Table of Contents

Session	1
~ ~~~~	

Climate Changes and Its Effects on the Arab Area Hamad Al-Mebayedh	1
Low Temperature Synthesis of Zinc-Titanate Ultra Fine Powders S. Ghanbarnezhad, A. Nemati and R. Naghizadeh	ć
Monitoring of Heavy Metal Content in Tawargah Pond in Libya A.I Alajtal, H.G. Edwards and M.A. Elbagermi	11
Temporal variation in litterfall production of <i>Bruguiera gymnorrhiza</i> stands on Okinawa Island, Japan M. Kamruzzaman, S. Sharma, M. Kamara, R. Deshar and A. Hagihara	16
Developing a Framework for Study of GSCM Criteria in Indian Mining Industries Kamalakanta Muduli and Akhilesh Barve	22
Session 2	
A Laboratory Study on Wave Reduction by Mangrove Forests Ahmad Mustafa Hashim and Sim Mong Pheng Catherine	27
Measuring and Evaluating Air Pollution Per Inhabitant: A Statistical Approach Marina Dobrot, Natasa Petrovic, Marko Cirovic and Veljko Jeremic	33
Dynamics of Aboveground Mass Hierarchy in Overcrowded Mangrove <i>Kandelia obovata</i> Stands on Okinawa Island, Japan <i>M. Kamara, R. Deshar, M. Kamruzzaman, K. Analuddin and A. Hagihara</i>	38
Conserving Behaviour: A Replication of the ENVIROCON Scale in Four Countries Arminda do Pa ço, Helena Alves, Chris Shiel and Walter Leal Filho	44
Falling Dust Characteristics in Riyadh City, Saudi Arabia During Winter Months Abdullah. Saad. Modaihsh and Mohamed Osman Mahjoub	50
Session 3	
Construction, Working and Standardization of Microbial Fuel Cell Animesh Deval and Anil Kumar Dikshit	59
Enhanced Copper (II) Removal from acidic Water By Granular Activated Carbon Impregnated with Carboxybenzotriazole Muna A. AbuDalo, Svetlana Nevostrueva and Mark T. Hernandez	64
Developing a Land Evaluation Model for the Benghazi Region in Northeast Libya using a Geographic Information System and Multi-criteria Analysis Farag F Abushnaf, Kevin J Spence, Ian D Rotherham	70

Enhancement of Arsenite Sorption onto Oxide Coated Light Expanding Clay Aggregate by Means of Manganese Oxide Nader Yaghi and Helin ä Hartikainen	77
Bioremediation of Libyan Crude Oil-Contaminated Soil under Mesophilic and Thermophilic Conditions *Rafik M. Hesnawi and Farid S. Mogadami*	84
Session 4	
The Importance of Coaxial and Non-coaxial Components of Shear Strength of Sediments in Submarine Slumping and Initiation of Turbidity Currents J. Rajaraman and S. Narasimha Rao	90
Monitoring Microbial Diversity of a Full-Scale Municipal Wastewater Treatment Plant in Dubai Munawwar Ali Khan, Javeria Mohsin and Sultan Mohammad Faheem	97
Regeneration of spent catalysts by H_2O_2 chemical treatment Jyh-Cherng Chen and Jun-Jie Huang	102
Building related KPIs in Sino-Singapore Tianjin Eco-City" Wen Yang and Wu Deng	107
Shear Strength Improvement of Soft Clay Mixed with Tanjung Bin Coal Ash Aminaton Marto, Mohamed Abukar Hassan, Ahmad Mahir Makhtar and Bakhtiar Affandy Othman	111
Session 5	
Analysis of Perception and Adaptability Strategies of the Farmers to Climate Change in Odisha, India Naresh Chandra Sahu and Diptimayee Mishra	118
Trends of Sediment Loading in Catchment Areas of Pinang River in Malaysia Nurul Ruhayu Mohd Rosli and Khairun Yahya	123
Case Study: Shallow Subsurface Geology Mapping Using 2-D Resistivity Imaging with EHR Technique M.M. Nordiana, Rosli Saad, M.N.M. Nawawi, I.N. Azwin and Edy Tonnizam Mohamad	129
Removal of Cadmium and Zinc Ions From Aqueous Solution by Using Two Type of Husks. Kailash P. Patel, S.K.Tank, Kalpesh M. Patel and Parimal Patel	135
An Empirical and Semi Blind Algorithm for Resolving Overlapped Peaks in Chromatography: Application to the Analysis of Environmental Samples Mauro Mecozzi and Michele Scarpiniti	139
Session 6	
Simulation of Safe Height Embankment on Soft Ground using Plaxis	146

