1st UNITED-SAIG International Conference 21-22 APR 2021 Chulalongkorn University, Thailand



Co-funded by the Erasmus+ Programme of the European Union

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 <u>after registration</u> to the conference.

DAY 1, 21 A		
Central European	Bangkok Time (ICT)	
Summer Time		
(CEST)		
Moderatior	Session cl	hair: David Banjerdpongchai, Professor, Chulalongkorn University,
Bangkok, Th	nailand, Inte	ernational School of Engineering, Faculty of Engineering
8:00 –	13:00 –	Welcome Speech
8:15	13:15	Witaya Wannasuphoprasit
		Conference Chair, Associate Professor, Chulalongkorn University,
		Bangkok, Thailand, International School of Engineering, Faculty of
		Engineering
		Martina Friedrich
		Programme Officer Erasmus+ Higher Education, Austrian Agency for
		International Cooperation in Education and Research (OeAD-GmbH)
		Opening Speech
		Supot Techavorasinskul
		Dean of Faculty of Engineering, Professor, Chulalongkorn University
8:15 -	13:15-	Erasmus+ CBHE Project UNITED - Insights
8:25	13:25	Hanna Sprenger
		Project Manager, FH JOANNEUM GesmbH, Graz, Austria, Institute of
		Automotive Engineering
		natomotive Engineering
8:25 -	13:25 –	SAIG – Southeast Asia Automotive Interest Group
8:45	13:45	Nuraini Abdul Aziz
		SAIG Chairman, Associate Professor, University Putra Malaysia,
		Kuala Lumpur, Malaysia, Faculty of Engineering
1		Radia Lampar, Walaysia, Facally of Engineering



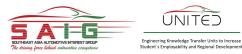


8:45 –	13:45 –	University business cooperation from the industry perspective –
9:30	14:30	Panel Discussion
		Hisham Razuli Halim
		Head of Engineering, DreamEDGE Sdn Bhd, Selangor, Malaysia
		Phichai Opaskiatikul
		Executive Assistant to CEO, Atipong Motor Company Limited, Udon
		Thani, Thailand
		Pipat Tangsiripaisan
		Chief Engineer, Urban Mobility Tech Co. Ltd., Bangkok, Thailand
		Moderators:
		Thomas Esch
		Professor, FH Aachen University of Applied Sciences, Aachen,
		Germany
		Nuksit Noomwongs
		Assistant Professor, Chulalongkorn University, Bangkok, Thailand,
		Department of Mechanical Engineering
9:30 -	14:30 -	Coffee Break
9:35	14:35	
Moderatior	n/Session c	hair: I Nyoman Suprapta Winaya, Udayana University, Bali, Indonesia
9:35 -	14:35 -	Keynote "Achieving the autonomous driving in future mobility:
9.33 – 10:15	14.35 -	Thailand's perspective"
10.15	15.15	
		Dr. Pasan Kulvanit
		Department of Science Service, Thailand's Ministry of Higher
		Education, Science, Research, and Innovation
10:15 -	15:15 –	Scientific Session "Vehicle Dynamics"
11:35	16:35	

11:35 –	16:35 –	Coffee Break
11:40	16:40	
Moderation	n / Session	chair: Himsar Ambarita, Universitas Sumatera Utara, Indonesia
11:40-	16:40 -	Keynote "CO ₂ -neutral powertrains"
12:20	17:20	
		Ing. Dr. Ralf Marquard
		Managing Director, LHP Europe GmbH, Cologne, Germany
12:20 –	17:20 –	Scientific Session "Alternative/sustainable powertrain"
13:40	18:40	
13:40 -	18:40 -	Evaluation and summary of the first day of the conference
13:50	18:50	
		Witaya Wannasuphoprasit
		Conference Chair, Associate Professor, Chulalongkorn University,
		Bangkok, Thailand, International School of Engineering, Faculty of
		Engineering

