Ikechukwu Onyegiri**, Iwuagwu, Ben Ugochukwu; Nwankwo, Stephen Ikpendu
605. *Performance of Venturi Scrubber for the Removal of Dust Particle.* **Manisha Bal\***, and B. C. Meikap
649. *The Effects of Construction Materials and Construction and Demolition Waste on Urban Health Quality in Nigeria: The Way Forward.* **Ben Ugochukwu Iwuagwu**, Ikechukwu Onyegiri, Marcellinus Okafor

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

### 03-01 Contaminants in the Subsurface

527. *Assessment of Heavy Metal Contamination in Soils Around a Waste Dump in Ibadan, Southwestern Nigeria.* **Akintola O.O.**, Adeyemi G.O. and Bodede I.A.

547. *Modeling of fate and transport of Contaminant in Groundwater due to the leachate from a Municipal Solid Waste Dumpsite and Reclamation: A Case Study.* **Charles P Joseph** and S. Mohan
719. *Polycyclic Aromatic Hydrocarbons in Soils from the Central-Himalaya Region: Distribution, Sources, and Risk Assessment.* **Wei Luo**, Xiang Bi, and Jiajia Gao.
729. *Assessment of Soil Contamination Due to Kota Stone Slurry Effluents in Kota Region of Rajasthan.* **Er. Sachin Maurya**, Er. Urvashi Maheshwari, and Prof. A K Dwivedi

### 03-02 Natural Attenuation of Contaminants

595. *Interacting Effects of Salinity, Sewage Sludge, and Earthworms on the Fractionation of Heavy Metals in Soil around A Lead-Zinc Mine.* **Ghasem Rahimi**, Fatereh Karimi
827. *An Investigation into the Microbial Attenuation of Hydrocarbon Contaminated Soil.* Grace Zvinowanda and **Memory Tekere**

### 03-03 In-Situ Remediation

558. *Enhanced Fenton Degradation of Polychlorinated Biphenyls in Capacitor-Oil-Contaminated Soil by Chelating Agents.* **Ling Zhao**, Xiao-Hong Ma, and Yuan-Hua Dong
559. *Leachate Pollution Control using Combined Bioreactor – Composite Aggregate Approach.* Mohan S and **Vijay V. Nair**
773. *Modified Fenton's Oxidation for Pallikaranai Wetland Remediation.* **Ambika Selvaraj**
824. *Modification of Soil Properties Using Human Hair Fiber.* **Sunita Kumari**, Gautam Kumar and Shankar Suman

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

524. *Exploring the Opportunity for Organic Household Waste (OHW) Management Options: An Empirical investigation for Muharraq City.* **Sumaya Yusuf Abbas**
640. *Life Cycle Assessment of Bioplastics and Food Waste Disposal Methods.* **Shakira R. Hobbs\***, Tyler Harris<sup>1</sup>, William J. Barr<sup>2</sup> and Amy E. Landis<sup>3</sup>
657. *Utilization of Phosphogypsum to Reduce Greenhouse Gases Emissions and to Improve the Conditions of Calcareous Soil on the Kingdom of Saudi Arabia.* **Saud S.. AL-Oud**, Fahad N Al-Barakaha and Adel RA Usman
680. *The Effect of Removal Grit from Dewatered Sludge through Enhanced Hydrolysis - Centrifuge on Anaerobic Digestion.* Xiaohu Dai, **Guopeng Wang**, Dong Zhang
711. *Review of Solid Waste Management in Indian Towns – From Conservation Perspective of River Ganges.* **Nadeem Khalil**, Mohammad Bilal
713. *A New Concept for Utilization of Industrial Solid Wastes in Building Structures.* Arunima Shukla and **Ashok N. Bhaskarwar**
723. *Biodrying Technology for Municipal Solid Waste Treatment.* Asha P Tom, Ajit Haridas, **Renu Pawels**
739. *Characterization and Leaching Assessment of Toxic Metals in Municipal Solid Wastes in Southwest, Nigeria.* **Adebola Abosede Adeyi**, Adewale Muyiwa Adeyemi
740. *Leaching Assessment of Toxic Metals in Solid Wastes Generated in Tertiary Institutions in Ibadan, Nigeria.* **Adeyi, A. A\*** and Ojeabulu, V
788. *Municipal Waste Generation and Their Possible Management System in Dhaka City Corporation: Commercial Approaches.* **Md. Iftakharul Muhib** and M. Khabir Uddin.
793. *Synergy of Sludge, Food Waste Disposal and MSW Incineration in a Commercial Plant.* **Wu Xiao**
809. *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
829. *Analysis of Municipal Solid Waste Producing Law and Internet Technology-Based Enterprises in China.* **Jinyan Li**, Haizhen Yang
845. *Good Management Practices of Hazardous (Solid) Waste and its Monitoring.* **Ashok K. Rathoure**

