

## SCIENTIFIC PROGRAM

Day 1 : Thursday, 4 August 2022				
8:30 a.m.–9:00 a.m.	Conference Registration at <a href="https://www.ri2c-2022.com/home.aspx">https://www.ri2c-2022.com/home.aspx</a>			
9:00 a.m.–9:15 a.m.	General Introduction of RI <sup>2</sup> C 2022 Greeting and Welcoming by Master of Ceremony (MC)			
9:15 a.m.–9:30 a.m.	Opening Session: - Welcome & Report by Conference Chair: Professor Somrerk Chandra-Ambhon Vice President for Research and Technology Development of KMUTNB - Opening Remarks by President of KMUTNB: Professor Suchart Siengchin			
9:30 a.m.–9:35 a.m.	Greeting to Keynote session by Master of Ceremony (MC)			
9:35 a.m.–10:40 a.m.	<b>Keynote Speaker I : Dr. Sadayuki Sato</b> Director Engineering Division of YASKAWA ELECTRICS (THAILAND) CO., LTD. <b>Topic :</b> Trend of research and development on inverter drive technology "Power electronics and Motor control"			
10:40 a.m.–11:45 a.m.	<b>Keynote Speaker II : Prof.Dr. Surin Khomfoi</b> King Mongkut's Institute of Technology Ladkrabang, Thailand <b>Topic:</b> Thailand EV Infrastructure: Are we ready?			
11:45 a.m.–11:50 a.m.	General Introduction : Guidelines for Presenters			
11:50 a.m.–12:55 p.m.	<b>Lunch Break</b>			
12:55 p.m.–1:00 p.m.	Welcoming by Master of Ceremony (MC)			
1:00 p.m.–2:05 p.m.	<b>Keynote Speaker III : Prof.Dr.-Ing. Edmund Haberstroh</b> RWTH Aachen University, Germany <b>Topic:</b> Trends in Rubber and Plastics Manufacturing Technology			
2:05 p.m.–3:10 p.m.	<b>Keynote Speaker IV : Prof.Dr. Sakdirat Kaewunruen</b> University of Birmingham, UK <b>Topic:</b> Railway research and innovation for global challenges, and the benchmarking for excellence			
3:10 p.m.–3:15 p.m.	General Introduction : Guidelines for Presenters			
3:15 p.m.–5:15 p.m.	<b>Parallel sessions (4 rooms)</b>			
	<b>Room I</b> Innovative Sustainable Sciences (iSS)	<b>Room II</b> Innovative Materials Engineering (iME)	<b>Room III</b> Special session : IEEE-CIS Thailand Chapter	<b>Room IV</b> Innovative Electricals and Electronics (iEE)
	iss2022-01	ime-2022-05	1570815429	1570811062
	iss2022-08	ime-2022-06	1570815491	1570811064
	iss2022-12	ime-2022-11	1570811573	1570811065
	iss2022-19	ime-2022-13	1570813291	1570811732
	iss2022-02	ime-2022-25	1570816179	1570811733
iss2022-09	ime-2022-04	1570825947	1570818218	
iss2022-10			1570818368	
			1570818261	

## Room I

Session : Innovative Sustainable Sciences (iSS)			
Chairman : Malinee Sriariyanun			
Co-Chairman : Elizabeth Jayex Panakkal			
Secretary : Nichaphat Kitiborwornnkul			
Time	Paper ID	Title	Authors
3:15-3:30 p.m.	iss2022-01	Lead(Pb <sup>2+</sup> ) Removal in Water Using Different Forms of Spent Arabica Coffee Grounds at Varying Contact	Jennifer Bandao-Antonio, Giovanni Malapit, John Paul Mendoza, Joe Randel Valdez
3:30-3:45 p.m.	iss2022-08	Carbon Footprint Analysis of the Cultivated Banana Cultivation in Prachinburi Province, Thailand	Chalita Suwan, Thanutyot Somjai
3:45-4:00 p.m.	iss2022-12	The impact of light intensity and wavelength on the performance of algal-bacterial culture treating domestic wastewater	Keerthi Katam, Rishika Ananthula, Sushmitha Anumala, Malinee Sriariyanun, Debraj Bhattacharyya
4:00-4:15 p.m.	iss2022-19	Identification of bacterial species from healthy wood of <i>Aquilaria crassna</i> using colony PCR	Vanarat Phakeenuya, Bowonlak Phetsri, Thidarat Khunsuksaen, Malinee Sriariyanun, Weeradej Meeinkuirt, Theerawut Phusantisampan
4:15-4:30 p.m.	iss2022-02	A comparative study of pH and temperature on rheological behaviour between Polyacrylamide (PAM) and it modified PAM	Jin Kwei Koh, Chin Wei Lai, Mohd Rafie Johan, Sanjay Mavinkere Rangappa, Suchart Siengchin
4:30-4:45 p.m.	iss2022-09	Improving the mechanical properties of jute fiber woven mat reinforced epoxy composites with addition of Zine oxide filler	T.P. Sathishkumar, L. Rajeshkumar, G. Rajeshkumar, M. R. Sanjay, Suchart Siengchin, P.Navaneethakrishana
4:45-5:00 p.m.	iss2022-10	Study of the Titanium Dioxide Nanoparticles Used as UV absorber on Natural Herbal Extract Sunscreen Products	Supamas Wirunchit, Natchayaporn Sakulpeeb, Wantana Koetniyom

