

SCIENTIFIC PROGRAM

Day 1 : Thursday, 4 August 2022

8:30 a.m.–9:00 a.m.	Conference Registration at https://www.ri2c-2022.com/home.aspx			
9:00 a.m.–9:15 a.m.	General Introduction of RI ² 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.	Keynote Speaker I : Dr. Sadayuki Sato Director Engineering Division of YASKAWA ELECTRICS (THAILAND) CO., LTD. Topic : Trend of research and development on inverter drive technology "Power electronics and Motor control"			
10:40 a.m.–11:45 a.m.	Keynote Speaker II : Prof.Dr. Surin Khomfoi King Mongkut's Institute of Technology Ladkrabang, Thailand Topic: 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.	Lunch Break			
12:55 p.m.–1:00 p.m.	Welcoming by Master of Ceremony (MC)			
1:00 p.m.–2:05 p.m.	Keynote Speaker III : Prof.Dr.-Ing. Edmund Haberstroh RWTH Aachen University, Germany Topic: Trends in Rubber and Plastics Manufacturing Technology			
2:05 p.m.–3:10 p.m.	Keynote Speaker IV : Prof.Dr. Sakdirat Kaewunruen University of Birmingham, UK Topic: 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.	Parallel sessions (4 rooms)			
	Room I Innovative Sustainable Sciences (iSS)	Room II Innovative Materials Engineering (iME)	Room III Special session : IEEE-CIS Thailand Chapter	Room IV 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 ²⁺) 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

Innovative Materials Engineering (iME)			
Chairman : Sanjay Mavinkere Rangappa			
Co-Chairman : Wanlop Kitisatorn			
Time	Paper ID	Title	Authors
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

Special session : IEEE-CIS Thailand Chapter			
Chairman : Maleerat Maliyam			
Co-Chairman : Saranlita Chotirat			
Time	Paper ID	Title	Authors
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

Innovative Electricals and Electronics (iEE)			
Chairman : Matheepot Phattanasak			
Time	Paper ID	Title	Authors
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

SCIENTIFIC PROGRAM

Day 2 : Friday, 5 August 2022					
8:30 a.m.– 9:00 a.m.	Conference Registration at https://www.ri2c-2022.com/home.aspx				
9:00 a.m.– 10:30 a.m.	Parallel sessions (5 rooms)				
	Room I Innovative Sustainable Sciences (iSS)	Room II Innovative Materials Engineering (iME)	Room III Innovative Electricals and Electronics (iEE)	Room IV Innovative Electricals and Electronics (iEE)	Room V Innovative Electricals and Electronics (iEE)
	iss2022-25	ime-2022-02	1570816358	1570816244	1570811088
	iss2022-26	ime-2022-03	1570818233	1570816248	1570811574
	iss2022-21	ime-2022-10	1570815717	1570815520	1570810809
	iss2022-22	ime-2022-14	1570816558	1570815708	1570810811
	iss2022-20	ime-2022-18	1570816676	1570816344	1570816224
iss2022-03	ime-2022-22	1570816692	1570816634		
10:30 a.m.– 10:35 a.m.	Break				
10:35 a.m.– 12:05 p.m.	Room I Innovative Sustainable Sciences (iSS)	Room II Innovative Materials Engineering (iME)	Room III Innovative Electricals and Electronics (iEE)	Room IV Innovative Electricals and Electronics (iEE)	Room V Innovative Electricals and Electronics (iEE)
	iss2022-11	ime-2022-26	1570818296	1570814887	1570816578
	iss2022-27	ime-2022-27	1570815692	1570816020	1570816261
	iss2022-04	ime-2022-28	1570816702	1570816605	1570811807
	iss2022-05	ime-2022-31	1570818140	1570817956	1570818378
	iss2022-07		1570811277	1570818740	1570818384
	iss2022-24		1570811724	1570814035	1570818422
12.05 p.m.– 1.00 p.m.	Lunch Break				
1.00 p.m.– 2.45 p.m.	Parallel sessions (5 rooms)				
	Room I Innovative Sustainable Sciences (iSS)	Room II Innovative Materials Engineering (iME)	Room III Innovative Electricals and Electronics (iEE)	Room IV Innovative Electricals and Electronics (iEE)	Room V Innovative Electricals and Electronics (iEE)
	iss2022-13	ime-2022-16	1570818287	1570815488	1570816022
	iss2022-14	ime-2022-17	1570818399	1570815505	1570816687
	iss2022-15	ime-2022-24	1570826289	1570816050	1570826308
	iss2022-16	ime-2022-19	1570826309	1570816715	1570817709
	iss2022-17	ime-2022-20	1570827572	1570817991	1570816650
iss2022-18	ime-2022-30	1570818025	1570813461	1570816612	
iss2022-23			1570813675	1570816611	
2.45 p.m.– 2.50 p.m.	Break				
2.50 p.m.– 4.05 p.m.	Room I Innovative Materials Engineering (iME)	Room II Innovative Materials Engineering (iME)	Room III Innovative Electricals and Electronics (iEE)	Room IV Innovative Electricals and Electronics (iEE)	Room V Innovative Electricals and Electronics (iEE)
	Close	ime-2022-01 ime-2022-07 ime-2022-12 ime-2022-21 ime-2022-23	Close	Close	Close