### 03-05 On-site and Off-site Remediation

776. *Treatment of Steel Rolling Mill Effluents Using Semi – Batch Foam Flotation.* Varun Sharma and **Ashok N. Bhaskarwar**
786. *Benzo(a)pyrene Biodegradation by Bacterial Candidate Paenibacillus sp HD1PAH and Arthrobacter Nicotianae HD2PAH.* **Hemen Deka**

### 03-06 Landfill / 03-07 Pemeable Reactive Barriers/

541. *Anaerobic Landfill Leachate Characteristics in Dry Climate.* **Rouhallah Mahmoudkhani**, Raheleh Fallahfard, Lobat Taghavi and Zahra Saadat Yeganeh.
796. *Enhancing Soil Productivity through Biochar Application to Heavy Metal Polluted Soil.* **O. O. Awotoye**, Olofinjana Olubukola
731. *Anaerobic Landfill Leachate Characteristics in Dry Climate.* **Rouhallah Mahmoudkhani**, Lobat Taghavi, Zahra Saadat Yeganeh, Reza Naghavi

### 03-08 Waste Fuel Site Remediation/

### /03-09 Waste Recycling

706. *Waste Management, Treatment and Disposal at Kuwait Oil Company (KOC).* Zainab Hussain, **Kholood Yousef**, Soud AL-Mutairy, Haitham Fouzy
718. *Bio-Ethanol from Pretreated Food Waste Hydrolysate Using Immobilized Saccharomyces Cerevisiae under Photo and Dark Fermentation.* **Marttin Gundupalli Paulraj** and Debraj Bhattacharyya
722. *Technological and Life Cycle Assessment of Organics Processing Odour Control Technologies,* **Navin Bindra**, Brajesh K Dubey and Animesh Dutta
734. *Direct Shear Testing of Sand Reinforced with Pellets Recycled from Polyethylene (Plastic) Bag Waste Material.* **Faridah Chebet** and Denis Kalumba
761. *Environmental and Economic Assessment for Waste Rare Earth Phosphor Recycling By Dual Hydrochloric Acid Dissolution.* **Shengen Zhang**, Yifan Liu, Bo Liu , Hu Liu , Alex A. Volinsky
615. *Indigenization to Improve Access to Affordable Refuse Disposal Services in Non-Urban South African Households.* **Fannie Machete**
632. *Sustainable Utilization for Lead Immobilization in Contaminated Soil by Recovered Struvite Supported Diatomite Complex: Potential, Mechanism, Efficiency and Risk Assessment.* **Huanping Jing**, Xuejiang Wang

### 03-10 Radioactive Waste and Land Pollution

588. *Statistic Methods for Assessments of Risks and Damages at Nuclear Power Plants,* **Alexander Valyaev**, Gurgen Aleksanyan, Alexey Valyaev, Oleg Arkhipkin
682. *Decontamination of Liquid Effluents from Uranium Mine by Using Natural Zeolite.* **Ahmet Erdal Osmanlioglu**
816. *A New Formula of Active Powder Concrete for Curing Radioactive Waste.* **Baosen Liu**, Li'an Hou, Shuili Yu, and Yubing Ye

### 03-11 Phytoremediation of Organic Pollutants

654. *Potentialities of Six Plant Species on Phytoremediation Attempts of Fuel Oil-Contaminated Soils.* **Matsodoum N. P.** , Djumyom Wafo G. V. , Djocgoue P. F., Kengne Noumsi I. M., Wanko N. A.
795. *Enhanced Phytoremediation Using Endophytic Microbes.* **ANYASI, RO.**, ATAGANA, HI.