Muhamad Fadhil Othman	
Mine Water Treatment Using a Vacuum Membrane Distillation System M. Sivakumar, M. Ramezanianpour and G. O'Halloran	151
Landfill Leachate Treatment over Nitritation/Denitritation in an Activated Sludge Sequencing Batch Reactor Suher Carolina Yabroudi, Dione Mari Morita, Pedro Alem	157
Biogas Production and Greenhouse Gases Reduction from Wastewater at Mahidol University, Salaya campus, Thailand Tarinee Buadit, Sayam Aroonsrimorakot, Kampanad Bhaktikul and Patana Thavipoke	163
Carbon Footprint of Faculty of Environment and Resource Studies, Mahidol University, Salaya Campus, Thailand Sayam Aroonsrimorakot, Chumporn Yuwaree, Chumlong Arunlertaree, Rungjarus Hutajareorn and Tarinee Buadit	169
Session 7	
Possible environmental risks of photocatalysis used for water and air depollution – case of phosgene generation Traian Vasilache, Iuliana Lazar, Marius Stamate, Valentin Nedeff and Gabriel Lazar	174
Measurement of uranium, radium and radon exhalation rate of soil samples from Karbi Anglong district of Assam, India using EDXRF and Can technique method Ranjan Kr. Kakati, Lukendra Kakati and T.V.Ramachandran	179
The Impact of Humic Substances as Remediation Agents to the Speciation Forms of Metals in Soil J. Burlakovs, M. Kļaviņš, L. Osinska and O. Purmalis	185
Design of an Aquatic Park and Salvation of Endangered Aquatic Species in its Natural Habitat Prasanna Desikan, Karthikeyan Karunakaran and Gokulnath. G	190
Cleaner Technology Application in Printing Factory (Offset Lithography System) Sayam Aroonsrimorakot and Chumporn Yuwaree	196
Session 8	
Correlation for the Average Daily Diffuse Fraction with Clearness Index and Estimation of Beam Solar Radiation and Possible Sunshine Hours Fraction in Sabha, Ghdames and Tripoli - Libya F.Ahwide, A.Spena and A. El-Kafrawy	201
Food and Environment: Trace Element Content of Hen Eggs from Different Housing Types Zane Vincevica-Gaile, Kristine Gaga and Maris Klavins	211

Applying the Seismic Refraction Tomography for Site Characterization

216

Fauziah Kasim, Aminaton Marto, Bakhtiar Affandy Othman, Ismail Bakar and

Optimization of Bench-Scale Production of Biosurfactant by <i>Bacillus licheniformis</i> R2	221
Sanket J. Joshi, Geetha S.J., Sanjay Yadav, Anjana J. Desai	
Isolation and characterization of hydrocarbon degrading bacterial isolate from oil contaminated sites Geetha S.J., Sanket J. Joshi and Shailesh Kathrotiya	226
Session 9	
Isolation and characterization of biosurfactant/biopolymer producing spore forming bacteria from oil contaminated sites and oil field of Oman S. N. Al-Bahry, A. E. Elshafie, Y. M. Al-Wahaibi, A. S. Al-Bemani, S. J. Joshi, A. Al-Lawati	231
Bacterial diversity of Omani oil wells using culture dependent and independent	236
techniques A. E. Elshafie, S. N. Al-Bahry, Y. M. Al-Wahaibi, A. S. Al-Bemani, S. J. Joshi, R. Al-Maini, W. Al-Alawi, M. Al-Mandhari	
Submerged Membrane Bioreactor (SMBR) for Treatment of Textile Dye	242
Wastewater towards Developing Novel MBR Process Shamim Ahmed Deowan, Francesco Galiano, Jan Hoinkis, Alberto Figoli and Enrico Drioli	
The Performance Assessment of Energy Companies G. Capece, F. Di Pillo, and N. Levialdi	248
Bioconcentration of Heavy Metals in Alfalfa (<i>Medicago sativa</i>) from Farm Soils around Sohar Industrial Area in Oman. <i>Tahra Talib Al-Rashdi and Hameed Sulaiman</i>	253
Session 10	
Removal of Reactive Dyes from Textile Dyeing Industrial Effluent by Ozonation Process Suphitcha Wijannarong, Sayam Aroonsrimorakot, Patana Thavipoke, Acharaporn Kumsopa and Suntree Sangjan	261
The Water Footprint Assessment of Ethanol Production from Molasses in	265
Kanchanaburi and Supanbrui Province of Thailand. Chooyok P, Pumijumnog N and Ussawarujikulchai A	
Effect of O ₃ and CO ₂ Levels on Growth, Biochemical and Nutrient Parameters of	270
Alfalfa (Medicago sativa) Salim H.Al-Rawahy, Hameed Sulaiman, Sardar A.Farooq, M.F.Karam and Neelam Sherwani	
Evaluation of Environmental Impact Assessment (EIA) systems in GCC States through Performance Criteria	278