Room I

Session : Innovative Sustainable Sciences (iSS)			
Chairman : Malinee Sririyanun			
Co-Chairman : Prapakorn Tantayotai			
Secretary : Nichaphat Kitiborwornnkul			
Time	Paper ID	Title	Authors
9:00-9:15 a.m.	iss2022-25	Formation of Thermal Oxide Scale and Its Adhesion to Hot Rolled Low Carbon Steels with Different Final Strip Thicknesses	Sun Naipinij, Sasapan Sukieum, Ravinupha Namprai, Thanasak Nilsonthi
9:15-9:30 a.m.	iss2022-26	Combined effect of inorganic salt and ionic liquid in pretreatment on enzymatic saccharification of rice straw	Diana Jose, Neelu Raina, Keerthi Katam, Wawat Rodiahwati, Rajagopal Deepakkumar, Malinee Sririyanun
9:30-9:45 a.m.	iss2022-21	Trends in harnessing energy from waste biomass: pathways & future potential	Neelu Raina, Malinee Sririyanun, Atin Kumar Pathak, Garima Slathia, Himanshu Saraswat
9:45-10:00 a.m.	iss2022-22	Effects of oxygen and water vapour on adhesion of scales grown on ferritic stainless steels in solid oxide fuel cells	Thanasak Nilsonthi
10:00-10:15 a.m.	iss2022-20	Dilute Inorganic Acid Pretreatment of Mixed Residues of Cocos nucifera (Coconut) for recovery of reducing sugar Optimization studies	Martin Gundupalli Paulraj, Malinee Sririyanun, Debraj Bhattacharyya
10:15-10:30 a.m.	iss2022-03	A comparative study of the anticorrosive response of Tinospora cordifolia stem extract for Al and Cu in biodiesel based fuels	Kumar Amgain, Bhesh Nath Subedi, Susan Joshi, Jagadeesh Bhattarai
Break 10:30-10:35 a.m.			
10:35-10:50 a.m.	iss2022-11	N and S Dual-Doped Mesoporous Carbon Nanostructure as a High Performance and Durable Metal Free Oxygen Reduction Reaction Electrocatalyst	Apichat Saejio, Nattawan Pitipuech, Kultida Kongpunyo, Nutsuda Buntao, Kittimaporn Nernprom, Khemika Boonkor, Kitisak Wichienwat, Noppavan Chanunpanich, Narong Chanlek, Sangaraju Shanmugam, Kriangsak Ketpang
10:50-11:05 a.m.	iss2022-27	Understanding the performance degradation and recovery of passive direct ethanol fuel cell	Panuwat Ekdharmasuit, Jiratchaya Sapkitjakarn, Phuritutphong Sangwanangkool
11:05-11:20 a.m.	iss2022-04	Effective Solvents for Proteins Recovery from Microalgae	Pau Loke Show, Kit Wayne Chew, Kuan Shiong Khoo, Atthasit Tawai
11:20-11:35 a.m.	iss2022-05	Pasting Property of Jasmine Rice Flour, Quality, and Sensory Evaluation of Gluten-Free Rice Penne as Affected by Protein and Hydrocolloid Addition	Pakkawat Detchewa, Viboon Pongkanpai, Chutamas Maneewong, Chanthima Phungamngoan, Anuchita Moongngarm
11:35-11:50 a.m.	iss2022-07	The application of an analytic network process to select vegetarian food for chronic disease patients	Wilaitip Punyota, Athakorn Kengpol, Preecha Rungsaksangmanee
11:50 a.m.-12:05 p.m.	iss2022-24	The development model of consumer behavior's decision support system on healthy beverage for elderly Chinese tourists	Thanyathip Pichitkarnkar, Athakorn Kengpol
Lunch Break 12:05-1:00 p.m.			

