

Foreword

Welcome to the **Second Issue 2013** of the Journal of Science and Technology (JST)!

JST is an open access journal for the science and technology published by Universiti Putra Malaysia Press. It is independently owned and managed by the university and run on a non-profit basis for the benefit of the world-wide science community.

In this issue, there are **27 articles** published; out of which **3 articles** are review articles, **14 articles** are regular articles and **10 articles** are from Curtin University Technology, Science and Engineering International Conference “Innovative Green Technology for Sustainable Development” (CUTSE 2011). The authors of these articles vary in country of origin (Malaysia, Bangladesh, Nigeria, Japan, Indonesia and Australia).

The review articles describe in details on *halal* perspective and detection of its ingredients in cosmetic and personal care products (*Hashim, P. and Mat Hashim, D.*), a review on the effects of probiotics and antibiotics towards *Clostridium difficile* Infections (*Hazirah, A., Loong, Y. Y., Rushdan, A. A., Rukman, A. H. and Yazid, M. M.*) and also a review on methodologies for measuring sustainability of product/process (*Pezhman Ghadimi, Noordin Mohd Yusof, Muhamad Zameri Mat Saman and Mahmood Asadi*).

The regular articles cover a wide range of study, from a detection of ethanol vapours using Titanium Dioxide (TiO₂) catalytic pellet by conventional and modified sol gel dip-coating method (*Ang Gaik Tin, Mohamad Zailani Abu Bakar and Cheah Mooi Chen*), determination on green compression strength of tin mine tailing sand for green sand casting mould (*Azhar Abdullah, Shamsuddin Sulaiman, B. T. Hang Tuah Baharudin, Mohd Khairol Anuar Mohd Ariffin and Thoguluva Raghvan Vijayaram*), a web-based decision support system for paddy planting management (*C. Y. N. Norasma, A. R. M. Shariff, E. Jahanshiri, M. S. M. Amin, S. Khairunniza-Bejo and A. R. Mahmud*), a development of an automation and control design system for lowland tropical greenhouses (*W. I. Wan Ishak, R. M. Hudzari and M. Y. Tan*), a recovery of heavy metals from spent etching waste solution of printed circuit board (PCB) manufacturing (*A. H. M. Ali, S. Sobri, Salmiaton. A. and Faizah M. Y.*), a production of orthophoto and volume determination using low-cost digital cameras (*Khairul Nizam Tahar and Anuar Ahmad*), a climate change resilience assessment using livelihood assets of coastal fishing community in Nijhum Dwip, Bangladesh (*Hossain, M. S., Rahman, M. F., Thompson, S., Nabi, M. R. and Kibria, M. M.*), a goal event detection in soccer videos via collaborative multimodal analysis (*Alfian Abdul Halin and Mandava Rajeswari*), on the diophantine equation $x^2 + 4.7^b = y^{2r}$ (*Yow, K. S., Sapar, S. H. and Atan, K. A.*), an electrical conductivity of anionic surfactant-doped polypyrrole nanoparticles prepared via emulsion polymerization (*Ghalib, H., Abdullah, I. and Daik, R.*), a landslide susceptibility mapping using averaged weightage score and GIS: a case study at Kuala Lumpur (*Mahmud, A. R., Awad, A. and Billa, R.*), a GIS modeling for selection of a transfer

station site for residential solid waste separation and recycling (*Billa, L. and Pradhan, B.*), a comparative study on the effect of density on water absorption of particle boards produced from Nipa Palm fibres with HDPE wastes (*Ekpunobi, U. E., Eboatu, A. N. and Okoye, P.-A.*) and Rootkit Guard (RG) - an architecture for rootkit resistant file-system implementation based on TPM (*Teh Jia Yew, Khairulmizam Samsudin, Nur Izura Udzir and Shaiful Jahari Hashim*).

I conclude this issue with 10 articles arising from the CUTSE 2011 international conference; theoretical modeling of pseudo hydrostatic force in solid-liquid pipe flow with two layers (*Hussain H. Al-Kayiem and Iylia Elena Abdul Jamil*), improvement of coke strength by phenolic resin coating: experimental and theoretical studies of strengthening mechanism (*Y. Asakuma, Y. Komatsu, S. Nishi, A. Kotani and M. Nishimura*), application of markov chain in the PageRank algorithm (*Ravi Kumar, P., Alex Goh, K. L. and Ashutosh, K. S.*), harnessing energy from electromagnetic field: practical implementation integrating coil antenna and IC load (*Syahrizal Salleh and Zulkifli Abd Majid*), palm oil transesterification processing to biodiesel using a combine of ultrasonic and chemical catalyst (*Supranto, S.*), electricity generation from citronella bagasse (CB) using dual chamber microbial fuel cell (*Nik Azmi Nik Mahmood, Mohd Nazlee Faisal Md Ghazali, Kamarul'Asri Ibrahim and Nur Muhammad ElQarni Md Norodin*), experimental design analysis of ultra fine fly ash, lime water, and basalt fibre in mix proportion of high volume fly ash concrete (*Mochamad Solikin, Sujeeva Setunge and Indubhushan Patnaikuni*), experimental study on shear behaviour of high strength reinforced recycled concrete beam (*Oh Chai Lian, Lee Siong Wee, Mohd Asha'ari Masrom and Goh Ching Hua*), responsive façades: parametric control of moveable tilings (*Sambit Datta and Michael Hobbs*) and a numerical study of ground improvement technique using group of soil-column on peat (*Muntohar, A. S., Rahman, M. E., Hashim, R. and Islam, M. S.*).

I anticipate that you will find the evidence presented in this issue to be intriguing, thought provoking, and hopefully useful in setting up new milestones. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

I would also like to express my gratitude to all the contributors; namely the authors, reviewers and editors for their professional contributions who have made this issue feasible. Last but not the least the editorial assistance of the journal division staff is fully appreciated.

JST is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

Chief Executive Editor

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