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INSTITUT SEL FUEL
SELFUEL
UNIVERSITI KEBANGSAAN MALAYSIA

ONLINE TRAINING COURSE

FUEL CELL AND HYDROGEN ENERGY FOR CLEANER FUTURE

Universiti Kebangsaan Malaysia

Come join us for a 2-day online training course on FUEL CELL AND HYDROGEN ENERGY FOR CLEANER FUTURE.

Date: 29 - 30th June 2021
Venue: Zoom Online Platform

Organized by Fuel Cell Institute, Universiti Kebangsaan Malaysia

Scan here for registration

Link: shorturl.at/jyDV2

Categories	Fee
Student	RM100
Academic	RM150
Non-academic /Industry	RM200
International	USD50

For enquiry: **workshop.selfuel@ukm.edu.my**

INTRODUCTION

Electricity is one of the most crucial things to support our modern life. The issues surrounding fossil fuel as today's primary electricity source are that they will run out soon, and its combustion process is harmful to the environment. Fortunately, fuel cell technology and hydrogen energy may provide a solution. Fuel cells with hydrogen gas as fuel able to generate electricity with pure water as the only by-product. It is a clean way to generate electricity. Besides that, hydrogen can be extracted from water molecule that is abundant on earth by electrolysis process. These technologies are marketed worldwide and now are here in Malaysia. Recently, Sarawak Energy Berhad officially launched South East Asia's first integrated hydrogen production plant, refuelling station, and fuel cell buses. In future, we may be able to use fuel cells to generate electrical power for charging our everyday electrics and electronics.

Fuel Cell Institute – UKM as the only research institute in Malaysia focuses on fuel cells development and hydrogen energy, is actively investigated in various fuel cell systems and hydrogen energy. Currently, there are few types of fuel cells require further exploration such as Proton Exchange Membrane Fuel Cell, Solid Oxide Fuel Cell, Direct Methanol Fuel Cell, and Microbial Fuel Cell. Each of the fuel cell types has its advantages and target applications. Moreover, discussion on hydrogen production and storage technologies will also take place.

For this workshop, we invite all stakeholders in this field, especially academicians, researchers and students, and interested industries to participate. Highly recognized experts within the field will deliver the workshop materials. Through this sharing session, we hope to attract the interest of more people towards these technologies. Together we shall develop our fuel cells and electrolyzer systems for a cleaner and better future.

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SPEAKERS

PROF. DR. NIGEL BRANDON

Distinguished International Professor, Fuel Cell Institute
Imperial College London

Prof. Dr. Nigel Brandon is Professor of Sustainable Development in Energy and Dean of the Faculty of Engineering at Imperial College London. His research interests are focused on fuel cells, hydrogen and energy storage in support of the low carbon energy transition. He is a Founder and Director of RFC Power, a flow battery company spun-out from Imperial College in 2018, and a founder of Ceres Power, an Alternative Investment Market-listed fuel cell company spun out of Imperial College in 2001, and which has a current market capital of over £2.5B. He has won awards in the field such as the Francis Bacon Medal from the American Society of Mechanical Engineers for work on fuel cell research and education, and the Silver Medal from Royal Academy of Engineering for contribution to fuel cell Bacon Medal from the American Society of Mechanical Engineers for work on fuel cell research and education, and the Silver Medal from Royal Academy of Engineering for contribution to fuel cell engineering leading to commercial exploitation. He is a Fellow Royal Academy of Engineering, a Chartered engineer, a Fellow of the Energy Institute, and a Fellow of the Institute of Materials, Minerals and Mining. He has recently joined SELFUEL for 12 months as a Distinguished International Professor.

PROF. DR.JUNJI INUKAI

Distinguished International Professor, Fuel Cell Institute
University of Yamanashi, Japan

Professor Junji Inukai is a professor at the "Clean Energy Research Center" and "Fuel Cell Chemistry Center", Yamanashi University, Japan. He is currently the Distinguished International Professor at Fuel Cell Institute, UKM. He started working in the Department of Science and Technology, Keio University as a Research Associate in 1992-1994. Later he served at Tohoku University from 1994-2006. Prof Inukai was also an invited researcher at University of Illinois from 2005-2006. From 2006 to the present, he is serving at Yamanashi University. Prof Junji Inukai has received several awards including the "Technology Award" by The Surface Finishing Society of Japan for "Development and Commercialization of Oxygen Monitoring System in Fuel Cells Using Microprobes" and "ACS Editor's Choice", by American Chemical Society. He has produced 90 original papers, 11 books, 32 reviews, and short reviews. In addition, he has produced 5 patents on new fuel cells and analytical methods.