Session : Innovative Sustainable Sciences (ISS)

Chairman : Babu Dharmalingam

Co-Chairman : Elizabeth Jayex Panakkal

Secretary : Nichaphat Kitiborwornkul

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	iss2022-13	Effect of pepsin on antioxidant and antibacterial activity of protein hydrolysate from salted jellyfish (<i>Lobonema smithii</i> and <i>Rhopilema hispidum</i>) by-products	Pratchaya Muangrod, Wiriya Charoenchokpanich, Sittiruk Roytrakul, Vilai Rungsardthong, Savitri Vatanyoopaisarn, Sawanya Charoenlappanit, Benjamaporn Wonganu, Benjawan Thumthanaruk
1:15-1:30 p.m.	iss2022-14	Influence of extraction times on physical and functional properties of gelatin from salted jellyfish by-products	Wiriya Charoenchokpanich, Pratchaya Muangrod, Sittiruk Roytrakul, Vilai Rungsardthong, Savitri Vatanyoopaisarn, Benjamaporn Wonganu, Benjawan Thumthanaruk
1:30-1:45 p.m.	iss2022-15	A comparative study of conventional and supercritical carbon dioxide extraction methods for the recovery of bioactive compound from Lion's Mane mushroom (<i>Hericium erinaceus</i>)	Pinida Joradon, Vilai Rungsardthong, Uracha Ruktanonchai, Khomson Suttisintong, Tawin Iempridee, Benjawan Thumthanaruk, Savitri Vatanyoopaisarn, Dutsadee Uttapap
1:45-2:00 p.m.	iss2022-16	Bioactive compounds and antioxidant activity of Lion's Mane mushroom (<i>Hericium erinaceus</i>) from different growth period	Nattapat Tachabajarong, Vilai Rungsardthong, Uracha Ruktanonchi, Somrerk Poodchakarn, Benjawan Thumthanaruk, Savitri Vatanyoopaisarn, Khomson Suttisintong, Tawin Iempridee, Dudsadee Uttapap
2:00-2:15 p.m.	iss2022-17	Investigation of Low-cost media for <i>Bacillus thuringiensis</i> subspecies israelensis	Phuwana Mo-on, Siriwan Panprivech, Viyada Kunathigan
2:15-2:30 p.m.	iss2022-18	Optimization of Microwave-Assisted Extraction of Palm Kernel Cake Protein	Thanida Tungchaisin, Sudathip Sae-Tan, Kittipong Rattanaporn
2:30-2:45 p.m.	iss2022-23	Paddy straw: an economical substrate for oyster mushroom (<i>Pleurotus ostreatus</i>) cultivation	Anne Sahithi Somavarapu Thomas, Sona A., Vinodhini Shanmugam, Marttin Paulraj Gundupalli, Malinee Sriariyanun

