

Contents

Preface	iii
Organizing Committees	x
ICESD 2011 Session 1	
Aviation and Global Climate Change <i>Mehri Hashemi Devin and Ali Akbar Sabziparvar</i>	1
Effects of Imidacloprid on the Biodiversity of Soil Microbes in Selected Soils of Malaysia <i>Nasrin Sabour Moghaddam, Mohamad Pauzi Zakaria, Dzolkhifli Omar, Kamaruzaman Sijam and Reza Khakvar</i>	7
Study of Hysteresis in Electrolysis and Photo-electrolysis <i>Sangeeta and Ashok N. Bhaskarwar</i>	11
Effect of Greywater Irrigation on Soil Characteristics <i>A. H. M. Faisal Anwar</i>	15
Water quality changes during aquifer storage and recovery: Quantification of water-sediment interactions and reactive transport modeling. <i>Carlos Descourvieres, Henning Prommer, Carolyn Oldham and Janek Greskowiak</i>	19
Treatment Effect On Coking Wastewater Using Three-phase Biological Fluid-bed With New Ultrastructure Biological Carriers <i>Na Li, Haibiao Liu and Junli Huang</i>	24
Developing and Expanding the Environmental Conflict Resolution Toolkit: Facilitation and Consensus Building for Better Environmental Outcomes <i>John Haydon and Jianbo Kuang</i>	28
Using variable fuzzy set theory and information entropy for air pollution risk assessment in Beijing, China <i>Liyun Yang and Songtao Wu</i>	33
Free Electricity source from trees <i>Ankita Vashishtha</i>	42
Particulate Matter emitted from a Pig Farm in Beijing: A Preliminary Study <i>Roxana Mendoza Huaitalla, Eva Gallmann and Liu Xuejun</i>	45
ICESD 2011 Session 2	
The removal of cadmium ions from aqueous solutions using silica support immobilized with 2-hydroxyacetophenone-3-thiosemicarbazone <i>Rajesh Kumar, Thomas N Abraham and S. K. Jain</i>	48
CORPORATE ECOLOGICAL FOOT PRINT (CEF) OF SRM UNIVERSITY TOWARDS SUSTAINABILITY A Pilot Study <i>Nagarajan C, Sai Aditya P and R Jeyalakshmi</i>	53

Effects of wind blow and sand burial stress on seedling growth and photosynthetic properties of <i>Caragana microphylla</i>	57
<i>Ha-Lin Zhao, Xue-Yong Zhao, Tong-Hui Zhang and Rui-lian Zhou</i>	
Investigation of Iran Vulnerability Trend to Desertification with approach of climate change	63
<i>Peyman Mahmoudi, Dostmohammad Kalim and Mohamad Reza Amirmoradi</i>	
Effects of sheep grazing and precipitation patterns on sandy grassland vegetation in Inner Mongolia, China	68
<i>Ha-Lin Zhao, Tong-Hui Zhang, Xue-Yong Zhao and Rui-Lian Zhou</i>	
Impeller Submergence Depth on Power Consumption of Mixing Tank	76
<i>Bimesh Kumar and Thiyam T Devi</i>	
Agitated Pile Composting of Water Hyacinth	79
<i>Ganesh Chandra Dhal, W. Roshan Singh and Ajay S. Kalamdhad</i>	
Inter-relationships among water, governance, human development variables in developing countries: a database coherence analysis	84
<i>Céline Dondelnaz, César Carmona-Moreno, Andrea Leone and Daoyi Chen</i>	
Occurrence of Chlorinated Paraffins in Bavarian House Dust Samples	88
<i>M. Coelhan, B. Hilger, H. Fromme and W. Völkel</i>	
Wetlands management for Little Crake (<i>Porzana parva</i>) conservation in a “Natura 2000”site	91
<i>A.N. Stermin, L.R. Pripon, A. David and I. Coroiu</i>	
ICESD 2011 Session 3	
Effect of irrigation and fertilizer on sandy grassland productivity in Horqin Sandy Land, North China	95
<i>Tonghui Zhang and Haling Zhao</i>	
Study on adsorption of heavy metal ion in metallurgical wastewater by sepiolite	100
<i>Xiuyan Zhou, Xiangxin Xue and Wenming Jiang</i>	
Identifying Vulnerability Pattern in a Flood Prone Micro-Hotspot of Mumbai, India	104
<i>Subhajyoti Samaddar, Roshni Chatterjee, Bijay Anand Misra and Hirokazu Tatano</i>	
Dual Impact Of Climate Change	110
Intensifying vulnerability	
<i>Achala Gupta</i>	
Consequence Analysis for probable accidents of filter separators installed in Gas Pressure Reduction Stations	115
<i>Mohammad Sadegh Yousefzadegan, Amir Masoud Masoudi, Yaser Kazemi Ashtiani, Masoud Kambarani and Seyed Iman Pishbin</i>	
Environmental issues and its impacts associated with the textile processing units in Tiruppur, Tamilnadu.	120
<i>Jayanth sarathi N, Karthik R, Logesh S, Srinivas Rao K and Vijayanand K</i>	

