

Contents

Preface	iii
Organizing Committees	xiii
ICEST 2011 Session 1	
Effect of Cooking Methods on Physicochemical Properties of Brown Rice <i>Natcha Daomukda, Anuchita Moongngarm, Lalita Payakapol and Angkana Noisawan</i>	V1-1
Green Analytical Chemistry in Determination of Volatile Fatty Acids in Wastewater <i>Bogdan Zygmunt, Anna Baner and Marta Wasielewska</i>	V1-5
Biogenic and Toxic Metals Content in Cancerous Tissues and Adjacent Normal Tissues of Digestive System of Human <i>Stawarz, R, Glogowska, M, Kilian, K., Goc, Z. and Massanyi, P.</i>	V1-9
Metropolitan Carbon Management A Hybrid-LCA Approach <i>Jukka Heinonen and Seppo Junnila</i>	V1-13
Quarrying activity and the building industry Relations between the production of aggregates for the building industry and their demand for greater environmental sustainability. <i>Ginevra Balletto and Carla Furcas</i>	V1-18
Calibrating surface temperature forecasts using BMA method over Iran <i>Iman Soltanzadeh, Majid Azadi and G. Ali Vakili</i>	V1-23
Species Composition and Feeding Guilds of Birds Utilizing Palm Oil Mill Effluent (POME) Area in Carey Island, Malaysia <i>Abdoul Baset Hassan-Aboushiba, Rosli Ramli and M. Sofian-Azirun</i>	V1-28
The Application of Iron-Coated Activated Carbon in Humic Acid Removal From Water <i>Hatam Godini, Ghodratolah Shams Khorramabady and Seyed Hamed Mirhosseini</i>	V1-32
Evaluation of Heavy Metals Removal Using Some Egyptian Clays <i>H. A. Talaat, N.M. El Defrawy, A.G. Abulnour, H.A. Hani and A. Tawfik</i>	V1-37
Utilization of Egyptian kaolin for Zeolite-A Preparation and Performance Evaluation <i>A.A. Mostafa, H. F. Youssef, M.H. Sorour, S. R. Tewfik and H. F. Shalaan</i>	V1-43
ICEST 2011 Session 2	
A Comparative Study of the Adsorption of Acid Brown 75 and Direct Yellow 162 onto Unmodified and Surfactant Modified Granule Developed from Coal Fly Ash <i>Chayada Pansuk and Soydoa Vinitnantharat</i>	V1-49
Behavior of nanoclay as an additive in order to reduce Kahrizak landfill clay permeability <i>Negin Kananizadeh, Taghi Ebadi, Seyed Ehsan Mousavi Rizi and Seyed Alireza Khoshnati</i>	V1-55
Residential area building project's carbon emissions with the hybrid LCA approach	V1-60