Room II

Innovative Materials Engineering (IME)			
Chairman : Thamrongsin Siripongsakul			
Co-Chairman : Thammaporn Thublaor			
Time	Paper ID	Title	Authors
9:00-9:15 a.m.	ime-2022-02	Cohesive Energy and Grain Boundary Energy of Aluminium, Copper and its alloys: A Molecular Approach	Aditya Kataria, Akarsh Verma, Sachin Sharma, M.R. Sanjay, Suchart Siengchin
9:15-9:30 a.m.	ime-2022-03	Effect of Copper on Formation and Adhesion of Low Carbon Hot-rolled Steel Strips	Akanut Chuenphirom, Ritthiya Kulkiatanant, Nuttanon Wattanachewanopakorn, Jatupath Libngmalard, Thanapat Seangrattanachaikul, Jutaprat Phetcharak, Thanasak Nilsonthi
9:30-9:45 a.m.	ime-2022-10	High temperature degradation of AISI 304L stainless steel in atmospheres containing CO of biomass to liquid plants at 800 °C	Suwijak Pokwitidkul, Paweena Treewiriyakitja, Penpisth Thongyoung , Nuntawat Kiatisereekul, Noparat Kanjanaprayut, Jennarong Tungtrongpairoj
9:45-10:00 a.m.	ime-2022-14	Polar effective plastic strain -forming limit diagram of DP 440 steel sheet with application to two-step forming test	Chutwin Amree, Sansot Panich, Tanakorn Jantarasricha
10:00-10:15 a.m.	ime-2022-18	Stacking fault, vacancy formation and interstitial formation energies of Copper, Aluminium and alloys: A molecular approach	Himanshu Parashar, Aditya Kataria, Akarsh Verma, Sachin Sharma, M.R. Sanjay, Suchart Siengchin
10:15-10:30 a.m.	ime-2022-22	The Factors of Alloying Elements on Corrosion Resistance of Aluminum Alloys	Wichawon Lowroongroj, Rungsinee Canyook
Break 10:30-10:35 a.m.			
10:35-10:50 a.m.	ime-2022-26	Adhesion of Thermal Oxide Scales on Hot-Rolled Steels with 0.026 and 0.193 wt.% Si in Ar-20%H ₂ O at 900°C	Wannapha Issaard, Thanasak Nilsonthi
10:50-11:05 a.m.	ime-2022-27	High-temperature corrosion behavior of carbon steel subjected to simulated combustion atmosphere	Piyorose Promdirek, Mack Boonpensina
11:05-11:20 a.m.	ime-2022-28	Optimization of a Finite Element Analysis Methodology for predicting the rolling contact fatigue of steels used for APM guide wheel	Ekkarin Phongphinitana, Chaiyut Sumpavakup, Piyorose Promdirek
11:20-11:35 a.m.	ime-2022-31	Recycled poly(ethylene terephthalate) for Membrane Material in Membrane Bioreactor	Pornlada Pongmuksuwana and Wanlop Kitisatorn
Lunch Break 11:35-1:00: p.m.			

