

SCIENTIFIC PROGRAM

Day 2 : Friday, 9 August 2024				
Room: Fortune I, II, III	9:00 a.m.–10:30 a.m.	Parallel sessions (3 rooms)		
		Fortune I Innovative Electricals and Electronics (iEE)	Fortune II Innovative Sustainable Sciences (iSS)	Fortune III Innovative Mechanical and Materials (iMM)
		1571033725 1571037801 1571034946 1571039205 1571038326 1571048840	RI2C_2024_Paper_2 RI2C_2024_Paper_16 RI2C_2024_Paper_23 RI2C_2024_Paper_25 RI2C_2024_Paper_33 RI2C_2024_Paper_34	RI2C_2024_Paper_21 RI2C_2024_Paper_13 RI2C_2024_Paper_1 RI2C_2024_Paper_37 RI2C_2024_Paper_22 RI2C_2024_Paper_36
Room: Fortune Gold	10:30 a.m.–10:45 a.m.	Poster Presentation / Coffee Break		
Room: Fortune I, II, III	10:45 a.m.–12:00 p.m.	Fortune I Innovative Electricals and Electronics (iEE)	Fortune II Innovative Sustainable Sciences (iSS)	Fortune III Innovative Mechanical and Materials (iMM)
		1571048846 1571038098 1571058313 1571039433 1571039429	RI2C_2024_Paper_9 RI2C_2024_Paper_52 RI2C_2024_Paper_53 RI2C_2024_Paper_54 RI2C_2024_Paper_55	RI2C_2024_Paper_7 RI2C_2024_Paper_24 RI2C_2024_Paper_30 RI2C_2024_Paper_8
12:00 p.m.–1:00 p.m.		Lunch Break		
Room: Fortune I, II, III	1.00 p.m.–2.00 p.m.	Parallel sessions (3 rooms)		
		Fortune I Innovative Electricals and Electronics (iEE)	Fortune II Innovative Sustainable Sciences (iSS)	Fortune III Innovative Mechanical and Materials (iMM)
		1571039097 1571039169 1571039218 1571039289	RI2C_2024_Paper_19 RI2C_2024_Paper_28 RI2C_2024_Paper_31 RI2C_2024_Paper_40	RI2C_2024_Paper_49 RI2C_2024_Paper_42 RI2C_2024_Paper_56
2.00 p.m.–2.10 p.m.		Break		
Room: Fortune I, II, III	2.10 p.m.–3.55 p.m.	Fortune I Innovative Electricals and Electronics (iEE)	Fortune II Innovative Sustainable Sciences (iSS)	Fortune III Innovative Electricals and Electronics (iEE)
		1571030677 1571031821 1571032975 1571034047 1571034471 1571034656 1571039326	RI2C_2024_Paper_3 RI2C_2024_Paper_32 RI2C_2024_Paper_51	1571034874 1571035045 1571035047 1571038536 1571038538 1571039092 1571039349
Room: Fortune Gold	3:55 p.m.–4:10 p.m.	Coffee Break		

