

Foreword

Welcome to the fourth issue of 2022 for the *Pertanika Journal of Science and Technology (PJST)*!

PJST 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 35 articles; four review articles and the rest are regular articles. The authors of these articles come from different countries namely Bangladesh, Indonesia, Iraq, Japan, Malaysia, Nigeria and Saudi Arabia.

An investigation on optimal material selection for manufacturing prosthetic feet was conducted by Fahad Mohanad Kadhim et al. from Iraq. This investigation simulates chosen materials to find the optimal material selection for manufacturing prosthetic feet by assuming boundary conditions, reaction forces, design considerations, and application. The result shows that the Hybrid composite material has excellent improvement in mechanical properties such as lightweight, stiffness, high mechanical properties, and cost-efficiency. Furthermore, by considering the body weight of the amputee and gait cycle, and analyzing the material properties, the hybrid composite material that is the best suitable should be selected to manufacture foot prostheses. Further details of the investigation can be found on page 2363.

A review on computed tomography and other imaging modalities in pediatric congenital heart disease was conducted by Hongying Chen and colleagues from Universiti Putra Malaysia. Congenital heart defects (CHD) are the most common congenital disabilities. Therefore, an early and accurate diagnosis of coronary heart disease is very important for patients to get timely and effective treatment. At present, the clinical application of echocardiogram (echo), cardiovascular magnetic resonance (CMR) and computed tomography angiography (CTA) in coronary heart disease anatomy and function has increased significantly, which plays an important role in preoperative diagnosis, intraoperative monitoring, and postoperative recovery evaluation. Details of this study are available on page 2439.

A regular article titled “Effective Emergency Management: Scrutinizing the Malaysia Lead Responding Agency Planning and Information Management Approach During Disaster Exercise” was presented by Khairilmizal Samsudin and co-researchers from Malaysia. This study proposes several areas of improvement for planning and information management elements in effective emergency management theory by identifying its challenges through the Fire and Rescue Department Malaysia (FRDM). Four disaster

exercises at the state and federal levels were observed using a structured checklist. The result indicates challenges were found in terms of proactivity in gaining information, disseminating critical information during emergencies, developing a specific incident action plan, and media management. Detailed information about this study is available on page 2521.

In the last 12 months, of all the manuscripts peer-reviewed, 46% were accepted. This seems to be the trend in PJST.

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, Editor-in-Chief and Editorial Board Members of PJST, who have made this issue possible.

PJST 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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