Innovative Materials Engineering (iME)			
Chairman : Wanlop Kitisatorn			
Time	Paper ID	Title	Authors
1:00-1:15 p.m.	ime-2022-16	Probability-based prediction of service life and energy-use due to silane-based treatment on chloride-exposed concrete structures	Aruz Petcherdchoo
1:15-1:30 p.m.	ime-2022-17	Review on Effect of Graphene Reinforcement on Properties of Cement Concrete	P.M. Walunjar, M.N. Bajad
1:30-1:45 p.m.	ime-2022-24	Time-dependent chloride transport models for cracked concrete bridge decks under chloride attack	Aruz Petcherdchoo, Koonnamas Punthutaecha
1:45-2:00 p.m.	ime-2022-19	Study influence of honeycomb structural parameters on impact force responses using reduced order modelling	Kamonchanok Hirunwat, Julaluk Carmai
2:00-2:15 p.m.	ime-2022-20	Study on using waste tires to control crash pulse of sled test	C. Ngiamngamri, S. Chanthanumataporn
2:15-2:30 p.m.	ime-2022-30	Reverse Engineering of brake block design for rolling stock	Sathaphon Wangchai, Piyorose Promdirek, Chanchai Techawatcharapaikul
Break 2:30-2:50 p.m.			
2:50-3:05 p.m.	ime-2022-01	Chitosan oligomer and monomer (COAMs) benefit and its application in innovative organic method for root rot disease treatment in durian crops	Pakpoom Vatcharakajon, Khuanjarat Choengpanya, Chantana Susawaengsup, Rapeephun Dangtungee
3:05-3:20 p.m.	ime-2022-07	Effects of acid concentrations and acid treatment time on structural and textural characteristics of mesoporous zeolite 13X	Punyanich Intharapat, Supak Tontisirin, Chantaraporn Phalakornkule
3:20-3:35 p.m.	ime-2022-12	Optimization of microwave-assisted hydrodistillation of essential oils from fennel seeds	Sirinat Noyraksa, Kittisak Wichianwat, Sirinya punpuk, Supakorn Aiemyeesun, Jakkrawut Maitip, Panawan Suttiarporn
3:35-3:50 p.m.	ime-2022-21	The effects of solvent-based ultrasonic-assisted extraction bioactive compounds and antioxidant activities from pigmented rice bran	Wasitthi Bunmusik, Panawan Suttiarporn, Thitawan Phankaew, Pasin Thitisut, Thidaporn Seangwattana
3:50-4:05 p.m.	ime-2022-23	The Solubility Profile of Oxyresveratrol	Chutatip Tongped, Pawanrat Thonkham, Nisalak Trongsirawat

Room III

Session : Innovative Electricals and Electronics (iEE)

Chairman : Wanwisa Thaiwirot

Time	Paper ID	Title	Authors
9:00-9:15 a.m.	1570816358	Metal Crack Detection with Chipless RFID Sensor using Shot-Time Matrix Pencil Method	Nattawat Chantasen, Nattakarn Shutimarrungson, Akkarat Boonpoonga, Prayoot Akkaraekthalin
9:15-9:30 a.m.	1570818233	Simple Chipless RFID Sensor for Metal Crack Detection Using Shot-Time Matrix Pencil Method	Nattawat Chantasen, Nattakarn Shutimarrungson, Akkarat Boonpoonga, Prayoot Akkaraekthalin
9:30-9:45 a.m.	1570815717	A Plastic Based Electrowetting on Dielectric Microchip Integrate with Electrochemical Sensor by Screen Printing	Triwit Plurksasukkaseam, Kessarat Ugsornrat, Adisorn Tuantranont
9:45-10:00 a.m.	1570816558	A Compact Label-Typed L-Shaped Slot UHF RFID Tag Antenna Mountable on Metallic Cans	Kittima Lertsakwimarn, Rattapong Suwalak
10:00-10:15 a.m.	1570816676	Antipodal Vivaldi Antenna with Dielectric Lens for Biomedical Imaging Applications	Wanwisa Thaiwirot, Dechawat Kamoldej, Phongsapuk Detchporn, Preecha Thongdit, Shalermchon Tangwachirapan
10:15-10:30 a.m.	1570816692	Breast Cancer Detection Based Microwave Imaging Using Single Antipodal Vivaldi Antenna	Wanwisa Thaiwirot, Shalermchon Tangwachirapan, Panupong Sawangsri, Pitchvara Pinitkiatisakul, Preecha Thongdit

Break 10:30-10:35 a.m.