Antti Säynäjoki, Jukka Heinonen and Seppo Junnila

Analysis of Cracking Behavior of Drying Soil <i>Alvis Atique and Marcelo Sanchez</i>	V1-66
Effect of Addition of Biosurfactant Produced by Pseudomonas sps. On Biodegradation of Crude Oil <i>Aparna A., Srinikethan G. and Smitha Hegde</i>	V1-71
Effect of modified atmosphere packaging on quality changes of fresh parsley, spinach and dill <i>Masoud Shafaii Zenoozian</i>	V1-76
Source Identification and Concentration Distribution of Polychlorinated Biphenyls (PCBs) in River Sediment <i>Seok-Un Park, Ki-Tae Shim, Min-Jin Lee and Jong-Guk Kim</i>	V1-80
Environmental Impact Evaluation for Various Incinerator Patterns by Life Cycle Perspective: A Case Study in Taiwan <i>Ming-Chien Hung, Shu-Kuang Ning and Ya-Hsuan Chou</i>	V1-84
Chemical oxidation of crude oil in oil contaminated soil by Fenton process using nano zero valent Iron <i>L. Ershadi, T. Ebadi, V. Ershadi and A.R. Rabbani</i>	V1-89
Savings for Retail Properties through Active Energy Management <i>Eeva Määttänen, Riikka Kyrö, Anna-Liisa Lindholm and Seppo Junnila</i>	V1-92
ICEST 2011 Session 3	
Climate impact of housing companies - a hybrid LCA approach <i>Riikka Kyrö, Jukka Heinonen, Antti Säynäjoki and Seppo Junnila</i>	V1-97
Reduction of set cement permeability in oil well to decrease the pollution of receptive environment using spherical nanosilica <i>V. Ershadi, T. Ebadi, A.R Rabani, L. Ershadi and H. Soltanian</i>	V1-101
Organic load removal of landfill leachate by fenton process using Nano Sized Zero Valent Iron particles <i>S. Shafeiyoun, T. Ebadi and M. Nikazar</i>	V1-105
High arsenic adsorption capacity of sub-4 nanometer magnetite nanoparticles <i>Yu-Han Yua, Shu-Chi Chang and Chin-Ching Wu</i>	V1-109
Economic Evaluation of Municipal Solid Waste Management System for Taiwan's Taichung Special Municipality <i>Yao-Jen Chang and Min-Der Lin</i>	V1-114
Treatment of Landfill Leachate using Coagulation <i>Shabiimam M. A and Anil Kumar Dikshit</i>	V1-119
Challenges and Emerging Solutions to the Development of a Product Carbon Labeling	V1-123

Methodology*Q.Z. Yang and Z.Q. Shen*

Prototype of 5.8 GHz Wireless Power Transmission System for Electric Vehicle System V1-128

Chang-Jun Ahn, Takeshi Kamio, Hisato Fujisaka and Kazuhisa Haeiwa

Land Degradation due to Mining in India and its Mitigation Measures V1-132

H. B. Sahu and Er. S. Dash

Isolation and Characterization of Bacterial Strains to be Used as Biosorbent for Removal of Atrazine from Wastewater V1-137

*R. K. Pathak and Anil Kumar Dikshit***ICEST 2011 Session 4**

Low-Cost Grid Connected Photovoltaic System V1-141

Mahdi Salimi

Studies on the Biodegradation of Azo Dyes by White rot Fungi Daedalea Flavida in the Absence of External Carbon Source V1-147

Chhavi Rani, Asim K. Jana and Ajay Bansal

The Study of Pafssb on RO Pre-treatment in Pulp and Paper Wastewater V1-151

*Suqin LI and Xue ZHANG*Preparation and characterization of γ -poly(glutamic acid) copolymer with glycol diglycidyl ether V1-155*Xiaoli Yang and Huaiqing Wang*

Backcasting for sustainable dissemination of a Gasifier – SOFC – Microturbine System with cooking gas for Rural Areas V1-159

Ritah Mubbala and PV Aravind

Low-level Jet(LLJ) and western Iran heavy rain: case study Dec 1991 V1-163

Elham Mobarak Hassan and Amir Hossein Meshkatee

Engine Performance and Emissions Analysis using “Envo Diesel” and Coconut Biodiesel Blended Fuel as Alternative Fuels V1-168

A.M. Liaquat, M.A. Kalam, H.H. Masjuki and M.H. Jayed

Effects of phosphorus accumulation in soil with the utilization ages of the vegetable greenhouses in the Suburb of Shenyang V1-173

Lu Fei, Muqiu Zhao, Xin Chen and Yi Shi

SOIL NITROGEN ACCUMULATION IN DIFFERENT AGES OF VEGETABLE GREENHOUSES V1-177

Muqiu Zhao, Yi Shi, Xin Chen and Jian Ma

Analysis on composition and pattern of agricultural non-point source pollution in Liaohe River Basin, China V1-180