PROF. DATO' IR. DR. WAN RAMLI WAN DAUD FASc

Professor of Chemical Engineering, Faculty of Engineering & Built Environment
Professor of Sustainable Hydrogen Energy, Fuel Cell Institute
Universiti Kebangsaan Malaysia

Prof. Dato' Ir. Dr. Wan Ramli Wan Daud FASc is the Professor of Chemical Engineering at Department of Chemical & Process Engineering, Faculty of Engineering & Built Environment, Universiti Kebangsaan Malaysia since 1996, Principal Research Fellow at the Fuel Cell Institute, Universiti Kebangsaan Malaysia since 2006 and Professor of Sustainable Hydrogen Energy at the Fuel Cell Institute, Universiti Kebangsaan Malaysia since 2019. He is the Founding Director of the Fuel Cell Institute, Universiti Kebangsaan Malaysia in 2007-2013. He is also the founding President of the Malaysian Association of Hydrogen Energy (MAHE). He was elected a Fellow of the Academy of Science Malaysia since 2012 for irector of the Fuel Cell Institute, Universiti Kebangsaan Malaysia in 2007-2013. He is also the founding President of the Malaysian Association of Hydrogen Energy (MAHE). He was elected a Fellow of the Academy of Science Malaysia since 2012 for his leading role in scientific work on hydrogen energy and fuel cells. Professor Wan Ramli was honored with the Merdeka Award 2016 for Outstanding Scholastic Achievement for outstanding scholarly research and development in advancing the technology of fuel cells and hydrogen energy in Malaysia, the region and the world. He was cited in WOS Publon 7,162 times with H-index 43, in SCOPUS 8,051 times with H-index 46 and in Google Scholar 12,265 times with H-index 54. He was listed as one of the World's Most Influential Scientific Minds in engineering twice in 2015 by Thomson Reuters and 2017 by Clarivate Analytics for having the highest number of papers that are highly cited.

PROF. IR. DR. SITI KARTOM KAMARUDIN

Director of Fuel Cell Institute

Professor Ir. Dr. Siti Kartom Kamarudin is presently the director of the Fuel Cell Institute, Universiti Kebangsaan Malaysia. Her primary research focus is on direct liquid fuel cells. To-date, she was cited in Scopus 6,200 times with H-index of 38. She has received several international awards on her innovation in this field, including the Best Women Invention from World Intellectual Property Organization (WIPO) and Best Innovation Award from Taiwan Invention Products Promotion Association (TIPPA) 2009, gold medal award in ITEX 2008 and many more. She was awarded as one of the 'The World Most Influential Minds in the World 2015 Top 100' in the field of engineering by Thomson Reuters and 2017 by Clarivate Analytics for having the highest number of papers being highly cited. More recently, she has been the awarded with the 'Malaysia Research Star Award' for three consecutive years from 2017 to 2019.

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SPEAKERS

ASSOC. PROF. DR. SHAHBUDIN MASTAR@MASDAR

Deputy Director of Fuel Cell Institute

Mohd Shahbudin Mastar @ Masdar is an Associate Professor at Department of Chemical Engineering, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia. He is also one of the Joint Appointment Research Fellow at Fuel Cell Institute, Universiti Kebangsaan Malaysia. He obtained his BEng in Biochemical Engineering and Master of Science in Chemical Engineering from Universiti Kebangsaan Malaysia. Meanwhile, he obtained his PhD in Chemical Engineering from Gunma Universiti, Japan. His research areas are process system engineering mainly for hydrogen and direct liquid fuel cells, hydrogen production via electrolyzer system and biogas purification.

ASSOC. PROF. TS. DR. LOH KEE SHYUAN

Senior Research Fellow, Fuel Cell Institute

Loh Kee Shyuan, PhD, is a Senior Research Fellow at the Fuel Cell Institute in Universiti Kebangsaan Malaysia. His main research focuses on developing advanced nanomaterials for energy devices, as well as for chemical and biosensor application. He has published more than 80 peer reviewed journal articles and have earned him of h-index 16.

ASSOC. PROF. DR. LORNA JEFFERY MINGGU

Senior Research Fellow, Fuel Cell Institute

Lorna Jeffery Minggu (PhD) is an Associate Professor at Fuel Cell Institute, Universiti Kebangsaan Malaysia. She is the head of the Photoelectrochemical Lab and the coordinator and lecturer for Hydrogen Energy Course. She obtained her BEng in Chemical Engineering from UMIST United Kingdom, and MSc and PhD in Chemical Engineering from Universiti Kebangsaan Malaysia. Her research areas are photo fuel cell, photoelectrochemistry, water splitting, solar fuels and hydrogen production for sustainable and renewable energy applications.

