

Foreword

Welcome to the **Second Issue 2015** 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, **two** are review articles, **one** is short communication and **six** are regular articles. **Six articles** are from the International Conference on Agricultural and Food Engineering for Life 2012 (CAFEi 2012). The authors of these articles vary in country of origin, coming from **Malaysia, India, Ethiopia, Bangladesh** and **Japan**.

The first review article in this issue discusses on Activin A: Its role and involvement in inflammatory diseases (*Tie Tung Hing, Rusliza Basir, Chuah Yaw Kuang, Herni Talib and Norshariza Nordin*). Second review article describe in details on the ballistic impact performance of the layered and laminated composites (*Kannan Rassiah, M.M.H Megat Ahmad and Aidy Ali*) and the short communication paper in this issue reports on the dose optimisation of ¹⁸F-Fluorodeoxyglucose for whole body PET Oncology examination in CDNI of UPM (*Hishar, H., Salasiah, M., Fathinul Fikri, A. S. and Nordin, A. J.*).

The first regular article in this issue is on the incinerated domestic waste sludge powder as sustainable replacement material for concrete (*Kartini, K., Dahlia Lema, A.M., Dyg. Siti Quraisyah, A.A., Anthony, A.D., Nuraini, T. and Siti Rahimah, R.*). The following article look at: The mapping of spatial patterns of violent crime in peninsular Malaysia: Normal mixture model approach (*Syerrina Zakaria and Nuzlinda Abdul Rahman*); evaluation of performance measures of two-lane highways under heterogeneous traffic (*Pritam Saha, Ashoke Kumar Sarkar and Manish Pal*); analysis of absorber and buffer layer band gap grading on CIGS thin film solar cell performance using SCAPS (*Nima Khoshsirat, Nurul Amziah Md Yunus, Mohd Nizar Hamidon, Suhaidi Shafie and Nowshad Amin*); a comparative study on standard, modified and chaotic firefly algorithms (*Hong Choon Ong, Surafel Lulseged Tilahun and Suey Shya Tang*); and pathway of continuous professional development among physiotherapists: a qualitative study (*Ayiesah Ramli and Marzzatul Farhana Maslan*).

I conclude this issue with six articles arising from the CAFEi 2012 international conference: total phenolic content and antioxidant activity of *Quercus infectoria* galls using supercritical CO₂ extraction technique and its comparison with Soxhlet extraction (*Hasmida, M. N., Liza, M. S., Nur Syukriah, A. R., Harisun, Y., Mohd Azizi, C. Y. and Fadzilah Adibah, A. M.*); drying performances and milling quality of rice during industrial fluidized bed drying of paddy in Malaysia (*Ibrahim, M. N., Sarker, M. S. H., Ab. Aziz N. and Mohd Salleh, P.*); effects of cooking temperature in repetitive cooking-chilling cycles on

resistant starch content and quality characteristics (*Nor, M. Z. M., Talib, R. A., Noranizan, M. A., Chin, N. L. and Hashim, K.*); effects of milling methods on tensile properties of polypropylene / oil palm mesocarp fibre biocomposite of fish crackers (*Nordin, N. I. A. A., Ariffin, H., Hassan, M. A., Ibrahim, N. A., Shirai, Y. and Andou, Y.*); the effects of airflow on oven temperatures and cakes qualities (*Shahapuzi, N. S., Taip, F. S., Ab. Aziz, N. and Ahmedov, A.*); and quantification of gallic acid and tannic acid from *Quercus infectoria* (manjakani) and their effects on antioxidant and antibacterial activities (*Ab. Rahman, N. S., Md. Salleh L., Abd. Majid F. A. and Harisun, Y.*).

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

Nayan Deep S. KANWAL, FRSA, ABIM, AMIS, Ph.D.
nayan@upm.my