

AGENDA

**The First UNITED – Southeast Asia Automotive Interest Group (SAIG)
International Conference
International Collaboration towards Sustainable and Green Automotive
Technology**

**21-22 APR 2021, Faculty of Engineering, Chulalongkorn University,
Thailand**

Registration <https://forms.gle/QGr2VQQQP1fsMqTe9>
ZOOM LINK will be provided via email after registration to the conference.

DAY 1, 21 April 2021		
Central European Summer Time (CEST)	Bangkok Time (ICT)	
Moderation/Session chair: David Banjerdpongchai , <i>Professor, Chulalongkorn University, Bangkok, Thailand, International School of Engineering, Faculty of Engineering</i>		
8:00 – 8:15	13:00 – 13:15	<p>Welcome Speech Witaya Wannasuphprasit <i>Conference Chair, Associate Professor, Chulalongkorn University, Bangkok, Thailand, International School of Engineering, Faculty of Engineering</i></p> <p>Martina Friedrich <i>Programme Officer Erasmus+ Higher Education, Austrian Agency for International Cooperation in Education and Research (OeAD-GmbH)</i></p> <p>Opening Speech Supot Techavorasinskul <i>Dean of Faculty of Engineering, Professor, Chulalongkorn University</i></p>
8:15 – 8:25	13:15- 13:25	<p>Erasmus+ CBHE Project UNITED - Insights Hanna Sprenger <i>Project Manager, FH JOANNEUM GesmbH, Graz, Austria, Institute of Automotive Engineering</i></p>
8:25 – 8:45	13:25 – 13:45	<p>SAIG – Southeast Asia Automotive Interest Group Nuraini Abdul Aziz <i>SAIG Chairman, Associate Professor, University Putra Malaysia, Kuala Lumpur, Malaysia, Faculty of Engineering</i></p>

8:45 – 9:30	13:45 – 14:30	<p>University business cooperation from the industry perspective – Panel Discussion</p> <p>Hisham Razuli Halim <i>Head of Engineering, DreamEDGE Sdn Bhd, Selangor, Malaysia</i></p> <p>Phichai Opaskiatikul <i>Executive Assistant to CEO, Atipong Motor Company Limited, Udon Thani, Thailand</i></p> <p>Pipat Tangsiripaisan <i>Chief Engineer, Urban Mobility Tech Co. Ltd., Bangkok, Thailand</i></p> <p><u>Moderators:</u> Thomas Esch <i>Professor, FH Aachen University of Applied Sciences, Aachen, Germany</i></p> <p>Nuksit Noomwongs <i>Assistant Professor, Chulalongkorn University, Bangkok, Thailand, Department of Mechanical Engineering</i></p>
9:30 – 9:35	14:30 – 14:35	Coffee Break
Moderation/Session chair: I Nyoman Suprpta Winaya , <i>Udayana University, Bali, Indonesia</i>		
9:35 – 10:15	14:35 – 15:15	<p>Keynote “Achieving the autonomous driving in future mobility: Thailand’s perspective”</p> <p>Dr. Pasan Kulvanit <i>Department of Science Service, Thailand’s Ministry of Higher Education, Science, Research, and Innovation</i></p>
10:15 – 11:35	15:15 – 16:35	Scientific Session “Vehicle Dynamics”

11:35 – 11:40	16:35 – 16:40	Coffee Break
Moderation / Session chair: Himsar Ambarita , <i>Universitas Sumatera Utara, Indonesia</i>		
11:40– 12:20	16:40 – 17:20	<p>Keynote “CO₂ -neutral powertrains”</p> <p>Ing. Dr. Ralf Marquard <i>Managing Director, LHP Europe GmbH, Cologne, Germany</i></p>
12:20 – 13:40	17:20 – 18:40	Scientific Session “Alternative/sustainable powertrain”
13:40 – 13:50	18:40 – 18:50	<p>Evaluation and summary of the first day of the conference</p> <p>Witaya Wannasuphprasit <i>Conference Chair, Associate Professor, Chulalongkorn University, Bangkok, Thailand, International School of Engineering, Faculty of Engineering</i></p>