### 03-12 Polymer Waste Recycling and Management

604. *Experimental Study on Characterization and Pollution Potential of Contaminated Chromium Hazardous Waste.* **M. Gopal Naik**, Madhusudhan Rao, Aadhi Naresh

### 03-13 Plants and eco/Soil Stabilization

643. *Study of Shear Strength of Reinforced Soil.* Manas Kumar Bhoi, **Gloria James** and Poornima Menon

## 04. Ecosystem Assessment and Restoration

### 04-1 Ecosystem Assessment

617. *Spatial Variability of Macroinvertebrates in Kashmir Himalaya.* **Sami Ullah Bhat**, Inam Sabha, Sheikh Tajamul and Shabir Ahmad Rather
697. *Risk Reduction / Cost Savings by Effective Oil Spill Response and Spill Countermeasure Plans.* **Steven Pedigo**, Diane Wagenbrenner, Cody Kaduce, Paul W. Sammarco
712. *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
720. *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.

782. *Ecosystem Level Carbon Source-Sink Analysis Using EC Data and LUE Model*. **S.P.S. Kushwaha**, T. Watham, N.R. Patel, and S. Nandy
805. *Sustainable Housing and Building Performance Assessment Systems*. **Deepa G. Nair** and Santhosh John
812. *Bounties of a Bleak Landscape!* **Joystu Dutta** and Arun Kumar Roy Mahato

#### 04-02 Nutrients and Functions of Ecosystems

618. *Carbon Sequestration on Application of Biochar Pellet Cooperated with Pig Manure Compost during Rice Cultivation*. **JoungDu Shin**, EunSuk Jang

#### 04-03 Restoration of Ecosystems

650. *Developing a Sustainable Eco-Fishing Village in Riverine Nigeria: A Review of Iworkiri Fishing Village Bonny Island, Nigeria*. **Ikechukwu Onyegiri**, Ben Ugochukwu, Iwuagwu, Roland, Dan-Wachuku

### 05. Bio-Assessment and Toxicology

#### 05-1 Human Exposure

624. *Are the 16 EPA PAHs in Need of Overhaul after 40 Years of Faithful Service?* **Jan T. Andersson**, Christine Achten
772. *The Incidence of Hepatitis B and C in Jos, Plateau State, Nigeria*. **Janet Itelima**, Michael Elujoba and Chinyere Ihemenandu
790. *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
847. *Unraveling the Molecular Mechanism behind UV-B Induced Skin Cancer*. **Rayala Suresh Kumar**

#### 05-2 Bio-response and Ecotoxicology

520. *Cd-Induced Phytotoxicity Reduces Lindane Accumulation in Rice Seedlings*. **Shidi Huang**, and G. Daniel Sheng.
537. *Multigeneration Effects of Pentachlorophenol and 2,2',4,4'-tetrabromodiphenyl ether on Folsomia Candida*. **Min Qiao** and Qian-qian Zhang
555. *Genotoxicity and Cytotoxicity of Nine Benzothiazoles: Development and Application of A High Content Screening in Vitro Micronucleus Test for Genotoxicity and Cytotoxicity Assessment*. **Mei Ma**, ChaoHuang, Ye Yan, Na Li, Kaifeng Rao, Yiping Xu
607. *Acute and Chronic Effects and Multi-biomarker Assessment of Metal Nanoparticles on Carassius auratus*. Jun Xia, Guanghua Lu, **Jun Hou**
676. *Toxicity of silver Nanoparticles on E. crypticus in Soils Applied with Biosolid: Effect of Transformation Ratio to Silver Sulfide Nanoparticles and Biosolid Application Rates*. **Emel TOPUZ** and Ismail KOYUNCU
701. *In Vitro Study on the Joint Hepatotoxicity upon Combined Exposure of Cadmium and BDE-209*. **Lixin Wang**, Tong Wu, Lulu Zhang, Jiansheng Cui.
741. *Role of Purslane oleracea against Manganese Toxicity in Hepato-Renal Tissues*. **A. C. Verma**
791. *Toxicological Assessment of Pharmaceutical Effluent to Clarias Gariepinus (Burchell, 1822)*. O. A. **Eleyele\*** and O. T. Aladesanmi
804. *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
836. *Trans-Generational Immune Toxicity Effect of Benzo[A]Pyrene on oryzias melastigma*. Xiaohan Yin and **Kejian Wang**
837. *Persistent Physiological Concentration ROS Generated by BaP Exposure Blocking NF-κB Pathway in Medaka (Oryzias melatigma)*. **Qian Cui**, and Kejian Wang
851. *Nanoparticles as Emerging Contaminants of Concern: Ecotoxicity Effects on the Growth and Survival of Bacteria*. **Sidney Stokes**, Lucas Ringo and Lynal Albert

