Foreword

Welcome to the **Third Issue 2017** of the Journal of Science and Technology (JST)!

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

This issue contains **32 articles,** of which **one** is a review article and **five** are regular research articles. This issue also features **nine** selected papers from the 2nd International Conference on Statistics in Science, Business and Engineering (ICSSBE 2015), **nine** papers from the International Conference on Science, Engineering, Law and Management (ICSELM 2017) and **eight** papers from the International Conference On Computational Methods In Engineering and Health Sciences (ICCMEH 2015). The authors of these articles vary in country of origin, coming from **Malaysia, Iran, Indonesia, Hong Kong, Thailand, India,** and **Iraq**.

The review article in this issue discusses the implementation of building information modelling (BIM) in Malaysia (*Nuzul Azam Haron Raja Putri Zarifh Ana Raja Soh and Aizul Nahar Harun*).

The regular articles cover a wide range of topics. The first article is on the reliability, technical error of measurement and validity of height measurement using a portable stadiometer (*Azli Baharudin, Mohamad Hasnan Ahmad, Balkish Mahadir Naidu, Nurul Rufaidah Hamzah, Nor Azian Mohd Zaki, Ahmad Ali Zainuddin* and *Noor Safiza Mohd Nor*). The following articles look at the value of 18F-fluorodeoxyglucose-positron emission tomography/computed tomography (^{18}F-FDG PET/CT) in staging and impact on the management of patients with nasopharyngeal carcinoma (*Sethu Thakachy Subha, Fathinul Fikri Ahmad Saad, Abdul Jalil Nordin* and *Saraiza Abu Bakar*); design of a movable swine-roasting machine (*Bunkrachang, N.* and *Kitthawee, U.*); effect of inoculum content and screening of significant variables for simultaneous COD removal and H_2 production from tapioca wastewater using the Plackett-Burman Design (*Thanwised, P.*); and comparison of scoring functions on greedy search Bayesian network learning algorithms (*ChongYong, Chua* and *HongChoon, Ong*).

I conclude this issue with 26 articles arising from selected international conferences featuring the following: an analysis of Malaysia's single stock futures and its spot price (*Marzuki, R. M., Mohd, M. A., Nawawi, A. H. M.* and *Redwan, N. M.*); a projecting input-output table for Malaysia comparing the RAS and EURO methods (*Shuja', N., Lazim, M. A.* and *Yap, B. W.*); relative risk estimation for dengue-disease mapping in Malaysia based on the Besag, York and Mollié models (*Samat, N. A.* and *Pei Zhen, W.*); the effects of baseline correction algorithms on forensic classification of paper based on the ATR-FTIR spectrum and principal component analysis (PCA) (*Lee, L. C., Liong, C-Y., Khairul, O.* and *Jemain, A. A.*); deriving partial differential equation for the value of a *salam* contract with credit risk (*Hisham, A. F. B., Jaffar, M. M.* and *Othman, J.*); combination of forecasts with an application to the unemployment rate (*Muniroh, M. F., Ismail. N.* and *Lazim. M. A.*); a complexity index for a decision-making method (*Harliza, M. H., Daud, M.* and *Rosma, M. D.*); evaluation of risk factors for prolonged invasive mechanical ventilation

in a paediatric intensive care unit (PICU) (*Ismail, I., Yap, B. W.* and *Abidin, A. S. Z.*); the control chart technique for the detection of the problem of bad data in a state estimation power system (*Zahid Khan, Radzuan B. Razali, Hanita Daud, Nursyarizal Mohd Nor and Mahmud Fotuhi Firuzabad*); the Internet of things, a look into a technology adoption model in India (*Singh, G., Gaur, L.* and *Ramakrishnan, R.*); the effect of iron (III) oxide (Fe_2O_3) nano-powder mixed dielectric medium on micro-electrical discharge machining (EDM) of cobalt-chrome-molybdenum (CoCrMo) (*Elsiti, N. M., Noordin, M. Y.* and *Idris, A.*); a review of channel modelling for optical wireless links (*Miglani, R. and Malhotra, J. S.*); dealing with interdependency among NFR using ISM (*Kaur, H.* and *Sharma, A.*); a DNA and Bernoulli random number generator-based security key generation algorithm (*Sodhi, G. K.* and *Gaba, G. S.*); an analysis of MIMO FSO over different modulation techniques (*Kaur, K., Miglani, R.* and *Malhotra, J. S.*); performance evaluation of compressive-sensing-based channel estimation techniques in an OFDM system for different channels (*Jha, A., Kansal, L.* and *Gaba, G. S.*); a cost estimation model for web applications using agile software development methodology (*Soni, D.* and *Kohli, P. J.*); understanding consumer preferences using IoT smart mirrors (*Gaur, L., Singh, G.* and *Ramakrishnan, R.*); investigation on tapping of Al6061-SiC metal matrix composite with HSS taps (*Melvin Paious, Raviraja Adhikari* and *Nagaraja*); dynamic performance characteristics of finite journal bearings operating on TiO2-based nanolubricants (*Binu, K. G., Yathish, K., Shenoy, B. S., Rao, D. S.* and *Pai, R.*); a finite element analysis of the modal behaviour of vertical axis wind turbine comprising prestressed rotor blades (*Torabi Asr, M., Masoumi, M. M.* and *Mustapha, F.*); a review study of diesel and natural gas and their impact on CI engine emissions (*Hayder A. Alrazen* and *K. A. Ahmad*); the stability of water-lubricated bearing using the linear perturbation method under turbulent conditions (*R. Mallya, B. S. Shenoy, R. S. Pai* and *R. Pai*); estimation and validation of nearshore current and its characteristics at Carey Island (*Fitri, A., Hashim, R.* and *Motamedi, S.*); a computational fluid dynamics study of combustion and emission performance in an annular combustor of a jet engine (*M. Zuber, M. S. B. Hisham, N. A. M. Nasir, A. A. Basri* and *S. M. A. Khader*); and the effect of silica nanoparticles in kenaf-reinforced epoxy, looking specifically at its flexural and compressive properties (*F. Bajuri, N. Mazlan* and *M. R. Ishak*).

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 contribution towards making this issue feasible. Last but not 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.

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