Climatic Impacts of Green House Emissions A Case Study on the Public and Private Transportation Sectors of the Asia Pacific <i>Avinash Shankaranarayanan and Christine Amaldas</i>	125
Turbulence Modeling Around Piers of Shadervan Bridge in Karun River <i>Seyed Majid Mosaddad, Mehdi Delphi, Fereidoon Shirvani and M. Mahmoodian Shooshtari</i>	130
Land Evaluation for Extensive Recreation Using Spatial Multi Criteria Evaluation Method <i>Seyed Ali Jozi, Narges Zaredar and Sahar Rezaian</i>	133
Water Consumption Management using WEAP&Conceptual Models (Case study: Golestan Province – Iran) <i>Sahar Rezaian and Seyed Ali Jozi</i>	137
ICESD 2011 Session 4	
Evaluation of Microbial quality of the drinking water of Duhok province/Kurdistan region of Iraq <i>Hassan Amin Al-mezori and Karzan A. M. Hawrami</i>	141
Genotypic Frequency of Calpastatin Gene in Lori Sheep By PCR-RFLP Method <i>Shahram Nanekarani, Nematollah Asadi and Saber.Khederzadeh</i>	148
Utility of Cerium(IV)Phosphomolybdate as a cation exchanger and dye adsorbent <i>A.P Apsara and B.Beena</i>	151
Adsorption of two azo reactive dyes by tannery sludge activated carbon: effect of temperature and pH <i>Geethakarthy A. and Phanikumar B R.</i>	154
Improved Method of Desalination of Seawater with Electric Power Generation using Solar Energy <i>Mukund.N and Muthu Raman.V</i>	158
Remediation of Cr(VI) contaminated soil by Zero-Valent Iron Nanoparticles (nZVI) entrapped in Calcium Alginate Beads <i>Ritu Singh, Virendra Misra and R. P. Singh</i>	162
Prevalence of Geophagia and its possible implications to health – A study in rural South Africa <i>G George and E Ndip</i>	166
Perennial Trends of Wastewater Discharge and Pollutant Content in Rivers of Shanghai <i>Kang Jiancheng, Yan Guodong and Wang Guodong</i>	170
Academic public-private partnership: a solution for sustainable development <i>Adrian Macarie, Adrian Lesenciu and Mircea Boșcoianu</i>	174
Selective Action of Chlorine Disinfection on Different Coliforms and Pathogens Present in Secondary Treated Effluent of STP. <i>Dinesh Kumar, Neha Tyagi and A.B.Gupta</i>	179
ICESD 2011 Session 5	