#### 05-3 Bioavailability and Bio-accumulation

554. *Characterizing Metabolism of Organophosphate Flame Retardants in Freshwater Fish*. **Yiping Xu**, Zijian Wang, and Rui Hou
557. *Organotin Contamination in Commercial and Wild Marine Bivalves from China: Increasing Occurrence of Triphenyltin after the TBT Ban*. **Chunzhao Chen**, Qinghui Huang, and Wen Zhang
715. *Bioconcentration of Diclofenac in Crucian carp and Its Influence Factors*. **Guanghua Lu\***, Jiannan Ding, and Zhenghua Zhang

766. *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

516. *Comparison of Inactivation of Disinfectant- and Antibiotic- Resistant Bacteria by Free Chlorine and UV*. **Jingyu Wang** and Minghao Sui
545. *Effects of Soil Moisture on Biodegradation of Atrazine by DN36*. **Yang Chen** and G. Daniel Sheng.
648. *Community Structure of Microorganisms in Crude Oil Polluted Mangrove Swamp in Niger Delta, Nigeria*. **Nwankwo, Chika Christiana**, Obidiugwu, Victor and Okpokwasili Gideon Chijioke
695. *Existed to Acquire or Evolved to Destroy? -The Story of Bacterial Phosphotriesterases*. **Dayananda Siddavattam**
747. *Microbial Community Analysis of Anaerobic Digesters during Biotransformation of Nonylphenol Diethoxylate*. **Fadime Kara Murdoch** and F. Dilek Sanin
765. *Pectinase from Bacillus subtilis strain Btk-2Z: Optimization of Cultural Conditions and Application in Coffee Processing*. **Oliyad Jeilu Oumer\*** and Dawit Abate

#### 06. Wetlands

##### 06-1 Wetland Conservation

##### /06-2 Wetlands for Wastewater Treatment

519. *Wetland Conservation and Protection*. **Kwang, Daniel Kwasi**
745. *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

#### 07. Sediments

##### 07-1 Assessment of Sediments

561. *Assessment of Quality of Sediments and Nutrients with Land Use Land Cover Changes in Cahaba River Basin Using SWAT*. **Pooja P. Preetha**, Mohammad Z. Al-Hamdan and Michael D. Anderson
593. *Assessment of the Impact of Land Cover and Land Use Changes on the Water Quality of Sediments and Nutrients in Cahaba River Basin Using SWAT*. **Pooja P. Preetha**, Ashraf Z. Al-Hamdan, and Michael D. Anderson

##### 07-2 Remediation of Contaminated Sediments

638. *Hexabromocyclododecane (HBCDD) Biodegradation in Anaerobic Sediment Mesocosms*. **Irem Karahan**, Hale Demirtepe and Ipek Imamoğlu
844. *Enhanced Nitrogen Removal by the Integrated Constructed Wetlands with Artificial Aeration*. **Jizheng Pan**

#### 08. Global Change

##### 08-1 Global Warming and its Impacts

580. *Integrated Resilience Study on Energy Security Under Drought*. **Forough Shadman**, Mahmoud Moghavvemi
609. *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
627. *A Socio-Epidemiological Study on Global Climate Change and Malaria Risk in Lombok, Indonesia: 2005-2014*. **Hisayoshi MITSUDA**
710. *Effects of Global Warming on Reproductive Functions, Heat Shock Protein Expression and Cellular Apoptosis of Eastern Oyster Gonad*. **Sarah Nash**, and M.D Saydur Rahman.
716. *Impacts of Climate Changes on the Natural Disasters of Bangladesh*. **M. A. Sattar**

##### 08-2 Carbon Discharge Reduction

573. *The Impact of Saw-Dust Biochar on Soil pH and Crop Yields for Climate Change Mitigation*. **George Elambo Nkeng**, Martha Eneke Munongo, and Jetro Nkengafac Njukeng
589. *CO<sub>2</sub> Absorption Studies Using Amine Solvents with Fourier Transform Infrared Analysis*. **Funmilola Avoseh**, Khalid Osman, Paramespri Naidoo and Deresh Ramjugernath.
725. *Sequestration and Storage Capacity of Carbon in the Mangrove Vegetation of Sundarban Forest, Bangladesh*. **Towhida Rashid**, Sirajul Hoque, Anupa Datta

742. *Energy Conservation Helps in Mitigation of Adverse Effects of Climate Change.* **Mehboob Alam Khan**  
777. *Leapfrogging Carbon Capture Sequestration.* **Adel J. Al-Khalifah**