**** Oral Presentation 15 min (12 min presentation + 3 min Q&A) ****

Fortune I

Innovative Electricals and Electronics (iEE)			
Time	Paper ID	Title	Authors
9:00-9:15 a.m.	1571033725	A Development of Transmission Expansion Planning Simulation Tool using Differential Evolution Algorithm	Pichet Sriyanyong, Piyapong Phosrikaew, Wisitchai Duang-Art
9:15-9:30 a.m.	1571037801	Pedagogical Advancements in Power Electronics Laboratory: STEM-Oriented Instructional Tools	Nitchamon Poonnoy, Matheepot Phattanasak
9:30-9:45 a.m.	1571034946	Multi-Value Learning Rate Approach for Indoor Real-Time Localization with Bluetooth Low Energy	Wadeenat Wannasawaskulm, Piyapong Dangkham
9:45-10:00 a.m.	1571039205	Measuring user interface of mental health application with performance metrics	Bagas Wibowo, Paulus Insap Santosa
10:00-10:15 a.m.	1571038326	Screen Printed Graphene Carbon Paste Electrochemical Sensor for Lab on a Chip by Screen Printing	Kessararat Ugsornrat, Anan Saenkhamai, Apichaya Chantaraklud, Triwit Phurksasukkasem, Chanpen Karuwan, Adisorn Tuantranont
10:15-10:30 a.m.	1571048840	Revamping Curriculum Designs in Digital Talent Accelerators for the Modern Technological Landscape	Erwin Halim, Dhana Suvilitta Sie, Gregorius Hansel, Anderes Gui, Dedy Syamsuar, David Sundaram
10:30-10:45 a.m.	Poster Presentation / Coffee Break		
Innovative Electricals and Electronics (iEE)			
Time	Paper ID	Title	Authors
10:45-11:00 a.m.	1571048846	Analysis of SanguPalu Application Success Factor Using the Delone and McLean Model	Dedy Syamsuar, Muhammad Naufal, Jessicania Windari, Erwin Halim
11:00-11:15 a.m.	1571038098	A generative artificial intelligence digital influencer model to be a university goodwill ambassador	Vipusit Piankarnka, Prachyanun Nilsook, Panita Wannapiroon
11:15-11:30 a.m.	1571058313	Bibliometric Analysis of Universal Buddhism Propagation via Metaverse to enhance Buddhist Digital Empathy	Ongart Noth Thammita, Panita Wannapiroon, Prachyanun Nilsook
11:30-11:45 a.m.	1571039433	Design and Implementation of 5G IoT for Retirement Village in Metaverse	Pisit Vanichchanunt, Sirapop Saengthongkam, Natthapong Waichampa, Navy Wuttiananchai, Bancha Janthong, Khatathap Swatdipisal, Vitawat Sittakul, Lunchakorn Wuttisittikulij, Sukritta Paripurana
11:45 a.m. - 12:00 p.m.	1571039429	Application of Homomorphic Encryption for Encrypting and Decrypting Patient Data in Thailand's Healthcare System	Yadzaree Lohlah, Pongsarun Boonyopakorn
12:00-1:00 p.m.	Lunch Break		

Innovative Electricals and Electronics (iEE)			
Time	Paper ID	Title	Authors
1:00-1:15 p.m.	1571039097	Automatic Identification and Counting System of Thrombocytes in Chickens (<i>Gallus domesticus</i>) via Deep Learning	Raveewan Ploypan, Sirawit Subaneg, Ganokwan Gliniam
1:15-1:30 p.m.	1571039169	Evaluating Machine Learning Techniques for DNS Traffic Classification Using Three Publicly Available Datasets	Matee Witawasiri, Pongsarun Boonyopakorn
1:30-1:45 p.m.	1571039218	AI Simulation, IoT, and Digital Twin For Smart Campus	Tanapeak Pexyeen, Kobkiat Saraubon, Prachyanun Nilsook
1:45-2:00 p.m.	1571039289	Developing an Adaptive Requirement Elicitation Framework: A Study for State Enterprises of Thailand	Ajchareeya Chaipunyathat, Maleerat Maliyaem, Nalinpat Bhumpenpien
2:00-2:10 p.m.	Break		
Innovative Electricals and Electronics (iEE)			
Time	Paper ID	Title	Authors
2:10-2:25 p.m.	1571030677	A Study of Convolutional Neural Network Architecture for Hip Fracture Diagnosis Using Radiographs on Small Datasets	Warawut Kesornsukhon, Phichai Udombuathong, San Ratanasanya
2:25-2:40 p.m.	1571031821	A guideline of security and privacy improvement for promoting a Thai government e-service digital trust	Sakol Kulrujiphat, Pongpisit Wuttidittachotti
2:40-2:55 p.m.	1571032975	Approximate String Matching Algorithm Using Multiple-Character Inverted Lists	Soontaree Thumsuwan, Nuanprang Sangurai, Chouvalit Khancome
2:55-3:10 p.m.	1571034047	Noun Phrase Engine for Thai NLP	Nuchjarin Krukaset, Watcharapong Krukaset, Chouvalit Khancome
3:10-3:25 p.m.	1571034471	Congestion Prediction Model for Toll Plazas Using GRU and Optuna Approach	Pattarapon Klaykul, Wilaiporn Lee, Akara Prayote
3:25-3:40 p.m.	1571034656	Predicting Durian Pulp Weight and Loss Using Classification Methodologies: A Comparative Study	Surapong Wiriya, Chiranun Kamolsin, Piyanuch Chareernmool
3:40-3:55 p.m.	1571039326	Logistic Regression-based Sentiment Classification Approach for Identifying Undergraduate Student Sentiments in a Course Studied	Thawatwong Lawan, Mananya Nimpisan, Jantima Polpinij, Bancha Luaphol, Khanista Namee, Pongpipat Saithong, Hattanut Nakpaichit, Siriwiwat Lata, Satitiphong Ua-Areemit, Napassakorn Mahattanateeranan
3:55-4:10 p.m.	Coffee Break		