*Qingchun Wen, xin Chen, Yi Shi, Jian Ma and Qian Zhao***ICEST 2011 Session 5**

Present Solar Energy Potential and Strategies in China <i>K.H Solangi, R Saidur, N.A. Rahim, H. Fayaz and M.R. Islam</i>	V1-184
LUNAR RHYTHM-DEPENDENT SPAWNING AND LARVAL RELEASE IN THE CONTINUOUSLY BREEDING MANGROVE CRAB, SESARMA QUADRATUM (DECAPODA: BRACHYURA) <i>Syama, V.P and G. Anilkumar</i>	V1-188
Analysis and Modeling of River's Meander to Generate Hydro Electrical Energy, Case Study Meander of Karon River in Shoushtar city <i>Hadi Molaei Tavani</i>	V1-191
Effects of elevated CO ₂ and O ₃ and N fertilization on amount of soil microbial biomass carbon in spring wheat growing season <i>Rui Fang, Yi Shi, Caiyan Lu and Xin Chen</i>	V1-196
Numerical Simulation Technology of Oil Containment by Boom <i>Feng Xing, Wu Wanqing and Wu Wenfeng</i>	V1-200
Available K and total organic C accumulation in soil with the utilization ages of the vegetable greenhouses in the Suburb of Shenyang <i>Zhiyuan Liu, Xin Chen, Yi Shi and Mingfen Niu</i>	V1-204
Three-Dimensional Groundwater Flow Simulation for the Design of Permeable Reactive Barriers <i>Young Wook Chung, Juyoul Kim and Sung-Ho Kong</i>	V1-207
The study of influencing factors to Corn straw mixed with pig effluent anaerobic fermentation <i>Mingfen Niu, Xiaoping Pang and Shiruo Chen</i>	V1-211
Anthropogenic sources of heavy metals in deposited sediments from runoff and industrial effluents, Shiraz, SW Iran <i>F. Moore, A. Attar and F.Rastmanesh</i>	V1-215
Removal of Zinc from Water Using Modified and Non-Modified Carbon Nanofibers <i>Muataz Ali Atieh</i>	V1-220
ICEST 2011 Session 6	
Degradation of diesel with microorganisms in rhizosphere of Carex phacota Spr. <i>Zhenzhen Wang, Xiaoyan Liu, Xinying Zhang, Xing Hu and Fahui Liu</i>	V1-224
Structural Analysis of Bamboo Trusses Structure in Greenhouse <i>Putthadee Ubolsook and Sirichai Thepa</i>	V1-228
Growth response and phytoremediation ability of Reed for diesel contaminant <i>Jun Wang, Xiaoyan Liu, Xinying Zhang, Xia Liang and Weijie Zhang</i>	V1-233
A Theoretical Model for Cost Optimization of Multicomponent Mixtures across Membranes in a Permeation Unit <i>Bismark Singh</i>	V1-238

