

Foreword

Welcome to the **First 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, **15 articles** are published, **three** are review articles, **eleven** are regular articles and **one** is a case study. The authors of these articles vary in country of origin, coming from **Malaysia, Indonesia, Iran, Australia, Italy, Bangladesh, Pakistan, Egypt, USA and Nigeria**.

The first review article in this issue discusses the Theory Inventive of Problem Solving (TRIZ) or Design for Manufacture and Assembly (DFMA) combination with Quality Function Deployment (QFD) as product design methodology (*Rosnani Ginting and Amir Yazid Ali*). The second review article discusses simulation methods for the structure of cementitious material hydrates at different length scales (*Tarighat, A., Zehtab, B. and Tavakoli, D.*) and the third review article describes the potential of 3'-Fluoro-3' Deoxythymidine as a cellular proliferation marker in PET oncology examination (*Hishar, H., R. Price, Fathinul Fikri, A. S., Eddie Lau, W. F., Assunta, C. and A. J. Nordin*).

The first regular article in this issue is on scaling group transformation for MHD double-diffusive flow past a stretching sheet with variable transport properties, taking into account velocity slip and thermal slip boundary conditions (*Uddin, M. J., Khan, W. A. and Ismail, A. I. M.*). The following articles look at: morphological and physico-chemical characteristics of soils in the Tasik Chini catchment in Pahang, Malaysia (*Sujaul, I. M., Ismail, B. S., Tayeb M. A., Muhammad Barzani, G. and Sahibin, A. R.*); development of an integrated catalytic membrane-based unit for biofuel production (*El-Zanati, E., Ritchie, S. M. C. and Abdallah, H.*); going beyond barebones cloud infrastructure services in dealing with competitiveness during an economic turbulence (*JosephNg, P. S. and Kang, C. M.*); optimisation of combined acid and enzymatic hydrolysis of cocoyam starch to produce a fermentable hydrolysate (*Amenaghawon, N. A., Osagie, E. I. and Ogbeide, S. E.*); simulation of a bioreactor with an improved fermentation kinetics – fluid flow model (*Emily Liew Wan Teng and Law Ming Chiat*); expression of C5a and its receptor in canine spontaneous tumours, which is a preliminary finding (*Norhaifa, G., Nashreq, K. N., Kamarudin, N. H., Bachek, N. F., Ajat, M. M., Hafandi, A., Selvarajah, G. T. and Hezmee, M. N. M.*); a comparative study of group runs and side sensitive group run control charts (*Yew, S. Y., Khoo, M. B. C., Teoh, W. L., Teh, S. Y. and Yeong, W. C.*); analysis of bit-plane images using principal component imaging from a face and palmprint database (*Therry Z. Lee and David B. L. Bong*); classification using the General Bayesian Network (*Sau Loong Ang, Hong Choon Ong and Heng Chin Low*); and potential impacts of climate change

on precipitation and temperature at Jor dam lake (*Aida Tayebiyar, Thamer Ahmad Mohammad, Abdul Halim Ghazali, M. A. Malek and Syamsiah Mashohor*).

I conclude this issue with a case study that reports on parotid oncocytoma in Birt-Hogg-Dubé syndrome, which considers a new pitfall in 18F-Fluorodeoxyglucose Positron Emission Tomography/Computed tomography imaging (*Sethu Thakachy Subha, Abdul Jalil Nordin, Norhafizah Mohtarrudin and Fathinul Fikri Ahmad Saad*).

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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