Speaker Information:

Name: Assoc. Prof. Dr. Khairul Azami Sidek

Speaker background info:

Dr. Khairul Azami Sidek is the Deputy Director in the Office of Industrial Links and an associate professor in the Department of Electrical and Computer Engineering, Kulliyyah of Engineering, International Islamic University Malaysia (IIUM). He obtained his Bachelors of Engineering from IIUM, Masters of Engineering from Universiti Kebangsaan Malaysia (UKM) and Doctor of Philosophy from RMIT University, Australia. He has 17 years of experience in the academic field, published more than 70 articles in conferences and journals, obtained several research grants, received numerous awards from the university and is actively engaged with the community. His research interests are biomedical signal processing, pattern recognition and biometric recognition.

Topic of Presentation:

Electroencephalogram Signal Analysis: Emerging Trends and Challenges

Abstract:

The brain wave has so much potential for the future of mankind and life. The prospect is pertinent as it is categorized as one of the science & technological drivers in the framework developed by Academy of Science Malaysia published in December 2020 called the *10-10 Malaysian Science, Technology, Innovation and Economy (MySTIE) Framework.* It falls under the category of neuro technology that consist of innovation that enables the study of brain processes, brain-computer interface, decision-making, behaviour and neurological disorders. The application of the brain signal has the prospect to be implemented in many socio economic drivers such as education, medical and healthcare, agriculture and forestry, and smart technology and systems. It is envisaged that the framework will identify fundamental, applied and experimental R&D needed to transform Malaysia in moving up the global innovation value chain, enhance economic competitiveness, reduce inequalities and raise the

citizen's quality of life. This will transform Malaysia to become a united, prosperous and environment-friendly nation by 2030. This talk will elaborate more on these overviews and connect the topic to related emerging trends in neuro technology applications and its challenges. Don't miss the opportunity to join the talk.