Innovative Sustainable Sciences (iSS) : Energy

Time	Paper ID	Title	Authors
9:00-9:15 a.m.	RI2C_2024_Paper_2	Analysis of Solar and Wind Farm Area Using Technique for Order of Preference by Similarity to Ideal Solution	Kasin Ransikarbum, Nezir Aydın, Jettarat Janmontree, Hartmut Zadek
9:15-9:30 a.m.	RI2C_2024_Paper_16	Thermoelectric Generator Under Identical Temperature Difference Conditions	Thanadhol Sukhabot, Prayut Jiamrittivong, Nutdechatorn Puangngernmak
9:30-9:45 a.m.	RI2C_2024_Paper_23	Study Energy Consumption, Evaporation Rate of The Blue Swimming Crab Hatchery System	Suwapitchakorn Thongplu, Prayut Jiamrittivong, Nutdechatorn Puangngernmak
9:45-10:00 a.m.	RI2C_2024_Paper_25	Enhanced Electrochemical Performance of Activated Carbon Derived from Acacia catechu Bark by KOH Activation for Supercapacitor Application	Pawan Kumar Mishra, Sabin Aryal, Hari Bhakta Oli, Timila Shrestha, Thakur Sapkota Ram Lal (Swagat) Shrestha, Deval Prasad Bhattarai
10:00-10:15 a.m.	RI2C_2024_Paper_33	Effect of Heat stabilizer content on the gel characteristic of the modified-recycled PET for 3D printing filament application	Nismar Parneam, Siriorn Isarankura Na Ayutthaya, Nathapong Sukhawipat
10:15-10:30 a.m.	RI2C_2024_Paper_34	Comparative characteristics of power delivery and temperature between Conventional vs Hybrid energy storage system in UAVs	Prasophchok Phumma, Waiard Saikong
10:30-10:45 a.m.	Poster Presentation / Coffee Break		

Innovative Sustainable Sciences (iSS) : Food

Time	Paper ID	Title	Authors
10:45-11:00 a.m.	RI2C_2024_Paper_9	Effect of tray drying temperature and drying time on properties of cricket powder	Lida Simasatitkul, Kittisak Thongprom, Thunyapisit Jaroensang, Karittha Im-Orb
11:00-11:15 a.m.	RI2C_2024_Paper_52	Pasting profiles and gel properties of rice flour blended with native, acetylated, or cross-linked starch	Vilai Rungsardthong, Benjawan Thumthanaruk, Yuree Wandee, Buddhi Lamsal, Kanyapat Wongkhueng
11:15-11:30 a.m.	RI2C_2024_Paper_53	Growth and bioactivity of <i>Phellinus linteus</i> in the mushroom farm, at different cultivation time	Supapitch Jitchum, Lueacha Tabtimmmai, Weerachon Phoohinkong, Benjawan Thumthanaruk, Xiaoshuan Zhang, Khomson Suttisintong, Vilai Rungsardthong
11:30-11:45 a.m.	RI2C_2024_Paper_54	Development of Functional Beverage with Rice Bran Protein (Hom mali 105)	Wanticha Saveboworn, Sriwiang Rittisak, Regine Schoenlechner, Sutee Wangtueai, Ratcharoen Charoen
11:45 a.m. - 12:00 p.m.	RI2C_2024_Paper_55	Characteristic and flavor profiles of specialty Arabica coffee derived from fermentation with protease, at different conditions	Intugon Wongyai, Khomson Suttisintong, Benjawan Thumthanaruk, Tita Foophow, Tamaki Yasutomo, Vilai Rungsardthong
12:00-1:00 p.m.	Lunch Break		