## 09. Metals

### 09-1 Metal Distribution

515. *Heavy Metals Accumulation Potential of Some Selected Tropical Plant Species.* **Awotoye, O.O.**; Ogunbanjo, O.R.; Okanlawon, F.B.; Ajayi, O.E.; Okeleke S.O and Alao, J.O  
556. *Accumulation and Sources of Trace Metals in Roadside Soils in Shanghai, China: A Case Study of Two. rban/Rural Roads.* **Geng Yan**, Ling Chen, and Lingchen Mao.  
576. *Vertical Distribution and Chemical Behavior of Uranium in the Tailings Material of Schneckenstein (Germany).* **Taufik Naamoun**, Broder Merkel

### 09-2 Metal Removal and Remediation

501. *Relative Efficiency of Some Selected in the Uptake of Heavy Metals from Industrial Effluents.* **Ojekunle, Z.O.**, Erinle O. and Bada B.S.  
666. *The Pomelo Peel and the Powdered Pomelo Peel as New Sorbents for Removal of Chromium from Aqueous Solution.* **Wang Qiong**  
721. *Ameliorative Effects of *Rosmarinus officinalis* Leaf Extract and Vitamin C on Cadmium-Induced Oxidative Stress in Nile Tilapia *Oreochromis niloticus*.* **Promy Virk**, Mai Elobeid  
750. *Silver Recovery: Silver Ion Toxicity.* **S. Syed**  
754. *Fast Microwave-Assisted Preparation of EDTA Dianhydride Modified Jute Fiber for Heavy Metals Removal.* **Zhaolin DU**, Tong ZHENG, Peng WANG  
848. *Accumulation of Metals and Hydrocarbons in Mangrove sediments of Arabian Gulf at the Eastern Province of Saudi Arabia.* **Md Iqram Uddin Al Amran**, Omer Al Alhaiqi, Abideen Ojo Salawudeen and Mohamed Ali Qurban

### 09-3 Speciation, Bioavailability and Accumulation

737. *Levels of Heavy Metals in Organs of *Oreochromis Niloticus* from Great Kwa River, South-East Nigeria*  
Juliet M. Yakubu

### 09-4 Phytoremediation

539. *Phytoremediation Potentials of *Cedrela Odorata* Seedlings in Dumpsite Contaminated Soil.* **Akintola O.O.**, Bodede A.I., Aderounmu A. F., Kolawole E.A., and Ibode T.R.  
540. *Potentials of *Cedrela Odorata* Seedlings in Removing Heavy Metals from Sewage Sludge Amended Soil.* **Akintola O.O.**, Aderounmu A. F., Bodede A.I., Kolawole E.A., and Ibode T.R.

### 09-05 Metal Processing

574. *Potential of Mechanical Activation and Ultrasound Combination towards Mineral Extraction: A Case Study of Low-Grade Rhodochrosite.* **Hongping He**, Ning Duan.

## 10. Chlorinated and Other Persistent Organic Compounds

### 10-1 Characterization of Organic Pollutants

726. *Bioaccumulation and Trophic Transfer of Tetrabromobisphenol-A Flame Retardant in an Aquatic Food Web.* **Jiang-Ping Wu** and Bi-Xian Mai  
751. *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

690. *Potential of Endophytic Bacteria on Reducing PAH Contamination of Plants.* **Xuezhu Zhu**, Jiayu Tao

## 11. Modeling

### 11-1 Environmental Simulation

525. *Evolutionary Design and Calibration of District Metered Area of Water Supply Network Systems Using Numerical Methods and Hydraulic Software.* **Rameshwar Rao**, Aadhi Naresh and M. Gopal Naik
551. *Investigation of a Chlorinated Hydrocarbon Plume Close to a Surface Water Body – A Case Study.* **Sonja Schröter**, Wilfried Schneider
658. *Three Dimensional Full-Loop Simulation of a Circulating Fluidized Bed Gasifier.* **Vikrant Sharma**, V.K. Agarwal
670. *Numerical Simulation of Dissolved Oxygen, Algal Biomass, Nitrate, Organic Nitrogen, Ammonia, and Dissolved Phosphorus in Waste Stabilization Ponds.* **Sina Nejati** and Seyed Ahmad Mirbagheri
683. *Numerical Analysis for a Series of Recent Catastrophic Floods (2011-2017): New Verification of the Groundwater and Tectonic Processes Possible Impact.* **T. Trifonova**, S. Arakelian, D. Trifonov, S. Abrakhin, V. Koneshov, A. Nikolaev
696. *An Analytical Solution to the Problem of Poned Ditch Drainage in a Stratified Soil.* **Gautam Barua** and Subhadeep Chakrabarti
717. *Modeling of Reference Evapotranspiration Variables Using Fuzzy Interference Systems.* **Akinola Ikudayisi** and Josiah Adeyemo
775. *Shadow Detection and Removal with Analysis Techniques for Object Tracking.* **Sameer Ali**
813. *Improving Human Health in China through Alternative Energy.* **Melissa Scott**, Robert Sander, Greg Nemet, Jonathan Patz

