

**POLITEKNIK & KOLEJ KOMUNITI  
JOURNAL OF ENGINEERING AND TECHNOLOGY**

**EXECUTIVE ADVISORY BOARD**

**Chief Editor**

Dr. Baharuddin Mustapha  
Politeknik Sultan Salahuddin Abdul Aziz Shah (Malaysia)

**International Advisory Board**

Ts. Zainab Ahmad  
Department of Polytechnic and Community College Education (Malaysia)

Ts. Haji Mohamad Amin Hamat  
Department of Polytechnic and Community College Education (Malaysia)

Dr. Ishak Mohamad  
Department of Polytechnic and Community College Education (Malaysia)

Ts. Dr. Mohd Norhadi Muda  
Department of Polytechnic and Community College Education (Malaysia)

Dr. Azhar Abdullah  
Politeknik Ungku Omar (Malaysia)

Ts. Dr. Saifudin Hafiz Yahaya  
Universiti Teknikal Malaysia Melaka (UTeM)

Prof. Madya Ir. Ts. Dr. Mohd Shukor Salleh  
Universiti Teknikal Malaysia Melaka (UTeM)

Dr. Sumaanti (Indonesia)  
Ibnu Sina College Batam (Indonesia)

Adjunct Professor Dr. Aladin Zayegh  
Victoria University Melbourne (Australia)

Dr. Taha Selim Ustun  
Carnegie Mellon University (United States of America)

## **Editorial Board Members**

Elmiza Roslan

Dr. Choong Chee Guan

Ir. Dr. Mohd Rizal Lias

Ir. Dr. Khalid Ghazi Hj. Ali

Dr. Mohd Pahmi Saiman

Dr. Izwah Ismail

Dr Marlina Ramli

Dr. Aspalilla Main

Dr. Sharifah Nadiyah Razali

Dr. Kannan Rassiah

Mohd Khairul Nizam Abdul Talib

Mohd Nafiz Mohd Nazly

Shafura Shariff