

## **ERASMUS+ United CBHE Automotive International Collaboration from European to South East Asia**

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### **Abstract**

The industrial revolution especially in the IR4.0 era have driven many states of the art technologies to be introduced. The automotive industry as well as many other key industries have also been greatly influenced. The rapid development of automotive industries in Europe have created wide industry gap between European Union (EU) and developing countries such as in South East Asia (SEA). Indulging this situation, FH JOANNEUM, Austria together with European partners from FH Aachen, Germany and Politecnico di Torino, Italy are taking initiative to close down the gap utilizing the Erasmus+ United Capacity Building in Higher Education grant from EU. A consortium was founded to engage with automotive technology transfer using the European framework to Malaysian, Indonesian and Thailand Higher Education Institutions (HEI) as well as automotive industries in respective countries. This could be achieved by establishing Engineering Knowledge Transfer Unit (EKTU) in respective SEA institutions guided by the industry partners in their respective countries. This EKTU could offer updated, innovative and high-quality training courses to increase graduate's employability in higher education institutions and strengthen relations between HEI and the wider economic and social environment by addressing University-industry cooperation which is the regional priority for Asia. It is expected that, the Capacity Building Initiative would improve the quality of higher education and enhancing its relevance for the labor market and society in the SEA partners. The outcome of this project would greatly benefit the partners in strong and complementary partnership targeting the automotive industry and enhanced larger scale international cooperation between the European and SEA partners. It would also prepare the SEA HEI in sustainable partnership with Automotive industry in the region as a mean of income generation in the future.

## Keywords

Malaysian Automotive Industry, Capacity Building Higher Education, Technology Transfer, European Framework and South East Asia.

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## Biography

**Noreffendy Tamaldin** is a Professor, and Dean, Center for Graduate Studies at Universiti Teknikal Malaysia Melaka, UTeM. He received BSc in Mechanical Engineering (Honor cum laude) in 1998 and Master of Engineering in Mechanical-Mechatronics in 2000 from Univ of Hartford CT, USA. He received his PhD Degree in Automotive Engineering from Coventry University, U.K. in 2010 with research consortium between Jaguar Land Rover, Ford Motor, EMCON Technologies (Faurecia), and Johnson Matthey. In 2014 he has successfully completed Executive Management program at Kellogg School of Management, Northwestern University, Chicago, USA. He received several awards such as from Malaysian Embassy Washington DC 1998, ASME Sr Capstone Award 1998, ON Semiconductor 5 Patent Disclosure awards in 2000-2001, Silver Quil Award 2001, Emerald Outstanding paper award 2017 and many excellent service and academic award from the university from 2012-2017. He also received more than 30 research grants locally and internationally worth approximately 8 million Euro . The most recent research grant includes 2 international grants from Erasmus+ capacity building involving large scale international collaboration from European Union and Malaysian, Thailand, Indonesia, Cambodia and Philippines as well as industry grant for Biodiesel from palm oil. He also received 6 Gold, 9 Silver, 8 Bronze and 1 Special award from various local and international research exhibitions. He has published over 80 journal and conference papers indexed by Scopus, WOS and ISI. His research interests include Engine Performance, emission, Tribology, Alternative fuel and automotive instrumentations. He is also a member of professional bodies such as Malaysian MBOT, BEM, IEM, Malaysian Tribology Society, Malaysian Powder Metallurgy and Particulate Materials Association (MPM2A), ASME as well as Chartered Engineer from IMechE UK.

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**Dipl. Ing. Dr. techn. Karl H. Reisinger** is an Associate Professor at FH JOANNEUM, Graz, Austria. He graduated in 1992 from the Technical University of Graz (Austria). From 1992 to 1998 he worked at the Technical University of Graz as a Research Assistant and investigated the dynamic behaviour of electronically controlled AS/RS machines, finishing 1998 with PhD degree. Starting in 1999 at Steyr-Daimler-Puch, which is now Magna Steyr Fahrzeugtechnik, he installed Hardware in the Loop Simulation into the software engineering process and concerned himself with the control of all wheel drive transfer cases. In 2003 he changed to Magna Powertrain at Lannach/Graz to lead the department of Mechatronic Systems Engineering. Since 09/2007 he has been working at the FH JOANNEUM as the lecturer for mechatronics on the degree program Vehicle Technology. The focus is on vehicle dynamics, control engineering and Mechatronic Systems Engineering.

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**Hisham Razuli** is currently the Head of Engineering at R&D center Dreamedge Sdn Bhd. He was the Staff Design Engineer at Proton from 2005 to 2015 and Senior Design Engineer at Sony Malaysia Sdn Bhd from 1997 to 2005. He obtained his Bachelor of Engineering-Mechanical Engineering from University Putra Malaysia in 1997. He is involved in many automotive related projects from various local and international manufacturer. He is actively involved in the review of Malaysian National Automotive Policy 2020 based on his vast experiences in the Automotive Industry.