1st UNITED-SAIG International Conference 21-22 APR 2021

Chulalongkorn University, Thailand





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

Γ





	on/Session cl	nair: ChonlateePhotong, Mahasarakham University, Mahasarakham,
Thailand	14.40	Versete (Detrofitting electric relation The ULDA income
9:40 -	14:40 -	Keynote "Retrofitting electric vehicle: The IIUM journey –
10:20	15:20	achievements, challenges and moving forward"
		Assoc. Prof. Dr. Sany Izan Ihsan
		Dean of the Kulliyyah of Engineering, International Islamic University
		Malaysia (IIUM), Selangor, Malaysia
10:20 -	15:20 -	Scientific Session "New business models and automotive
11:40	16:40	Evaluations"
11:40 -	16:40 -	Coffee Break
11:45	16:45	
	-	nair: Muhd Ridzuan Mansor, Universiti Teknikal Malaysia Melaka,
Melaka, M	-	
11:45 -	16:45 -	Keynote "Challenge in the transport industry in Europe towards CO ₂
12:25	17:25	emission"
		Prof. DI Dr. Josef Affenzeller
		Director of Research Coordination, AVL List GmbH, Graz, Austria
12:25 –	17:25 –	Scientific Session "Materials"
14:05	19:05	
14:05 -	19:05 –	Evaluation and closing remarks of the conference
14:15	19:15	
		Witaya Wannasuphoprasit
		Conference Chair, Associate Professor, Chulalongkorn University,
		Bangkok, Thailand, International School of Engineering, Faculty of
		Engineering

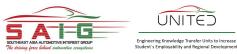




SCIENTIFIC SESSIONS DAY 1

Scientific Se	ssion 1: "Veł	nicle dynamics", 21 April 2021
CEST	ITC	
10:15 –	15:15 –	SCENARIO BASED SIMULATION TESTING OF AUTONOMOUS VEHICLE
10:35	15:35	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
		University of Nottingham, Malaysia
		Delft University of Technology, Netherlands
10:35 –	15:35 –	DYNAMIC BEHAVIOR OF VEHICLE ON TURNING DIRECTION USING
10:55	15:55	FOUR-WHEELS-STEERING SYSTEM WITH SIDE-SLIP CONTROL
		I.D.G Ary Subagia
		Udayana University, Indonesia
10:55 –	15:55 –	Evaluation of Aerodynamics Package for FSAE race car
11:15	16:15	Pawin Bongkochmas and Worakorn Sasijulaka
		Chulalongkorn University, Thailand
11:15 –	16:15 –	SHUTDOWN CIRCUIT AND SYSTEMS
11:35	16:35	Worakorn Sasijulaka, Kittiphat Pinthong, Pawin Bongkochmas and
		Nopdanai Ajavakom
		Chulalongkorn University, Thailand

Scientific Se	ession 2: "Alt	ernative/sustainable powertrain" 21 April 2021
CEST	ІТС	
12:20 -	17:20 -	Thermal Management of Electric Vehicle Battery Module-based Heat
12:40	17:40	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
		Udayana University, Indonesia
12:40 -	17:40 -	Thermal Management Of Electric Vehicle Batteries With Heat Pipe-
13:00	18:00	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
		Udayana University, Indonesia
13:00 -	18:00 -	Characteristics of gas fuel from pyrolysis of sunan candlenut
13:20	18:20	oilcake in various bed materials
		IM Rajendra, INS Winaya, A Ghurri, and IKG Wirawan
		Udayana University, Indonesia
13:20 –	18:20 –	CONDENSATE OIL YEILD FROM FIXED BED PYROLYSIS USING
13:40	18:40	REUTEALIS TRISPERMAGAR WASTE FUEL
		I N. Suprapta Winaya, I W. Widana, I M Rajendra, I M. Panji Prakasa
		Udayana University, Indonesia



SCIENTIFIC SESSIONS DAY 2

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

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