## Room II

<b>Innovative Materials Engineering (iME)</b>			
<b>Chairman : Sanjay Mavinkere Rangappa</b>			
<b>Co-Chairman : Wanlop Kitisatorn</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
3:15-3:30 p.m.	ime-2022-05	EFFECT OF FIBER ORIENTATION ON PHYSICAL AND MECHANICAL PROPERTIES OF TYPHA ANGUSTIFOLIA NATURAL FIBER REINFORCED COMPOSITES	L. Rajeshkumar, T.P. Sathishkumar, G. Rajeshkumar, V. Bhuvaneswari, M.R. Sanjay, Suchart Siengchin
3:30-3:45 p.m.	ime-2022-06	Effect of nano-clay addition on the chemically treated phoenix sp. fiber based epoxy composites	G.Rajeshkumar, M. Karthick, A.K. Aseel Ahmed, T.P. Sathishkumar, L. Rajeshkumar, M.R Sanjay, Suchart Siengchin
3:45-4:00 p.m.	ime-2022-11	Insights into the effects of alkaline treatment and soaking duration on the properties of pterocarpus angolensis (mukwa) wood fibers	K. Setswalo, O.P. Oladijo, M. Namoshe, S. Siengchin, M.R. Sanjay
4:00-4:15 p.m.	ime-2022-13	Overview of Natural Fiber: Manufacturing Process and Application	S.S. Oladijo, M.R. Sanjay, O.P. Oladijo, S. Siengchin, E.T. Akinlabi
4:15-4:30 p.m.	ime-2022-25	UV-Blocking Properties of Carboxymethyl Cellulose Film Integrated with Oolong Tea Extracts as Eco-friendly Packaging Film	Nanticha Danmatam, Wanwipa Nakburee, Datchanee Pattavarakorn
4:30-4:45 p.m.	ime-2022-04	Effect of Copper Oxide Nanoparticles on Morphological and Crystalline properties of Bacterial Nanocellulose Composite Foam	Jibril Maulana, Heru Suryanto, Aminnudin, J.S. Binoj, M.R. Sanjay, Suchart Siengchin

### Room III

<b>Special session : IEEE-CIS Thailand Chapter</b>			
<b>Chairman : Maleerat Maliyam</b>			
<b>Co-Chairman : Saranlita Chotirat</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
3:15-3:30 p.m.	1570815429	Automatic Text Summarization of COVID-19 Scientific Research Topics Using Pre-trained Model from HuggingFace	Sakdipat Ontoum, Jonathan H. Chan
3:30-3:45 p.m.	1570815491	Question Classification from Thai Sentences by Considering Word Context to Question Generation	Saranlita Chotirat, Phayung Meesad, Herwig Unger
3:45-4:00 p.m.	1570811573	The Design of a Deep Learning Model to Classify Passion Fruit for the Ageing Society	Akksatcha Duangsuphasin, Athakorn Kengpol
4:00-4:15 p.m.	1570813291	Krathu-500: Post-Comments Thai Corpus	Pittawat Taveekitworachai, Jonathan H. Chan
4:15-4:30 p.m.	1570816179	A Comparative Study of Short Text Classification Methods for Bug Report Type Identification	Jantima Polpinij, Manasawee Kaenampornpan, Bancha Luaphol
4:30-4:45 p.m.	1570825947	A Natural Language Processing and Machine Learning-Based Framework to Automatically Identify Cyberbullying and Hate Speech in Real-Time	Samyak Shrimali

## **Room IV**

<b>Innovative Electricals and Electronics (iEE)</b>			
<b>Chairman : Matheepot Phattanasak</b>			
<b>Time</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
3:15-3:30 p.m.	1570811062	Scientific story for educational purpose case study: photovoltaic panel	Parham Karimi, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak
3:30-3:45 p.m.	1570811064	Creative educational approach: System implementation using MATLAB/Simulink	Parham Karimi, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak
3:45-4:00 p.m.	1570811065	Teaching the snowball effect on polymer electrolyte fuel cells through visual abstract	Farinaz Nemati, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak
4:00-4:15 p.m.	1570811732	One-loop sensorless flatness-based method for a nonideal boost converter	Zohreh Shahrouei, Mahsa Rahmati, Matheepot Phattanasak, Roghayeh Gavagsaz-Ghoachani, Serge Pierfederici
4:15-4:30 p.m.	1570811733	A three-level converter for supercapacitor in electric vehicles	Zohreh Shahrouei, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak, Serge Pierfederici
4:30-4:45 p.m.	1570818218	Study and teach different operational areas of a converter using an experimental short video	Mohammad Afkar, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak
4:45-5:00 p.m.	1570818368	A review of the factors affecting the utilization of solar photovoltaic panels	Maryam Rezvani, Aslan Gholami, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak, Majid Zandi
5:00-5:15 p.m.	1570818261	Optimal Control of Grid Connected Electric Railways to Mitigate Low Frequency Oscillations	Prasenjit Dey, Chaiyut Sumpavakup, Phumin Kirawanich