DAY 2, 22 April 2021		
Central European Summer Time (CEST)	Bangkok Time (ICT)	
Moderation/Session chair: Nor Kamariah N Noordin , <i>Universti Putra Malaysia, Kuala Lumpur, Malaysia</i>		
8:00 – 8:05	13:00 – 13:05	<p>Opening of the 2nd day of the 1st UNITED-SAIG Conference</p> <p>Witaya Wannasuphprasit <i>Conference Chair, Associate Professor, Chulalongkorn University, Bangkok, Thailand, International School of Engineering, Faculty of Engineering</i></p>
8:05 – 8:25	13:05 – 13:25	<p>University-Business Cooperation from the academic perspective</p> <p>Andrea Tonoli <i>Full Professor, Politecnico di Torino, Italy, Department of Mechanical and Aerospace Engineering</i></p>
8:25 – 9:35	13:25 – 14:35	<p>UNITED Engineering Knowledge Transfer Units</p> <p>Himsar Ambarita <i>Professor, Universitas Sumatera Utara, Medan, Indonesia, Department of Mechanical Engineering</i></p> <p>I Nyoman Suprpta Winaya <i>Head of the Mechanical Engineering Study Program, Universitas Udayana, Bali, Indonesia</i></p> <p>Abdul Aziz Bin Hairuddin <i>Profesor Madya, University Putra Malaysia, Kuala Lumpur, Malaysia, Faculty of Engineering</i></p> <p>Noreffendy Tamaldin <i>Professor, Dean Center for Graduate Studies, Universiti Teknikal Malaysia Melaka, Malaysia, Faculty of Mechanical Engineering</i></p> <p>Chonlatee Photong <i>Associate Professor, Mahasarakham University, Mahasarakham, Thailand, Faculty of Engineering</i></p> <p>Sunhapos Chantranuwathana <i>Assistant Professor, Chulalongkorn University, Bangkok, Thailand, Faculty of Engineering</i></p>
9:35 – 9:40	14:35 – 14:40	Coffee Break

Moderation/Session chair: Chonlatee Photong, Mahasarakham University, Mahasarakham, Thailand		
9:40 – 10:20	14:40 – 15:20	<p>Keynote “Retrofitting electric vehicle: The IIUM journey – achievements, challenges and moving forward”</p> <p>Assoc. Prof. Dr. Sany Izan Ihsan <i>Dean of the Kulliyah of Engineering, International Islamic University Malaysia (IIUM), Selangor, Malaysia</i></p>
10:20 – 11:40	15:20 – 16:40	Scientific Session “New business models and automotive Evaluations”
11:40 – 11:45	16:40 – 16:45	Coffee Break
Moderation/Session chair: Muhd Ridzuan Mansor, Universiti Teknikal Malaysia Melaka, Melaka, Malaysia		
11:45 – 12:25	16:45 – 17:25	<p>Keynote “Challenge in the transport industry in Europe towards CO₂ emission”</p> <p>Prof. DI Dr. Josef Affenzeller <i>Director of Research Coordination, AVL List GmbH, Graz, Austria</i></p>
12:25 – 14:05	17:25 – 19:05	Scientific Session “Materials”
14:05 – 14:15	19:05 – 19:15	<p>Evaluation and closing remarks of the conference</p> <p>Witaya Wannasuphprasit <i>Conference Chair, Associate Professor, Chulalongkorn University, Bangkok, Thailand, International School of Engineering, Faculty of Engineering</i></p>

SCIENTIFIC SESSIONS DAY 1

Scientific Session 1: „Vehicle dynamics“, 21 April 2021		
CEST	ITC	
10:15 – 10:35	15:15 – 15:35	SCENARIO BASED SIMULATION TESTING OF AUTONOMOUS VEHICLE USING VIRTUAL TESTING PLATFORM Vimal Rau Aparow, Cheok Jun Hong, Ng Yuan Weun, Chai Chee Huei, Tiong Kai Yen, Lee Chen Hong and Justin Dauwels <i>University of Nottingham, Malaysia</i> <i>Delft University of Technology, Netherlands</i>
10:35 – 10:55	15:35 – 15:55	DYNAMIC BEHAVIOR OF VEHICLE ON TURNING DIRECTION USING FOUR-WHEELS-STEERING SYSTEM WITH SIDE-SLIP CONTROL I.D.G Ary Subagia <i>Udayana University, Indonesia</i>
10:55 – 11:15	15:55 – 16:15	Evaluation of Aerodynamics Package for FSAE race car Pawin Bongkochmas and Worakorn Sasijulaka <i>Chulalongkorn University, Thailand</i>
11:15 – 11:35	16:15 – 16:35	SHUTDOWN CIRCUIT AND SYSTEMS Worakorn Sasijulaka, Kittiphat Pinthong, Pawin Bongkochmas and Nopdanai Ajavakom <i>Chulalongkorn University, Thailand</i>

