INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING AND APPLIED SCIENCES

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MESSAGE FROM CHIEF EDITOR

Assalamualaikum and Greetings to all,

Again, welcome to the 8th edition of the International Journal of Electrical Engineering and Applied Sciences (IJEEAS). IJEEAS is an open access journal with the aim of publishing a variety of research articles in Electrical Engineering and Applied Sciences. This edition covers topics on the field of power electronics, control system, Mechatronics & Intelligent Robotics as well as the Engineering and Technical Education our local and international contributors.

The power electronics theme features an article from Junaidi et al., presents an insightful study on the performance evaluation of a single-phase grid-connected transformerless inverter according to the level of leakage ground current. It studies the effect of factors such as the PWM technique used, existed parasitic capacitance between the arrays to the ground and AC side filtering towards the leakage current level. The investigation results provide a guidance in the design of transformerless inverter for the grid-connected system.

As for the control theme, three interesting articles are presented. Tan Hor Yan et al. proposes using an image processing technique for a reverse vending machine for sorting beverages containers to be recycled. The paper by Ridha et al. proposes the use of robust sliding mode controller (SMC) instead of the conventional PI controller to improve the power quality of a stand-alone hybrid power system. It is shown from the results that the SMC able to improve the THD performance of the system output. Meanwhile Mditshwa et al. evaluates the effectiveness of Automatic Generation Control (AGC) to complement the governing system to maintain the power generation stability under various contingencies.

The mechatronics and intelligent robotics theme features an interesting work by Mohammad Zulhakimi et al. on the application of IoT in the smart greenhouse system. With the objective of reducing human labour dependency, cost and water consumption, the developed system able to automatically monitor the temperature, humidity and soil moisture and the harvested data can be easily accessed through the mobile application.

Last but not least, the Engineering and Technical Education theme presents an article discussing about student's perception of outcome-based education (OBE) in engineering programmes, as well as their awareness and commitment towards learning activities. The results from the qualitative study shows that the OBE promotes self-regulated learning during emergency remote teaching.

On behalf of the editorial board, I would also like to thank all the researchers and IJEEAS's editorial members who have contributed to the success of this edition. Last but not least, a special thanks to all readers who keep following our publication and supporting IJEEAS.

Prof. Ir. Dr. Marizan bin Sulaiman Chief Editor IJEEAS