## **Foreword**

Welcome to the Second Issue 2016 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.

In this issue, **24 articles** are published; **two** are review articles, **nine** are regular articles and **two** are case studies. This issue also features **seven** selected papers from the International Conference on Computational Methods in Engineering and Health Sciences 2015 (ICCMEH 2015) and **four** selected papers from the International Conference on Innovations, Shifts and Challenges (ICISC 2015). The authors of these articles vary in country of origin, coming from **Malaysia**, **India**, **Thailand**, **Australia**, **Algeria**, **Palestine**, **Taiwan** and **Indonesia**.

The first review article in this issue discusses the flow modification around a circular cylinder applying splitter plates, where it was found that the length ratio was a more important factor compared with the gap ratio in the case of vortex suppression (*Babak Mahjoub, Kamarul Arifin Ahmad* and *Surjatin Wiriadidjaja*). The second review article is a comprehensive and comparative study on online testability for reversible logic (*Hari Mohan Gaur, Ashutosh Kumar Singh* and *Umesh Ghanekar*).

The first regular article in this issue is on the seismic response of a light rail transit station equipped with braced viscous damper (Fateh, A., Hejazi, F., Ramanathan, R. A. and Jaffar, M. S.). The following articles look at: the path analysis of mental health among Thai elderly with Diabetes Mellitus (Chonticha Kaewanuchit); data clustering using differential search algorithm (Vijay Kumar, Jitender Kumar Chhabra and Dinesh Kumar); the effect of silica fillers on viscosity, peel strength, shear strength and tack of a styrenebutadiene rubber-based adhesive (Poh, B. T. and Loh, W. S.); an artificial neural network for modelling rainfall runoff (Aida Tayebiyan, Thamer Ahmad Mohammad, Abdul Halim Ghazali and Syamsiah Mashohor); modified levels of parallel Odd-Even Transposition Sorting Network (OETSN) with GPU computing using CUDA (Neetu Faujdar and SP Ghrera); identification, characterisation and phylogenetic analysis of commensal bacteria isolated from human breast milk in Malaysia (Zubaida Hassan, Shuhaimi Mustafa, Raha Abdul Rahim and Nurulfiza Mat Isa); coverage and lifetime optimisation of WSN using evolutionary algorithms and collision-free nearest neighbour assertion (Vinodh P. Vijayan and N. Kumar); and data gathering protocol for reducing energy utilisation in a gireless sensor network (Biju Paul and N. Kumar).

The two case studies featured in this issue highlight the 18F-FDG-PET CT features of colocolic intussusceptions in patient with colonic carcinoma (*Fathinul Fikri, A. S., Noraini Sarina, A., Shahrin, S.* and *Abdul Jalil, N.*) and the pattern of calcification on CT and FDG-

PET of a rare perineural mantle cell lymphoma, with a potential as a non-histological imaging marker (Fathinul Fikri, A. S., Ramdave Shakher and Abdul Jalil, N.)

I conclude this issue with 11 articles arising from the ICCMEH 2015 and ICISC 2015 international conferences: a combined meshless RBF-FDTD method for the analysis of transient electromagnetic fields (Khalef, R., Benkhawa, L., Grine, F., Benhabiles, M. T. and Riabi, M. L.); high capacity video steganography technique in a transform domain (Hemalatha, S., U. Dinesh Acharya and Renuka, A.); the heat transfer performance of gold/water nanofluid flows in a minitube using the thermal lattice boltzmann method (Ahmed A. Hussien, Mohd Z. Abdullah, Mohd A. Al-Nimr, N. M. Yusop, C. Nuntadusit and M. H. Elnaggar); flapping membrane wing as a prediction towards inter-domain flight (Abas, M. F., Aftab, S. M. A., Rafie, A. S. M., Yusoff, H. and Ahmad, K. A.); CFD investigation of transonic axial compressor rotor blades in various off-design conditions (Pauline Epsipha, Mohammad, Z. and Kamarul, A. A.); on the extension of moving particle method for flow computation in irregular flow domain (Ng, K. C., Sheu, T. W. H. and Hwang, Y. H.); split-disk properties of kenaf yarn fibre-reinforced unsaturated polyester composites using the filament winding method (Misri, S., Ishak, M. R., Sapuan, S. M. and Leman, Z.); using Tracker to engage students' learning and research in physics (Eddy Yusuf); automatic tag generation in folksonomy for learning resources reuse and sharing (Ching Chieh Kiu); a case study on utilising a mobile application to teach Malaysian governance to international students (Azizan Yatim); and an investigation into the impact of E-learning implementation on change management in Malaysian private higher education institutions (Sheiladevi, S. and Rahman, A.).

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.

## **Chief Executive Editor**

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