Scientific Session 2: “Alternative/sustainable powertrain” 21 April 2021		
CEST	ITC	
12:20 – 12:40	17:20 – 17:40	Thermal Management of Electric Vehicle Battery Module-based Heat Pipe Cooling System Wayan Nata Septiadi, I Gusti Ngurah Priambadi, Ainul Ghurri, Sulthan Alif Ramadhan Lazuardy, Hepy Erza Apriliani, Rolland Pierce and I Putu Agus Saskara Yoga <i>Udayana University, Indonesia</i>
12:40 – 13:00	17:40 – 18:00	Thermal Management Of Electric Vehicle Batteries With Heat Pipe-Based Cooling System on Charging Conditions Wayan Nata Septiadi, Ainul Ghurri, Made Ricki Murti, Hepy Erza Apriliani, Sulthan Alif Ramadhan Lazuardy and Gerardo Janitra Puriadi Putra <i>Udayana University, Indonesia</i>
13:00 – 13:20	18:00 – 18:20	Characteristics of gas fuel from pyrolysis of sunan candlenut oilcake in various bed materials IM Rajendra, INS Winaya, A Ghurri, and IKG Wirawan <i>Udayana University, Indonesia</i>
13:20 – 13:40	18:20 – 18:40	CONDENSATE OIL YEILD FROM FIXED BED PYROLYSIS USING REUTEALIS TRISPERMAGAR WASTE FUEL I N. Suprpta Winaya, I W. Widana, I M Rajendra, I M. Panji Prakasa <i>Udayana University, Indonesia</i>

SCIENTIFIC SESSIONS DAY 2

Scientific Session 3: "New business models and automotive evaluations" 22 April 2021		
CEST	ITC	
10:20 – 10:40	15:20 – 15:40	Sharing mobility concepts – flexible, sustainable, smart Torsten Merkens and Christoph Hebel <i>Aachen University of Applied Sciences, Germany</i>
10:40 – 11:00	15:40 – 16:00	Development of a Comparison Methodology and Evaluation Matrix for Electrically Driven Compressors in ICE and FC Oliver Schopen, Hans Kemper and Thomas Esch <i>Aachen University of Applied Sciences, Germany</i>
11:00 – 11:20	16:00 – 16:20	Comparison of Average Tank To Wheel efficiencies of the Passenger cars with different drivetrains J.R.Mavlonov, A.A. Mukhitdinov <i>Turin polytechnic university in Tashkent, Uzbekistan</i> <i>Tashkent State Transport University, Uzbekistan</i>
11:20 – 11:40	16:20 – 16:40	Air-Rush Noise Measurement of Vehicle HVAC System with Different Vent Louver Conditions Ahmad Zhafran Ahmad Mazlan, Mohamad Syazwan Md Isa, Mohamad Abdul Rahman Paiman and Mohd Zukhairi Abd Ghapar <i>Universiti Sains Malaysia, Malaysia</i> <i>Proton Holding Berhad</i>

Scientific Session 4: "Materials" 22 April 2021		
CEST	ITC	
12:25 – 12:45	17:25 – 17:45	Energy reduction caused by lightweight design Martin Gossar, Wolfgang Kriegler and Thomas Lechner <i>FH JOANNEUM University of Applied Sciences, Austria</i>
12:45 – 13:05	17:45 – 18:05	Motorcycle Footstep from Recycle Aluminium Alloy I Made Gatot Karohika and I Nyoman Gde Antara <i>Udayana University, Indonesia</i>
13:05 – 13:25	18:05 – 18:25	APPLICATION OF AHP METHOD TO SELECT BEST NATURAL FIBRE FOR POLYMER COMPOSITES FOR ELECTRIC SCOOTER DECK COMPONENT M. R. Mansor, M.A. Shaharuzaman, N. Tamaldin and G. Omar <i>UNIVERSITI TEKNIKAL MALAYSIA MELAKA, MALAYSIA</i>
13:25 – 13:45	18:25 – 18:45	MECHANICAL PROPERTIES ANALYSIS OF CARBON BLACK FILLED-ADHESIVE FOR JOINTS IN AUTOMOTIVE APPLICATIONS M. A. Daniel Azlan, K.K. Choon, B. R. Mizah <i>Universiti Teknikal Malaysia Melaka, Malaysia</i> <i>Centre for Advance</i>
13:45 – 14:05	18:45 – 19:05	STRETCHABLE CONDUCTIVE INK FOR AUTOMOTIVE ELECTRONIC SAFETY Ameeruz Kamal Ab Wahid, Mohd Azli Salim, Nor Azmmi Masripan and Adzni Md. Saad <i>Jabatan Kejuruteraan Mekanikal, Politeknik Sultan Azlan Shah (PSAS), Malaysia</i>