Session : Innovative Electricals and Electronics (iEE)

Chairman : Pongsathorn Chomdee

Time	Paper ID	Title	Authors
10:35-10:50 a.m.	1570818296	IoT, AI and Digital Twin For Smart Campus	Tanapeak Pexyeen
10:50-11:05 a.m.	1570815692	Microcontroller and Internet of Things Application for Smart Restroom	Jirawat Thaenthong, Varinthon Kwanjun, Phimsai Charoensuk
11:05-11:20 a.m.	1570816702	Automated vehicle access and exit control: a smart parking management system using finite state machine in VHDL	Md. Nazmush Shakib Shahi, Sheikh Samit Muhaimin, Mirza Muntasir Nishat and Fahim Faisal, Mohammad Saifullah Bin Motahar
11:20-11:35 a.m.	1570818140	Identity-Based Key Agreement Algorithm for Smart Meter Technology to ensure Anonymity	Mohammad Sahinur Hossen, Ahshanul Haque, Md Naseef-Ur-Rahman Chowdhury
11:35-11:50 a.m.	1570811277	Intelligent Composable Education System	Phisit Pornpongtechavanich
11:50 a.m.- 12:05 p.m.	1570811724	Remote Laboratory Management Platform	Oraphan Amnuaysin

Lunch Break 12:05-1:00: p.m.

Session : Innovative Electricals and Electronics (iEE)

Chairman : Titipong Lertwiriayaprapa

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	1570818287	Radiation Pattern Measurements of Small Antennas Using Spherical Near-field Measurement Technique	Kittisak Phaebua, Titipong Lertwiriayaprapa, Danai Torrungrueng, Kittima Lertsakwimarn, Kitiphon Sukpreecha
1:15-1:30 p.m.	1570818399	Truncation Error Study in Cylindrical Near-field Measurement Technique	Kittisak Phaebua, Akkarat Boonpoonga, Titipong Lertwiriayaprapa, Danai Torrungrueng
1:30-1:45 p.m.	1570826289	Active Pre-Equalizer for Broadband Optical Wireless Communication Integrated with RF Amplifier	Kamol Boonlom, Rungrat Viratikul, Panuwat Janpugdee, Jessada Konpung, Ian Robertson, Tim Amsdon, Nutapong Somjit
1:45-2:00 p.m.	1570826309	A Square Patch Partially Reflective Surface for Improving the Antenna Gain Characteristic of Low-Cost Dual Polarized Microstrip Antenna	Patchadaporn Sangpet, Sukanya Chudpooti, Nonchanutt Chudpooti, Prayoot Akkaraekthalin, Ian D. Robertson, Nutapong Somjit
2:00-2:15 p.m.	1570827572	An Incorporated 3D-Printed Lens with Square Microstrip Patch Antenna for NaCl Solution Discrimination	Patchadaporn Sangpet, Sukanya Chudpooti, Nonchanutt Chudpooti, Prayoot Akkaraekthalin, Ian D. Robertson, Nutapong Somjit
2:15-2:30 p.m.	1570818025	Low-cost Antenna Polarization Measurement System	Natdanai Phumirin, Kitiphon Sukpreecha, Kittisak Phaebua, Akkarat Boonpoonga, Titipong Lertwiriayaprapa