Dealing with Supercritical Flow in Culvert Zahiraniza Mustaffa, Natasha Madzlan and Ayesha Ghulam Rasool	288
Session 11	
Eno interactive whiteboards as an innovative eco-technology solution in teaching Science and Technological subjects Liliana Mata, Iuliana Lazar, Valentin Nedeff and Gabriel Lazar	294
Cluster Analysis Based of Geochemical Properties of Phosphogypsum Dump Located Near Bacau City in Romania Sorina Zirnea, Iuliana Lazar, Brice Ulrich Saha Foudjo, Traian Vasilache and Gabriel Lazar	299
Variation in Local Scour Profiles of an Embankment Pond Ayesha Ghulam Rasool and Zahiraniza Mustaffa	304
A Dynamic Model for Glucose Fermentation in a Three-Phase Bioreactor Leila Vafajoo and Behrooz Beigy	309
Screening of Biopolymer Producing Bacteria Isolated from Some Brassica Plants Nallusamy Sivakumar, Saif Al-Bahry and Huda Sultan Al-Battashi	314
Session 12	
Opportunistic and Microbial Pathogens in Municipal Water Distribution Systems S. N. Al-Bahry, J. A. Al-Hinai, I. Y. Mahmoud, S. K. Al-Musharafi	320
Heavy Metal Pollution from Treated Sewage Effluent S. K. Al-Musharafi, I. Y. Mahmoud and S. N. Al-Bahry	326
Adsorption of Phenol from Industrial Wastewater Using Olive Mill Waste M. Abdelkreem	331
Potential of Biomass Conservation Through Dissemination of Efficient Cook Stoves in Pakistan Khanji Harijan and Mohammad A. Uqaili	340
Fresh Water Habitat Pollution by Treated Sewage Effluent in Relation to Multiple-Antibiotic-Resistant Bacteria I. Y. Mahmoud, S. N. Al-Bahry, S. K. Al-Musharafi	345
Session 13	
Assessment of Corporate Environmental Performance Based on Fuzzy Approach Pislaru Mariuş, Diana Trandabat and Alexandru Trandabat	350
Housing Finance In Nigeria Amao Funmilayo Lanrewaju	355
Spectrophotometric Determination of Chromium (VI) in Nitric Acid by Means of	360

Solvent Extraction with Molten Mixtures of Naphthalene and Biphenyl M. A. Elbagermi, A. I Alajtal and H. G. M. Edwards	
Why Nigeria is not yet Sustainably Developed Odunjo, Oluronke Omolola	365
Environmental Effects of Mining Industries in Meymeh Region, North West of Isfahan Javad Tabatabaei and Fatemeh Mohammadi	370
Session 14	
Marine Conservation Zone Surveillance Using Image Processing Bharath Sudarsan, Krishna Subramani and Prasanth Kumar	376
Adsorption of Zn (II) Ions from Aqueous Solutions by Novel Adsorbent: <i>Ngella</i> sativa Seeds F. Al-Tohami, M. A. Ackacha, R. A. Belaid and M. Hamaadi	381
A Comparison of Parametric and Fuzzy Multi-Criteria Methods for Evaluating Land Suitability for Olive in Jeffara Plain of Libya Mukhtar Elaalem	386
Sustainable Optimization of Agricultural Production Basil Manos, Parthena Chatzinikolaou, Fedra Kiomourtzi	391
Colonization of Marine Epibiota around WABCORE Artificial Reef at Panuba Bay, Tioman Island, Malaysia Mohd Fauzi M., S. Y Ang, Saiful Bahri H. and Mohd Kamarul Huda S.	397
Session 15	
Water Management Strategies for Achieving Food Security S. P. Singh, B. Singh and U. Kumar	404
Ecological Strategy of City Sustainable Development Xiangsheng Dou, Shasha Li and Jing Wang	410
Up Dating Large Scale Maps Using High Resolution Satellite Image Ali E. Said, Hadi M. Omar Shandoul and Yekhlef Z. Yekhlef	416
Chronic Cadmium Hepatooxidative in Rats: Treatment with Haruan Fish (<i>Channa striata</i>) Extract <i>Eko Suhartono, Triawanti, Ari Yunanto, Rizky Taufan Firdaus, Iskandar</i>	422
Sustainable Cities: Challenges & Opportunities of Rapid Urbanization Devansi Hemant Nagarsheth and J. E. M. Macwan	427
Session 16	
Estimation of Electricity Generation in Libya Using Processing Technology of Wind Available Data: The Case study in Derna	433

