

# 2017 3rd International Conference on Advances in Environment Research (ICAER 2017) Table of Contents

## Session 1: Atmospheric Environment and Water Resources Management

- Retrieval and Validation of Aerosol Optical Depth by using the GF-1 Remote Sensing Data.....1  
*L Zhang, S Xu, L Wang, K Cai and Q Ge*
- Carbon Dioxide Emissions Due to Forest Fires in Bukit Batu Area, Bengkalis Regency, Indonesia.....8  
*Sofia Anita, T Ariful Amri, T Abu Hanifah, Edo Furnando and Amos Lukas*
- A Mini-review of Carbonaceous Nanomaterials for Removal of Contaminants from Wastewater .....15  
*S J Shan, Y Zhao, H Tang and F Y Cui*
- Analysis of Indoor Air Pollution of Decoration and Control Measures.....22  
*Li Yan*
- Chemical Speciation and Health Risk Assessment of Fine Particulate Bound Trace Metals Emitted from Ota Industrial Estate, Nigeria.....27  
*Winifred U Anake, Godson R E E Ana, Akan B Williams, Omowunmi H. Fred-Ahmadu and Nsikak U Benson*
- Modelling of Major Flood Arrivals on Chinese Rivers by Switch-time Processes.....32  
*Pavel Stoynov, Plamena Zlateva, Dimiter Velev and Xuejun Zong*
- Characterisation of Polychlorinated Biphenyls in Coastal Inland Seawater, Nigeria.....40  
*Nsikak U Benson, Omowunmi H Fred-Ahmadu, Adebusayo E Adedapo and Winifred U Anake*
- Modeling of CO<sub>2</sub> Solubility in Aqueous Potassium Lysinate Solutions at Post-Combustion CO<sub>2</sub> Capture Conditions.....45  
*Y Bian and S Shen*

Optimization of high performance composite flocculant PFZSSB.....50  
*K Zhang, SQ Li and Z Yan*

## **Session 2: Ecosystem and Forest, Mineral Resource Management**

Stimulation of Indigenous Carbonate Precipitating Bacteria for Ground Improvement.....56  
*Adharsh Rajasekar, Charles K.S. Moy and Stephen Wilkinson*

Estimation of above ground biomass in boreal forest using ground-based Lidar.....61  
*L Taheriazad, H Moghadas and A Sanchez-Azofeifa*

Ecosystem Resilience to Drought and Temperature Anomalies in the Mekong River Basin.....67  
*T Na-U-Dom, M Garc ía and X Mo*

Experimental study on removal of iron from potash feldspar.....72  
*JW Kong, SQ Li, X Miao, JX Bai and CQ Yang*

Preparation of the Iron Oxide Red from the Converter Dust by the Magnetic Separation and Roasting Process.....77  
*Z J Guo, S Q Li and C Q Yang*

The effect of hydrochemical and other environmental variables on zooplankton communities in artificially connected ponds Highgate, London.....82  
*Wen Liu and Zhirui Peng*

## **Session 3: Energy and Waste Management**

Research on Estimates of Xi'an City Life Garbage Pay-As-You-Throw Based on Two-part Tariff method.....91  
*Shi Yaobo, Zhao Xinxin and Zheng Fuli*

Resource Assessment of Tidal Current Energy in Hangzhou Bay Based on Long Term Measurement .....97  
*Feng Zhang, Chun-Ni Dai, Xue-Feng Xu, Chuan-Kun Wang and Qin Ye*

Preparation and Performance Evaluation of Biochars from Neem Seed Active Substance Extracted Residues (NSASER).....105  
*Jialei Li and Shuwen Lu*

|   |     |
|---|-----|
| Critical Review of Removal of Nano Materials in Waste<br>Streams.....       | 112 |
| <i>Solomon W. Leung, Bradley Williams, Karl De Jesus and James C.K. Lai</i> |     |