## 11-2 Water Quality Modeling

### 11-3 Pollutant Estimation and Risk Assessment

533. *Bacterial Dynamics in Intermittently Operated Drinking Water Distribution Systems.* **G.R. Abhijith** and S. Mohan
578. *Numerical Simulation on Algae Bloom in Chaohu Lake, China.* **Xin Qian**, Mei Li and Liuyan Yang

## 12. GIS, Database, and Remote Sensing

### 12-1 GIS for Environmental Assessment

536. *Evaluation Soil Organic Carbon in Some Areas in Nile Delta Using Remote Sensing and GIS Techniques.* **Mohamed Elsayed**; Mohamed A. E. AbdelRahman; Mohamed Abu-hashim
552. *Assessment of Soil Quality Using Decision Tree by Integration of Spatial Distribution of Soil Physio-Chemical Properties Using GIS.* **Mohamed A.E. AbdelRahman**, Salah A. Tahoun
597. *Geospatial Assessment of Selected Wheat Producing Areas of Punjab, Pakistan.* **Sheikh Saeed Ahmad**
629. *Groundwater Exploration and Geochemical Analysis of Its Sediments: A GIS Approach to Combat Climate Change for Sustainable Water Resource Management.* **Satyanarayan Shashtri**, Salanieta Tuisuva, and Chander kumar Singh
699. *Investigation of the Spatial Relationships between Groundwater Quality and Hydro-geological Physical Controls using Geographically Weighted Regression Model.* Jena S. and **Panda R. K.**
785. *Groundwater Exploration in Fiji: A Remote Sensing, GIS Approach.* **Akash Dutt Dubey** and S. N. Shashtri, C.K. Singh
810. *A GIS Based DRASTIC Modeling for Assessment of Groundwater Vulnerability in and Around SIPCOT- Perundurai, Erode, Tamil Nadu, India.* **S.Durgadevagi**, and R.Annadurai.

### 12-2 Data Management and Statistics

#### 12-3 Environmental Remote Sensing Applications

678. *Apply Data Science to Rapid Modeling of Dual Fuel Technology for Life Cycle Assessment (LCA).* **Fanxu Meng**, Carolyn LaFleur, Asanga Wijesinghe and Richard Haut
756. *Ponding of Sarimsakli Basin (Kayseri) and Its Influences on Kültepe Using GIS.* **Işıl Ömeroğlu**, G. M. Vedat Toprak and Fikri Kulakoğlu

## 13. Environmental Analysis and Measurements

### 13-1 Environmental Analysis

569. *Rapid Identification and Determination of Trace Polycyclic Aromatic Hydrocarbons in Water by Nylon 6 Nanofiber Membrane Enrichment/ Solid-Phase Surface Spectrofluorimetry.* **Zhi-gang Wang**, Jian Chen
853. *Study on Spectral Characteristics of Dissolved Organic Matter in Fen River of Taiyuan, West China.* **Jianhui Zhi**, Tingting Liu, Shengyu Song

### 13-2 Field Measurement Technologies

532. *On-Line Monitoring of Heavy Metals in Industrial Wasterwater by LIBS Technique.* **Nanjing Zhao**, Yao Jia, Li Fang, Mingjun Ma and Deshuo Meng
549. *Occurrences, Sources, and Transport of Organophosphorus Flame Retardants in the Waters of Fildes Peninsula, Antarctica.* **Kaifeng Rao**, Xiaozhong Gao, Yiping Xu, and Mei Ma.
705. *Influence of Physical Properties and Constitutions of Soil on the Laser Induced Fluorescence Spectra of PAHs in Soil.* **Deshuo Meng**, Nanjing Zhao, Yao Huang, Zhaolu Zuo, Mingjun Ma, Xiang Wang, Wenqing Liu and Jianguo Liu

### 13-3 New Method Applications

686. *Water Biosensor Challenge to Address Toxicity of Water* **Eunice Varughese**, Sid Hunter, Denice Shaw, Jay Garland

