

Mathematics is a pre-requisite in advancing many fields, including science and engineering. Mathematics provides the methodology and framework of rigorous thoughts in understanding and unveiling the beauty of science, and consequently, in applying science to solve real world problems and improve our lives.

The Department of Science in Engineering, International Islamic University Malaysia, in collaboration with the Centre of Research on Computational Mathematics, Universiti Tun Hussein Onn Malaysia, were therefore proud to organise the 5th International Conference on Mathematical Applications in Engineering 2019. The conference was aimed to provide a platform for academicians and researchers to meet, exchange ideas and present the latest findings involving mathematical applications in various field of studies. Participants from 15 countries attended the conference. The specific conference topics included:

- Algebra and analysis
- Analytical and numerical methods
- Mathematical modelling and simulation
- Mathematical physics and differential equations
- Probability and mathematical statistics

This publication contains most of the papers presented during the conference which was held on 30-31 October 2019 at the Putrajaya International Convention Centre, Putrajaya, Malaysia. All papers selected here were subjected to peer reviewing process. As such, we would like to thank all reviewers, type-setting editors, and last but not least all committee members for the successful publication of this special issue of the conference.

We also would like to thank our keynote speakers, Prof. Anvar Zakhidov, Prof. Mohd Salmi Md Noorani, and Prof. Rozaini Roslan, for making the conference successful, and our sponsors, Prostrain Technologies Sdn Bhd, Selari Technology Sdn Bhd, ETD Makmur (M) Sdn Bhd, and Inspilogix Sdn Bhd, for their contributions.