Implementation of Ambient Energy Harvesting from Air for ULP Devices as a Renewable Energy Source <i>B.R.Shashank, G.SharanKumaar, K.Kalaiarasi,A.Shalini and A.Raagavendra Prabu</i>	185
“Environmental Concerns through Web Communication” <i>Charu lata Singh and Kota Mallikarjun</i>	189
Somatic embryogenesis and plant regeneration in <i>Crocus vernus</i> <i>Iyyakkannu Sivanesan, Mi Young Lim, Eun Hae Jo and Byoung Ryong Jeong</i>	199
Impact of Global Warming on severity of Heat Stroke <i>Harishankar.N and J.Srinivasan</i>	202
Numerical simulation of a turbidity current flowing over a solid obstacle <i>Afshin Eghbalzadeh and Mitra Javan</i>	207
2D width-averaged numerical simulation of density current in a diverging channel <i>Mitra Javan and Afshin Eghbalzadeh</i>	212
Reusing of stone waste in various industrial activities <i>Elham Khalilzadeh Shirazi</i>	217
Indoor winter recreational site selection in arid and semi arid mountainous regions <i>Parvaneh Rezakhani and Narges Zaredar</i>	220
Future Sensors and Utilization of Sensors in Chemical Industries with Control of Environmental Hazards <i>K. Nirmal Kumar, R.Prabakaran, V.R. Sarma Dhulipala and P.Ranjith</i>	224
Compilation of a pattern for Environmental Auditing of Roads in Islamic republic of Iran <i>Mahmood Ameri and Fatemeh Zahed</i>	229
ICESD 2011 Session 6	
Preparing and developing the indexes of sustainable development of transportation in I.R. Iran <i>Mahmood Ameri and Fatemeh Zahed</i>	234
Analyzing the Microeconomic Determinants of Travel Frequency using the Com-Poisson Regression model <i>R. Sultan and N. Mamode Khan</i>	240
Assessing Indian Cities for Vulnerability to Climate Change <i>Ulka Kelkar, P. Balachandra and Anjula Gurtoo</i>	246
A Novel Method for the Preparation of Core-Shell Silica - 12- Tungstophosphoricacid Nanoparticles for t-Butylation of phenol <i>Rosilda Selvin, Hsiu-Ling Hsu and L. Selva Roselin</i>	251
Clean Electricity production by Solid Oxide Fuel Cell-Waste Heat Recovery Boiler arrangement in conjunction with a Gas Turbine --Clean Technology by Systems Integration	255

Arjun Mahalingam, Mayank Vaish and Shirish Agarwal

Polymer Composites Sustainability: Environmental Perspective, Future Trends and Minimization of Health Risk <i>V.P. Sharma, V. Agarwal, S. Umar and A. K. Singh</i>	259
Street/Inland-water (intermodal) Optimisation Model: For Municipal Solid Waste Collection & Transportation <i>Fathi A. Rhoma, Mandar Jawale and Bernd Noche</i>	262
Evaluation of Sustainability index for Urban Water Management System <i>Reena Popawala and N C Shah</i>	267
Advanced Oxidation Processes for Treatment of Textile and Dye Wastewater: A Review <i>Shashank Singh Kalra, Satyam Mohan, Alok Sinha and Gurdeep Singh</i>	271
Climate Change: Developing Countries and the Principle of Equity <i>Deepika Sriram and Medha Vikram</i>	276
Green usage of fossil fuels with solid oxide fuel cell <i>H.Kazemi Esfeh and T.M.Salehi</i>	281
Modelling Hydrodynamics for Water Quality of the Dwarka Region (Gujarat) <i>Rohit Goyal</i>	286
Hydrodynamic Modelling for Salinity of Singapore Strait and Johor Strait using MIKE 3FM <i>Rohit Goyal and Prameet Rathod</i>	295
Characteristics of Stormwater Runoff in Different Land Use Areas <i>Priyantha Ranjan Sarukkalige</i>	301
Food security, genetically modified crops and environment <i>Rakesh Kumar Gupta</i>	305
Author index	311