Wave Transmission on Submerged Rubble Mound Breakwater Using L-Blocks <i>Dayat Indri Yuliastuti and Ahmad Mustafa Hashim</i>	V1-243
Inspection and Remediation to Increase Service Life of Wood Poles <i>L. Gastonguay and J.-F. Labrecque</i>	V1-249
Screening and Identification of Nitrate-Reducing, Sulfide-Oxidizing Bacteria and their Characteristics <i>Yu Zhang, Mingxiang Chen, Junwei Yang, Jiti Zhou and Yu Wang</i>	V1-252
RECYCLING OF CARBON DIOXIDE TO PROVIDE RENEWABLE ENERGY AND FOR THE MITIGATION OF GREEN HOUSE GAS EMISSIONS <i>Charles Christopher Kanakam and K. Praneeth Raj</i>	V1-257
Influences of Various Aluminum Coagulants on Algae Floc Structure, Strength and Flotation Effect <i>Wang Yuheng, Zhuo Shengguang, Wang Qishan and Feng Qian</i>	V1-261
CFD modeling for fluid flow and heat transfer in membrane distillation <i>M. Shakaib, Iqbal Ahmed and Rosli M. Yunus</i>	V1-265
ICEST 2011 Session 7	
Methane Oxidation in Landfill Cover Soil: Case Study in Thailand <i>Komsilp Wangyao, Sirintornthep Towprayoon, Masato Yamada, Kazuto Endo and Tomonori Ishigaki</i>	V1-269
Changes of Soil Carbon and Nitrogen Storages under Modern Industrialization in a Rural Landscape of North China Plain <i>Kui Peng</i>	V1-274
Analysing the Impact of Roof Obstructions on Daylight Levels in Atrium Buildings: Physical Scale Model Measurements under Real Sky Conditions <i>Julitta Yunus, Sabarinah Sh Ahmad and Azni Zain-Ahmed</i>	V1-279
Residential Wastewaters Treatment System in Kuwait <i>Esra Aleisa, Khawla A. Al-Shayji and Rawa Al-Jarallah</i>	V1-285
Spatio-Temporal Interpolation of CO Concentration using a Likelihood-Based Method <i>Firoozeh Rivaz</i>	V1-290
An Introduction of Medicinal and Aromatic Plants in Chir Pine (<i>Pinus Roxburghii</i>) Forest of India: A Sustainable Technique <i>Chandra Shekher Sanwal, Sushma and Nilay Kumar</i>	V1-293
Effects of Dietary Replacing Corn with Bakery by-product with or without Enzyme Supplementation on Performance of Laying Hens <i>M. Torki and V. Kimiaeef</i>	V1-297
Environmental Assessment for Sustainability Determination based on Fuzzy Logic Model <i>Marius Pislaru, Alexandru Trandabat and Silvia Avasilca</i>	V1-301
Trading Pollution Discharge Permits in Rivers Using Fuzzy Bi-matrix Games	V1-306

Mohammad Reza Nikoo, Reza Kerachian and Mohammad Hossein Niksokhan

Strategic Path of China's Low-carbon Technology Development
Zuojun Wang

V1-310

ICEST 2011 Session 8

GREEN ENERGY—EZOWATT
Vettri. A and Kausthubh. G.R

V1-314

Sea Level Changes In Libya Using SRTM – DTM.
Ali said

V1-317

On vaccination controls for a time-varying SEIR epidemic model with asymptotic removal of the infection

M. De la Sen, S. Alonso-Quesada and A. Ibeas

V1-321

A model for environmental impact assessment of oil refinery in Iran a case study: Tehran oil refinery

Mohammad Rezaie Narimisa and Noor Ezlin Ahmad Basri

V1-329

A case study for environmental impact assessment of oil refinery in Iran with emphasis of Environmental and Social Action Plan (ESAP)

Mohammad Rezaie Narimisa and Noor Ezlin Ahmad Basri

V1-334

Innovative solar and waste heat driven ejector air conditioners and chillers
V.O Petrenko, B.J. Huang and K.O. Shestopalov

V1-338

Evaluation of compositions and Nutritional facts in some varieties of kiwifruit
Mehran mahmoudi, Peyman Aryaee and Shabnam Mokhtari

V1-344

Dispersion Polymerization of an Unsaturated Polyester Styrene as Ion Exchanger and its Application for Removal of Zn (II), Cu(II), Cd(II), and Pb(II) from Aqueous Solutions.

Mohamed .O. Sulyman and Maatoug A. Maatoug

V1-351

Comparison of Surface Layer Scintillometer and Eddy Covariance Footprint and Sensible Heat Flux Estimates for Different Wind Directions

George O. Odhiambo

V1-355

Evaluation of Efficacy of New Bioformulations on Promotion of Cotton Seedlings Growth Characteristics

S. Sobhan Ardakani, A. Heydari, L. Tayebi and M. Cheraghi

V1-361

ICEST 2011 Session 9

Growth performance and food conversion ratio of Persian sturgeon (*Acipenser persicus*) at different level of dietary protein