### 13-4 Environmental Monitoring

502. *Environmental Pollution and Its Related Hazards at Agbara Industrial Area, Ogun State, Nigeria.* **Ojekunle Z.O.**, Jinadu O. O. E., Afolabi T.A. and Taiwo A.M.
572. *Design of Chlorophyll Fluorescence Detection System based on Pseudo-random Sequence Modulation.* **Chaoyi Shi**, Xianhe Gao, Jun Lu, and Yanhong Gu
603. *The Influence of Urban Ecology on the Native Flora.* Mohamed A. El-Sheikh and **Amro M. El-Sheikh**
763. *Application of Passive Sampling in Assessing the Occurrence and Risk of Organophosphate Flame Retardants.* **Ying Li**, Guanghua Lu, and Cunman Yang

## 14. Society and the Environment

### 14-1. Society and the Environment

505. *Water Environment Protection in the Farmhouse Tourism Village—A Case Study on Shiling Village, Anji County.* **Ancheng Luo**, Yanping Sun, Zhiwei Liang
522. *Environmental and Social Sustainability.* **Sukhmander Singh.**
530. *Access to Environmental Benefits: Interest Driven or Need Driven?* **Ajay Karki**
610. *Environmental Reporting and Corporate Governance Practices of Indian Companies.* **Narinder Kaur** and Gurdip Singh
730. *Impact of Infrastructure Development on the Environment in India.* **CVR Vaishnavi**
769. *Some Remarks to Risk Assessments of Nuclear Power Plants (NPP).* **Alexander Valyaev**, Gurgen Aleksanyan, Alexey Valyaev
774. *Social Inequality and Environmental Threats in Indus Delta Villages: Pakistan.* **Hussain Bux**
778. *Organic Floriculture Small Farms Benefits Women and Environment in India's Drylands.* **Govindasamy Agoramoorthy**
792. *Migration, Climate Change and Livelihood Crisis in Fiji: A Historical and Holistic Perspective.* **Mumtaz Alam** and S. N. Shashtri
823. *Future Natures: A Case Study of Prospective Woolly Mammoth De-Extinction.* **Amy L. Fletcher**

### 14-2 Environmental Ethics and Laws

669. *The Improvement of the Remediation Policy in the Mining Sector in the Kyrgyz Republic.* **Gulzhan Makhmudova**, Kenichi Matsui.

### 14-3 Environmental Education

512. *Creating Appropriate Pattern for Development of Environmental and Sustainable Development Indicators in Payame Noor University in Iran.* **Seyed Mohammad Shobeiri**, Batoul Nazari
600. *Urban Poverty and Poor Housing Affordability: An Impediment on Health Quality in Nigerian Urban Areas.* **Iwuagwu, Ben Ugochukwu**; Ikechukwu Onyegiri; Marcellinus Okafor
655. *Creating Appropriate Pattern for Development of Environmental and Sustainable Development Indicators in Payame Noor University in Iran.* **Seyed Mohammad Shobeiri**
724. *Students' Attitudes towards the Environment.* Mile Srbinovski, **Veton Latifi** & Zamir Dika
799. *Education Program to the Environment: An Advocacy of a Travel Agency in Avaro City, Philippines.* Lilia F. Panchito, Ruben A. Neri, Recto B. Campos, Elisa P. Madrazo

## 15. Sustainable Development and Environmental Management



### 15-1 Environmental Quality and Planning

602. *Assessment of Consumption of Polyethylene / Plastic Bags in Abha City (KSA): Quantification, Disposal, Alternatives, Impact on Health and Environment and Mitigation – Through Field Survey.* **Chandrakant S. Sarkar** and Mohammed K. Almesfer
651. *Demonstration of Enhanced Net Anthropogenic Nitrogen and Phosphorus Input Models for Estimating Commodity-specific and System-wide Agricultural Nitrogen and Phosphorus Flows.* **Mikaela Algren**, Amy Landis, Chris Costello
660. *Potential Environmental and Health Impact of RF Radiation on Riggers in Telecommunication Industry in Ghana.* **Owusu Akyaw Kwarteng** and Lydia Michelle Tawiah