Room IV

Session : Innovative Electricals and Electronics (iEE)			
Chairman : Tanapon Jentsuttiwetchakul			
Time	Paper ID	Title	Authors
9:00-9:15 a.m.	1570816244	Hyperparameter Tuning in Convolutional Neural Network for Face Touching Activity Recognition using Accelerometer Data	Sakorn Mekruksavanich
9:15-9:30 a.m.	1570816248	Deep Learning Networks for Eating and Drinking Recognition based on Smartwatch Sensors	Sakorn Mekruksavanich
9:30-9:45 a.m.	1570815520	Data Fabric Technique for Sport Statistics to Predict Athlete's Medal Level	Chanita Sattaburuth
9:45-10:00 a.m.	1570815708	Metaverse for Developing Engineering Competency	Junjiraporn Thongprasit, Pallop Piriyasurawong
10:00-10:15 a.m.	1570816344	The Effect of Sensor Placement for Accurate Fall Detection based on Deep Learning Model	Sakorn Mekruksavanich
10:15-10:30 a.m.	1570816634	Classification of Physical Exercise Activity from ECG, PPG and IMU Sensors using Deep Residual Network	Sakorn Mekruksavanich
Break 10:30-10:35 a.m.			
10:35-10:50 a.m.	1570814887	The Evaluation of GUI Design using Questionnaire and Multivariate Testing	Fuangfar Pensiri, Keunho Ryu, Chiranun Kamolsin, Porawat Visutsak
10:50-11:05 a.m.	1570816020	MGGD: R Package for Mixture Generalized Gamma Distribution	Wikanda Phaphan, Thanee Ananitthi, Ibrahim Abdullahi
11:05-11:20 a.m.	1570816605	Thailand Stock Index Forecasting based on Multiple Data Sources Using RNN-LSTM Approach	Pudsadee Boonrawd, Korawat Phonyiam
11:20-11:35 a.m.	1570817956	Blockchain Certificates for Pedigree Management	Suradath Bangnikrai, Akara Prayote
11:35-11:50 a.m.	1570818740	Dominant Meaning with SCVs for Classification Twitter's Hate-Speeches	Yasser Ibrahim, Mohammed Abdel Razek, Nasser El-Sherbeny
11:50 a.m.- 12:05 p.m.	1570814035	Worker Scheduling of Banbury Process using Mathematical Programming: A Tire Manufacturing Company Case Study	Chonnipa Chaihanit, Srisawat Supsomboon, Anan Butrat
Lunch Break 12:05-1:00: p.m.			

Session : Innovative Electricals and Electronics (iEE)

Chairman : Prachyanun Nilsook

Co-Chairman : Panita Wannapiroon

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	1570815488	Intelligent Digital Storytelling Platform	Kawitsara Eambunnapong
1:15-1:30 p.m.	1570815505	Virtual Board Game Platform	Chawin Chukusol
1:30-1:45 p.m.	1570816050	Automatic Data Collection for Ariel Thermographic Inspections of Photovoltaic Modules	Titan Janthori, Benya Lertpornsuksawat, Tamsiri Sapsaman
1:45-2:00 p.m.	1570816715	SUBTAWEE Transportation Management on Mobile Application	Rattapong Suwalak, Nattaphorn Maliwan, Chonlada Maliwan
2:00-2:15 p.m.	1570817991	A Study of a Metaverse Interdisciplinary Learning Community	Thananan Areepong
2:15-2:30 p.m.	1570813461	Object Detection of Pedestrian Crossing Accident Using Deep Convolutional Neural Networks	Anan Yasamorn, Athasit Wongcharoen, Chanin Joochim
2:30-2:45 p.m.	1570813675	Dimensions of Agile Enterprise Architecture	Sirinuch Sararuch, Panita Wannapiroon, Prachyanun Nilsook
2:45-3:00 p.m.	1570813020	Storytelling-Based Teaching and Evaluation Method Through Visualization in Engineering Topics	Aslan Gholami, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak

Room V

Session : Innovative Electricals and Electronics (iEE)