Innovative Sustainable Sciences (iSS) : Agriculture

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	RI2C_2024_Paper_19	Sustainable charcoal production from rubber tree branches (hevea brasiliensis)	Suriyan Sairod, Prayut Jiamrittivong, Nutdechatorn Puangngernmak
1:15-1:30 p.m.	RI2C_2024_Paper_28	The Dual Role of Big Data: Operational Efficiency or a Threat to Sustainability	Dmitry Fedorov, Elizaveta Moshurova
1:30-1:45 p.m.	RI2C_2024_Paper_31	Utilization of bark extract of Phyllanthus emblica as sustainable corrosion inhibitor towards reinforced concrete infrastructures in aggressive environment	Madhab Gautam, Jagadeesh Bhattarai, Nootan Prasad Bhattarai, Jeevan Dhungana, Dhruva Babu Subedi
1:45-2:00 p.m.	RI2C_2024_Paper_40	Effect of Silica Fertilizer on Accumulation of Phytolith in Rice Plant and Soil	Vanarat Phakeenuya, Punyanuch Kunmanee, Marsuton Sanyapeung, Wasinee Pongprayoon, Keerthi Katam, Malinee Sririyanun
2:00-2:10 p.m.	Break		

Innovative Sustainable Sciences (iSS) : Environment

Time	Paper ID	Title	Authors
2:10-2:25 p.m.	RI2C_2024_Paper_3	Effects of Operating Parameters on Dielectric Barrier Discharge Non-Thermal Plasma Ozone Generator Performance and NO Conversion	Phurin Chonpan, Kampanart Theinnoi, Teerapong Iamcheerangkoon, Punya Promhuad, Sak Sittichompoo
2:25-2:40 p.m.	RI2C_2024_Paper_32	Wetting behavior of mixed surfactants on the mild steel surface	Chandradip Kumar Yadav, Ajaya Bhattarai
2:40-2:55 p.m.	RI2C_2024_Paper_51	Occurrence of 1,4-dioxane in domestic wastewater and processed water: A case study of Thailand's central plain	Mantiya Rattanit, Ladawan Kusanthia, Pavin Sethbhakdi, Peerapong Pornwongthong
3:55-4:10 p.m.	Coffee Break		

Innovative Mechanical and Materials (iMM)

Chair: Dr.Wanlop Kitisatorn

Co-Chair: Dr.Thamrongsin Siripongsakul

Time	Paper ID	Title	Authors
9:00-9:15 a.m.	RI2C_2024_Paper_21	Novel Preparation Approaches to the Fabrication of Low-Dimensional Semiconductor Photocatalysts	Umar Gaya, Shamsudeen Haladu, Abubakar Hamisu, Muktar Ibrahim, Khaled Elsayed, Abdullah Manda, Amal Al-Otaibi, Filiz Ercan, Ismail Ercan
9:15-9:30 a.m.	RI2C_2024_Paper_13	Poly(Vinylidene Fluoride-co-Hexafluoropropylene)/Amethyst Composites: Preparation, Properties, and Potential for Sustainable Energy Materials	Surapoj Khawkom, Nathapong Sukhawipat, Suchet Glabsawat, Tanapat Rompoche, Jureeporn Yuennan, Nikruesong Tohliebaji, Pamela Pasetto
9:30-9:45 a.m.	RI2C_2024_Paper_1	Comparative Analysis of Wheel Rims by using FEA Method	Aman Rawat, Sambhav Jain, Udayan Tripathi
9:45-10:00 a.m.	RI2C_2024_Paper_37	Phase Change Material for Energy-Efficient Concrete Pavement: Evaluating Mechanical and Thermal Performance	Prakash Somani, Arun Gaur, Amit Sain, Ghanshyam Balotiya
10:00-10:15 a.m.	RI2C_2024_Paper_22	Thermal Energy and Exergy Analysis of Asphalt Solar Water Heater for Small Residences	Thana Ananacha, Onvatee Amornleetrakul
10:15-10:30 p.m.	RI2C_2024_Paper_36	Evaluating Physical Properties of Biochar-Modified Bitumen for Sustainable Development: An MCDM Approach Using TOPSIS and VIKOR	Ghanshyam Balotiya, Arun Gaur, Prakash Somani, Amit Sain, Suresh Chand Bairwa
10:30-10:45 a.m.	Poster Presentation / Coffee Break		

Innovative Mechanical and Materials (iMM)