### 15-2 Sustainable Development

566. *An Appraisal on the Potential of Ecosan (Ecological Sanitation) to Serve the Three Tiers of Water-Food-Energy Nexus.* **Bilsen BELER-BAYKAL**
587. *Maximizing Biochar and Biooil Yield from Pyrolysis of Albizia: An Invasive Plant Evaluation.* **Hafiz Ahmad**, Jordan Mayers and Brandon Madden.
608. *Reducing Air Pollution by Using Hot in Place Recycling of Asphalt and the Constructal Law.* **Masoud Asadi**
611. *Ecotourism and Sustainable Development; Evidence from Lope National Park, Gabon.* **Frimpong ORNELIUS**
665. *The Challenges to Sustainable Development in Rural Regions of the Kyrgyz Republic.* Matsui Kenichi and **Kasymbekova Lira**
677. *Sustainability of Bioenergy for Power Generation in South West Nigeria.* Steven Morse Richard Murphy and **Seun Nubi**
735. *Demonstration of Energy Conservation Technology through Brick Kiln with Manufacturing of Improved and Quality Bricks.* **Ali Mohammad Shahwani**, Ghulam Fatima Saba
834. *Engineering Approach Used in Hydroponics Designs and Automation.* **Riley Horner**, Elizabeth Alviso, Michelle Mata, and Bahram Asiabanpour
854. *Aqueous Phosphorus Removal and Recovery by Pervious Concrete.* Vincent D. Hwang, Yaileen M. Acevedo Badillo, Anaira Román Santiago, Carla M. Moreno Cortés, Rafael A. Terán Rondón, **Sangchul S. Hwang**
857. *Bayesian Network Analysis of Reforestation Decisions by Local Communities in Vietnam.* **Thi Mai Anh Tran**, Hai Dinh Le, Dongwook W. Ko

### 15-3 Environmental Policy and Management

614. *Environment Management and Disclosure Practices of Corporate Enterprises in India.* **Gurdip Singh** and Narinder Kaur
784. *Environmental Management in Neelum Jhelum Hydropower Program (Pakistan) - Case Study.* **Muhammad Afzal Chaudhry**
855. *A Computable General Equilibrium Model for Liberia with Carbon Taxes and Exemptions.* **Presley K. Wesseh, Jr** Band Boqiang Lin
858. *Environmental Policy and Management.* **J. C. Kuniyal**

## 16. Renewable Energy Development

### 16-1 Water Energy Nexus

752. *Are Energy and Volatile Fatty Acid Recovery Possible from Antibiotic Production Waste Stream?* **Zeynep CETECIOGLU**

### 16-2 Wind Energy

781. *Photogalvanic Cell: An Efficient Device for Photochemical Conversion and Storage of Solar Energy.* **Chhagan Lal**

### 16-3 Solar Energy

531. *Role of Green Energy in Mitigation of Climate Change.* **Mehboob, Alam Khan**
702. *Renewable Energy Storage & Utilization for Cooling and Desalination: Energy & Environmental Impact Analysis.* **Muhammad Wakil Shahzad**, Muhammad Burhan and Kim Choon Ng
833. *Feasibility Comparison of Passive and Active Optical Fiber Daylighting Systems Utilizing PMMA Optical Fiber* **Richard Ramirez**, Katherine Casey, Juan Silva Febres, Bahram Asiabanpour

## 16-4 Bio-fuels

562. *Role of Microwave Irradiation in Enhancing the Saccharification Rate of Water Hyacinth.* **Sumarlin SHANGDIAR**, Shang-Cyuan Chen, Yu-Chieh Lin, Feng-Chih Chou, Che-An Cho, Yuan-Chung Lin\*
563. *Hydrogen Production from Spirulina Algae by Atmospheric Pressure Microwave Plasma.* Sumarlin SHANGDIAR, Ken-Lin Chang, Yu-Chieh Lin, Feng-Chih Chou, Yi-Hsing Hsiao, **Yuan-Chung Lin**
575. *Harvesting Microalgae from Urban Sewage for Biodiesel Production by Magnetic Flocculation Using Nano-Fe<sub>3</sub>O<sub>4</sub> Coated with Polyethyleneimine.* Yuxi Liu, Hongyi Chen, **Wenbiao Jin** and Peng Zhao
637. *Lipid Extraction/Biodiesel Production from Petrochemical Industry Wastewater Sludges by Direct Liquid-Liquid Lipid Extraction Method.* Elif Babayiğit and **Ayşen Erdinçler**.
757. *Eco-Economical Non-Conventional Method for Electricity Generation.* **Seema Vats**
830. *Design of Municipal Wastewater Power Plants for Warm Climate Regions.* **Chimwemwe Mndelemani**, Yinling Song