

Foreword

Welcome to the Second Issue of 2020 for 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 for the benefit of the world-wide science community.

This issue contains 20 articles; all are regular articles. The authors of these articles come from different countries namely India, Indonesia, Iran, Iraq, Kingdom of Saudi Arabia, Malaysia, Pakistan and Russia.

Articles submitted in this issue cover various scopes of Science and Technology including environmental sciences; engineering sciences; information, computer and communication technologies; medical and health sciences; earth sciences; and mathematical sciences.

A regular article titled “The effect of deep breathing exercises on menstrual pain perception in adolescents with primary dysmenorrhea” was written by Kurniati Devi Purnamasari and colleagues from Universitas Galuh, Indonesia. Their results showed that breathing relaxation interventions have a tendency to be directly proportional to the reduction in the Visual Analogue Scale pain experienced by patients. Detailed information on this study can be found on page 649.

Thuhairah Rahman and co-researchers from Universiti Teknologi MARA had investigated the effects of prolonged confined isolation on status of inflammation, endothelial activation and function in preparation for possible future manned space expedition to Mars. Six crew members were exposed to prolonged, confined isolation for 520 days with standard exercise and diet regime throughout isolation phase. Percent change increment was observed in inflammation while percent change reduction was seen in endothelial activation. The enhanced inflammation and reduced endothelial function could possibly be attributed to the rigorous exercise instituted throughout the confinement period. Further details of the article are available on page 659.

The next article is on virulence genes detection among the antibiotic resistant *Enterococcus faecalis* isolated from bird industry in Borneo by Sui Sien Leong from Universiti Putra Malaysia (Bintulu Campus) and Universiti Malaysia Sarawak. *Enterococcus* bacteria showed a high prevalence in the faecal samples. The high incidence of virulence genes (*AS*, *ace*, *gelE*, *efaA*) indicates that these genes were widely disseminated among

the antibiotic resistance *E. faecalis* found in the birdhouses, suggesting the important issues in the pathogenesis of *E. faecalis* infection which may cause potential health risks to humans. Detailed information on this study is presented on page 673.

We anticipate that you will find the evidence presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editors-in-Chief and Editorial Board Members of JST and editors, who have made this issue possible.

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

Prof. Dato' Dr. Abu Bakar Salleh

executive_editor.pertanika@upm.edu.my