Chairman : Nonchanutt Chudpooti

Time	Paper ID	Title	Authors
9:00-9:15 a.m.	1570811088	A Resistorless Temperature-insensitive Electronically-adjustable Single VDGA-based Voltage-mode Instrumentation Amplifier	Montree Siripruchyanun
9:15-9:30 a.m.	1570811574	Design PI+Approximation 2DOF Digital Control for Improve Response of Interleaved Buck Converter	Satit Mangkalajan
9:30-9:45 a.m.	1570810809	Object Identification and Localization of Visual Explanation for Weapon Detection	Narit Hnoohom
9:45-10:00 a.m.	1570810811	Visual Explanations of ResNet 101 for Blister Package Classification	Narit Hnoohom
10:00-10:15 a.m.	1570816224	Analysis of Wood Collection Site in the Biofuel Supply Chain using Integrated K-means and Rectilinear Minisum Location Model	Kasin Ransikarbum, Sreenath Madathil
Break 10:30-10:35 a.m.			
10:35-10:50 a.m.	1570816578	A Real-Time Unmasked Detection Using SSD-MobileNetV2 on Edge Device for the COVID-19 Pandemic	Maposee Hama, Pudsadee Boonrawd, Siranee Nuchitprasitchai, Orawan Chunhapran, Choopol Phromsuthirak
10:50-11:05 a.m.	1570816261	A Study of Motorcycle riding Characteristics on the wrong direction in Thailand	Pichet Janpla, Saharat Chanthanumataporn, Sitthichok Sitthiracha
11:05-11:20 a.m.	1570811807	Effect of Laser Pulse Overlap using Nanosecond Pulsed Lasers for Paint Removal on AA6061	Phumipat Kittiboonanan, John McWilliams, Polsin Taechamaneesatit, Amarin Ratanavis
11:20-11:35 a.m.	1570818378	Robust adaptive nonlinear control of an onboard charger for plugin hybrid electric vehicle	Usman Masood
11:35-11:50 a.m.	1570818384	Evaluation of Micro-slots Spectrum Sensing under Noise uncertainty and PU Random Access	Kitipoth Wasayangkool, Wilaiporn Lee, Kanabadee Srisomboon
11:50 a.m.- 12:05 p.m.	1570818422	Graph-based Word Clustering Considering the Distance and the Connectivity of a Co-occurrence	Supaporn Simcharoen, Herwig Unger
Lunch Break 12:05-1:00: p.m.			

Session : Innovative Electricals and Electronics (iEE)

Chairman : Pongsarun Boonyopakorn

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	1570816022	CNN based Automatic Detection of Defective Photovoltaic Modules using Aerial Imagery	Pornthep Sarakon, Tamsiri Sapsaman, Benya Lertpornsuksawat, Titan Janthori
1:15-1:30 p.m.	1570816687	A Comparative Study of Deep Convolutional Neural Networks for Car Image Classification	Phuriwat Rasameekunwit, Wutthichai Puangmanee
1:30-1:45 p.m.	1570826308	Scenario Analysis of Key Entropy Loss from Improper Quantization Decision in Wireless Physical-Layer Security	Apirath Limmanee
1:45-2:00 p.m.	1570817709	Generating and Evaluating Text Summarisations using Text-representing Centroids(TRC)	Anirach Mingkhwan, Herwig Unger, Yanakorn Ruamsuk
2:00-2:15 p.m.	1570816650	Optimized Architectural Adaption using a Generic Workflow for Telematics on Harvesters in Asia	Lukas Viebrock, Chayakorn Netramai
2:15-2:30 p.m.	1570816612	Big data Analytics for Pre-Teacher Preparation of Higher Education in Thailand	Montree Chinsomboon, Pallop Piriyasurawong
2:30-2:45 p.m.	1570816611	A Review Intelligent Supply Chains for Asset Management	Denchai Panket, Panita Wannapiroon, Prachyanun Nilsook
2:45-3:00 p.m.	1570818199	A new techno-economic solution to supply energy, decrease the peak and reduce the cost of electricity consumed in the new agricultural structure	Yeganeh Ghandriz, Sara Mahmoodian-Yonesi, Yazdan Alvari, Majid Zandi, Roghayeh Gavagsaz-Ghoachani, Matheepot Phattanasak