TS. DR. LIM KEAN LONG

Research Fellow, Fuel Cell Institute

Ts. Dr. Lim Kean Long completed his Ph.D. in Materials Science and Engineering at the University of New South Wales, Australia, specialising in the area of hydrogen storage materials. He has taught of Hydrogen Energy course in both Fuel Cell Institute and Faculty of Engineering and Built Environment, UKM. He has lead a number of national and university research projects, as well as, a member of a few international research projects, related to hydrogen energy. Apart from publishing his research works in international peer review journals, he was also involved in the drafting of technical code for hydrogen storage and saftety (HSS) with fuel cell as power generator for ICT infrastructures. Ts. Dr. Lim is also the life member of Malaysian Association of Hydrogen Energy, established in 2017.

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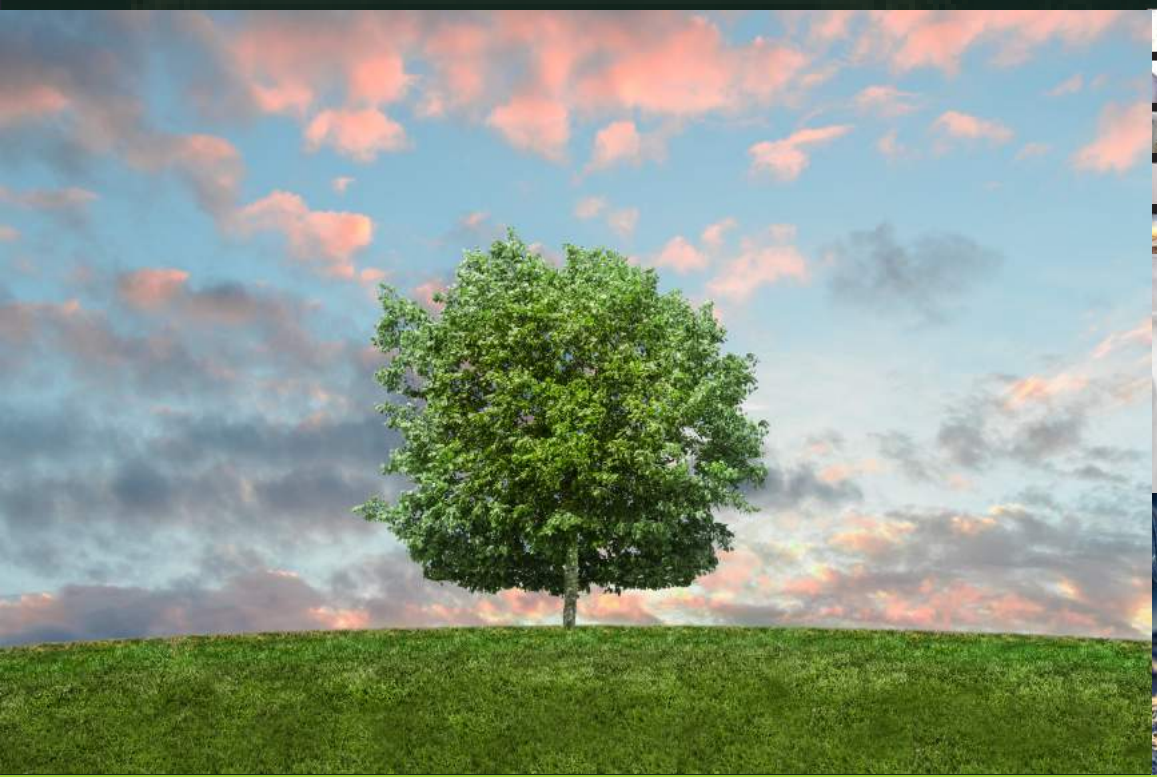

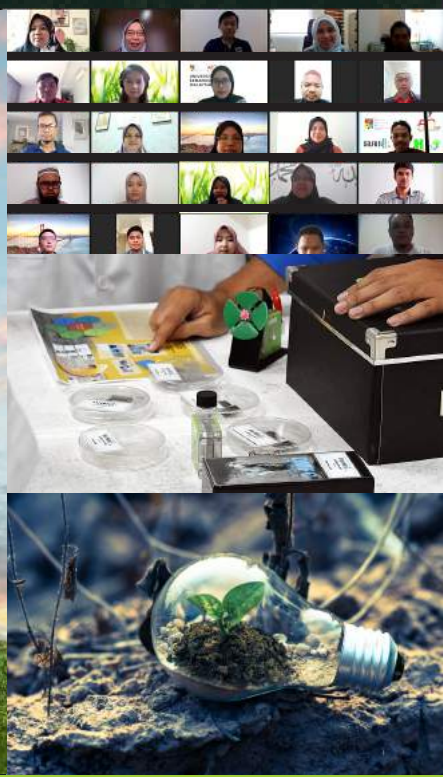

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