L.Tayebi, D. Mohammdrezaei, S. Sobhan Ardakani and M. Cheraghi

V1-365

The production of fruity yoghurt with banana flavor

Peiman Ariaai, Mehran Mahmoudi and Rabehe Izadi Amoli

V1-368

Poultry Fat—A Cheap and Viable Source for Biodiesel Production

V1-371

Selva Ilavarasi Panneerselvam, R. Parthiban and Lima Rose Miranda

An empirical research on female stereotyping in video game design V1-375
Wen Huei Chou

Determining the temporal trend in annual maximum flood series in the Large Karoun river V1-379
(Iran)

Narges Zohrabi, Ali Reza Massah Bavani, Hossein Sedghi, Abdol Rasol Telvari and Samaneh Abdoveis

Assessment of Heavy Metal Contamination and Sediment Quality in the Buriganga River, V1-384
Bangladesh
P. K. Saha and M.D. Hossain

Increase the Efficiency of Conventional Sand Drying Beds by using Intensive Solar Energy: V1-389
A case study from Jordan
Jamal A. Radaidah and Kamel K. Al-Zboon

Water Leaks Detection: Assessment of Wireless Communication through Water and Sand V1-394
Media in Buried Supply Pipes.
S.Mekid, A.Khalifa, R.Mansour, S.Ho and S.Sarma

Adsorption Study for Removal of Boron Using Ion Exchange Resin in Bach System V1-398
Mahdi Parsaei, Mohsen Salarpour Goodarzi and Mohamed Mahmoud Nasef

GEOMORPHIC CHANGES IN THE EAST COAST OF TAMILNADU BY INDIAN V1-403
OCEAN TSUNAMI-2004
S.R.Singarasubramanian, M.V.Mukesh, S.Rajmohan, K.Sujatha and A.Suguna

ICEST 2011 Session 10

A Schema Selection Framework for Data Warehouse Design V1-407
Mohammad Hossein Peyravi

Research on the countermeasures of the reduction in water transfer from the Yellow River in V1-411
Yinchuan Plain, China
Wang Wei and Qian Hui

Forecasting of Damage Level of Maritime Structures Caused by Typhoons Based on V1-415
Improved CP Method
Ryusuke Hashimura and Kiyoshi Takikawa

NON COMBUSTIBLE AUTOMOTIVE ENGINE DESIGN USING MAGLEV V1-420
TECHNOLOGY
G.Vimal Raj and N. Harish Kumar

Removal of Dissolved Hexavalent Chromium using Synthetic Biopolymer V1-426
Ghodratallah Shams Khorramabadi, Reza Darvishi Cheshmeh Soltani, Abbas Rezaee and Hatam Godini

A Novel Application of Pinch Technology in Air Pollution Analysis V1-430
Y. Rohani, A.R.Naderpour, B. Dabir and M.H. Panjehshahi

Biodegradation of the toxic polycyclic aromatic hydrocarbon, phenanthrene by an indigenously isolated <i>Alcaligenes faecalis</i> MVMB1 strain.	V1-440
<i>M. Brinda Lakshmi and M. Velan</i>	
Greenhouse Gas Emissions Reduction through a Biogas Plant: A Case Study of Waste Management Systems at FEKA Dairy Farm	V1-445
<i>Saeed Esfandiari, Ramin Khosrokhavar and Masih Sekhavat</i>	
A Waste-To-Energy Plant for Municipal Solid Waste Management at the Composting plant in Isfahan, Iran	V1-449
<i>Saeed Esfandiari, Ramin Khosrokhavar and Masih Sekhavat</i>	
Consumer Behavior of Urban Residents of Jaipur City (India) for Water Supply	V1-453
<i>Jethoo, A. S.</i>	
The economical impacts of oil refinery on employment and valued added in Iran a case study: TEHRAN oil refinery	V1-456
<i>Mohammad Rezaie Narimisa and Noor Ezlin Ahmad Basri</i>	
Development and Optimization of an Indirect Competitive ELISA for Detection of Norfloxacin Residue in Chicken Liver	V1-460
<i>Jiang Jinqing, Zhang Haitang, Liu Junwei, Li Junmin and Wang Ziliang</i>	
Author Index	V1-465