Chair: Dr.Wanlop Kitisatorn

Co-Chair: Dr.Thamrongsin Siripongsakul

Time	Paper ID	Title	Authors
10:45-11:00 a.m.	RI2C_2024_Paper_7	Copper Deposited Activated Carbon on Natural Rubber Latex Foam – Approach to Cadmium Ion Removal Application	Panachai Thusanaphoom, Nathapong Sukhawipat, Thanathach Yingshataporn-A-Nan, Aunpada Limrueangamphon, Chonthichar Intachai, Jantima Upan, Benjatham Sukkaneevat, Yutthana Wongnongwa, Narongrit Sosa, Pamela Pasetto
11:00-11:15 a.m.	RI2C_2024_Paper_24	Phytochemical characterization of Ochna integerrima roots and their in vitro anti-tyrosinase property	Sutarin Preepram, Anupong Joompang, Supachai Jadsadajerm, Santi Phosri, Awat Wisetsai
11:15-11:30 a.m.	RI2C_2024_Paper_30	Extraction and Characteristics of Melanin from Black Soldier Fly (BSF) Pupal Skin as Biopolymer Raw Material	Fanny Sakinah, Zainal Mustakim, Gusti Handayani, Joko Wintoko, Chandra Wahyu Purnomo
11:30-11:45 a.m.	RI2C_2024_Paper_8	Effects of Copper-modified Activated Carbon on Natural Rubber Composite for Dielectric Materials	Thanathach Yingshataporn-A-Nan, Nathapong Sukhawipat, Panachai Thusanaphoom, Thanadol Lardsaluk, Nattawut Moolchai, Wiwat Jeungthanasirigool, Pamela Pasetto
12:00-1:00 p.m.	Lunch Break		

Innovative Mechanical and Materials (iMM)

Chair: Dr. Wanlop Kitisatorn

Co-Chair: Dr. Thamrongsin Siripongsakul

Time	Paper ID	Title	Authors
1:00-1:15 p.m.	RI2C_2024_Paper_49	Removing oil from produced water using electrochemical methods	Napattra Monnuch, Pichan Tantichaipakorn, Prakorn Kittipoomwong
1:15-1:30 p.m.	RI2C_2024_Paper_42	Chemical Test and Cellular Bioactivities and Flavor Enhancer Properties of Mung Bean Protein via Glycation Reaction	Nuttakarn Srisukpachin, Lueacha Tabtimmai, Saranya Sedtananon, Natta Laohakunjit, Chanikan Sonklin
1:30-1:45 p.m.	RI2C_2024_Paper_56	Biodiesel preparation from Roselle seeds by ultrasonic cavitation	Pichan Tantichaipakorn, Prakorn Kittipoomwong
2:00-2:10 p.m.	Break		

Innovative Electricals and Electronics (iEE)

Time	Paper ID	Title	Authors
2:10-2:25 p.m.	1571034874	Raising Cyber Security Awareness in Upper Primary School Students: A Case Study of Thailand Primary School	Nattakorn Mala, Nawaporn Wisitpongphan
2:25-2:40 p.m.	1571035045	Neural Network Based Performance Analysis of Coastal Vulnerability Classification using Social-Physical Parameters in the Special Region of Yogyakarta	Dwi Haryani, Lukito Edi Nugroho, Rudy Hartanto
2:40-2:55 p.m.	1571035047	Used Car Prices Prediction using Machine Learning Techniques	Weerapol Yodmongkol, Pattarachai Pothong, Adul Wongkamin, Maleerat Maliyaem
2:55-3:10 p.m.	1571038536	Human Posture Detection in Virtual Reality Applications for Stress Reduction	Panuwat Kongchansawang, Santakorn Wongsiripa, Samart Moodleah
3:10-3:25 p.m.	1571038538	Learning by Doing: The Impact of Virtual Reality Scenarios on First Aid Training Effectiveness	Chanikarn Kawmong, Ittiporn Kuljittwattana, Samart Moodleah
3:25-3:40 p.m.	1571039092	The Development of a Unified Predictive Model to Predict Closing Prices for a Variety of Cryptocurrencies	Yuan Chen, Jantima Polpinij, Thawatwong Lawan, Gamgarn Somprasertsri, Khanista Namee, Bancha Luaphol, Siriwiwat Lata, Hattanut Nakpaichit, Satitiphong Ua-Areemit
3:40-3:55 p.m.	1571039349	Adaptive Multi-Loss GAN for Object Removals in Street-View Scenes	Arzeezar Lording, Luepol Pipanmaekaporn, Suwatchai Kamonsantiroj, Kanabadee Srisomboon
3:55-4:10 p.m.	Coffee Break		