Simulation of Blow Molding Using Ansys Polyflow Shubham Gupta, Vikram Uday, Amit Singh Raghuwanshi, Samarth Chowkshey, Shakti Nath Das and S. Suresh	448
Biodiesel Production from High Free Fatty Acid-Content Oils: Experimental Investigation of the Pretreatment Step A. Javidialesaadi and S. Raeissi	454
A multi-Criteria Evaluation using the Analytic Hierarchy Process Technique to Analyze Coastal Tourism Sites Mahsa Liaghat, Himan Shahabi, Bashir Rokni Deilami, Farshid Sattari Ardabili, Seyed Navid Seyedi and Hadi badri	460
Liquid –Liquid Equilibria of Systems Containingsunflower Oil, Ethanol and Water Alireza Shariati, Adel Azaribeni, Parisa Hajighahramanzadeh and Zahra Loghmani	466
Session 17	
Alterations in Antioxidative Defense System of <i>Anabaena Variabilis</i> in the Presence of Heavy Metals Khan Uzma Aftab and Iffat Zareen Ahmad	471
Performance of Lightweight Foamed Concrete with Waste Clay Brick as Coarse Aggregate Norlia Mohamad Ibrahim, Shamshinar Salehuddin, Roshazita Che Amat, Nur Liza Rahim and Tengku Nuraiti Tengku Izhar	478
Heavy metal phytoremediation potential of a heavy metal resistant soil bacterial isolate, <i>Achromobacter</i> sp. strain AO22 Russell Stanbrough, Saifone Chuaboonmee, Enzo A Palombo, Francois Malherbe, Mrinal Bhave	482
Assessment the Effect of ENSO on Weather Temperature Changes Using Fuzzy Analysis (Case Study: Chabahar) Maryam Hamedani Azmoodehfar and seyed Ali Azarmsa	488
Application of Molecular Markers for Identification of Potential Salt Tolerant Plant Species for Use in Agroforestry and Saline Land Reclamation Shanthi Joseph, Daniel J. Murphy, Joseph T. Miller and Mrinal Bhave	494
Session 18	
Changes in Microbial Community Structure During Anaerobic Repeated-Batch Treatment of Cheese-Processing Wastewater Jaai Kim and Changsoo Lee	500
Particle Routing Segregation of Debris Flow Mechanisms Near the Erodible Bed Yosuke Yamashiki, Mohd Remy Rozainy M.A.Z., Taku Matsumoto, Tamotsu Takahashi and Kaoru Takara	506

Renewable Energy for Pump Stations Operation in Delta Region Using GIS	514
Technique "Study Case: El_Menoufia Governorate" Nadia M. Eshraa	
Some Extracts of Mallow Plant and its Role in Health Sabri Fatima Zohra, Belarbi Meriem and Sabri Samira	523
A Managerial Tool for Environmental Sustainability Tamara Menichini and Francesco Rosati	528
Session 19	
Effect of Nutrient Source on Indigenous Biodegradation of Diesel Fuel Contaminated Soil Rafik M. Hesnawi and MOHAMED M. ADBEIB	534
Surfactant Enhanced Olive Oil Mill Wastewater Remediation Fadwa Odeha, Abeer Bawab, Manar Fayyad, Ayat Bozeya	539
Annual variability of precipitation of the North West of Algeria Hind Meddi	544
Effect of The Presence of Ivory Coconut (<i>Cocos nucifera L</i>) to Decrease Particulate Matter Concentration in Bogor Agricultural University <i>Pramudipta Zahriyani and Arief Sabdo Yuwono</i>	549
Climate Change Impact on Groundwater in Cheliff-Zahrez basin (Algeria) Mohamed Meddi and Abdelkader Boucefiane	555
AuthorIndex	561