

[008]Proceedings and Program : International Exchange and Innovation Conference on Engineering & Science : IEICES 2022

<https://hdl.handle.net/2324/5909047>

出版情報 : Proceedings of International Exchange and Innovation Conference on Engineering & Sciences (IEICES). 8, 2022-10-20. Interdisciplinary Graduate School of Engineering Sciences, Kyushu University

バージョン :

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Conference Program

❖ *The conference program time follows Japan Standard Time (JST)*

First Day

Oct. 20th (Thursday)

09:30	10:00	Registration (Lobby, C-Cube Building)	
10:00	10:05	Welcome Speech: Assoc. Prof. Osama Eljamal	
10:05	10:20	Open Remark and Introduction of IGSES	
10:20	10:40	Photo Session and Coffee Break	
Venue		Keynote Session K1, Chikushi Hall, (Zoom Meeting)	
Session Chair		Assoc. Prof. Hooman Farzaneh	
Co-chair		Mohamed Suliman	
10:40	11:50	Title: Vascular materials: Predicting Design Evolution Speaker: Distinguished Prof. Adrian Bejan , Mechanical Engineering, Duke University, USA	
11:50	12:20	Title: Wind Engineering Research Trend in Malaysia Speaker: Assoc. Prof. Azli Abd Razak , Wind Engineering and Building Physic Research Group, School of Mechanical Engineering, College of Engineering, Universiti Teknologi MARA, Selangor, Malaysia	
12:20	13:40	Lunch Break	
Session 1			
Venue		Chikushi Hall (Zoom Meeting)	WEEL Room (Zoom Meeting)
Session Chair		Khan Md. Mamun-Ur- Rashid	Leila Mahmoudi
Co-chair		Pakkapawn Prapan	Kalbekov Alimzhan
13:40	13:50	Analysis of the different maximum power point tracking strategies in a load-connected photovoltaic system Zhao Yuhan and Hooman Farzaneh, Kyushu University, Japan.	A mini-Review on Transportation and Fate of Silver Nanoparticles Released from Consumer Products: Ecological Risk Assessments Islam M. Radwan and Osama Eljamal, Kyushu University, Japan
13:50	14:00	Demand Elasticity Estimation from the Japanese National Electricity Grid Considering Wholesale Market Price Mohamed Saad Suliman and Hooman Farzaneh, Kyushu University, Japan	Effect of water matrix on ligand-assisted adsorption of ciprofloxacin from aqueous solutions by zerovalent iron nanoparticles Omar Falyouna, Ibrahim Maamoun, Mohd Faizul Idham, Osama Eljamal, Kyushu University, Japan
14:00	14:10	Techno-Economic Analysis of on Grid PV Power System for Vocational Training Institute Baluchistan, Pakistan to Reduce the Cost of Energy Nabeel Ul Rehman, Hooman Farazaneh, Kyushu University, Japan	CNT based nanomaterials for food industry: a review Kristi Priya Choudhury, Tahzib Ibrahim Protik, Newton Neogi, Sabbir Hossain Nipu, Shahjalal University of Science and Technology, Bangladesh
14:10	14:20	Modeling and prediction of the achievement level with related goals for SDG 11: Sustainable Cities and Communities Venkatesh Baskaran, R Velkennedy, S Murugan, Ga Theerumalai, Government College of Engineering, India	Mixed convection flow and heat transfer of Biomagnetic fluid with magnetic/non-magnetic particles due to a stretched cylinder in the presence of a magnetic dipole Jahangir Alam, M.G. Murtaza, E.E. Tzirtzilakis, M. Ferdows, University of Dhaka, Bangladesh

14:20	14:30	Estimating Ground Elevation using Borehole Information: A Case of Metro Manila, Philippines Joanel Galupino and Jonathan Dungca, De La Salle University, Philippines	An entirely solar-powered hybrid thermal-membrane desalination system integrated with Solar heaters and preheating technique Swellam W. Sharshir, Mahmoud Seif Eldin ¹ , A. E. Kabeel, Mofreh H. Hamed, H.F. Abosheisha, A. W. Kandeal, Faculty of Engineering, Kafrelsheikh University, Egypt
14:30	14:40	Environmental and Economical Evaluation of Natural Gas Vehicles Promotion Program in The City of Baghdad Rudha Khudhair and Yonghun Jung, Kyushu University, Japan	Simulation Study on the Wet-bulb Humidification-Dehumidification Cycle for Desalination Hafiz Muhammad Asfahan, Muhammad Sultan, Bahauddin Zakariya University, Pakistan
14:40	14:50	Comparison of prioritization of pedestrianization warrants among transport professionals- an initial assessment in Metro Manila Paolo Ian Lucero, Gyan Louie Gloriani, Fernando Miguel Lozano, Janine Lois Molina, Miguel Lorenzo Ondevilla, De La Salle University, Philippines.	Design and Development of Solar Dryer for Local Seaweeds (<i>Kappaphycus spp.</i>) Jack O. Bertulfo, Alvie A. Roluna, Joey G. Carillo, Lord Boy C. Silong, Caraga State University, Philippines
14:50	15:00	The RFID Electronic Tag Defect Detection System Based on YOLOv5 For Industrial Scenarios Jingyu Zhou, Zhaodong Ding, Guanghui Du, Shuangshuang Zhao, Tetsuya Furukawa, Ke Lu, Anhui University of Technology, China	Assessment of the Physical and Mechanical Properties of Indigenous Agro-Waste Materials from Southern Nigeria for the Production of Composite Particleboards for Sustainable Building Materials Pamilerin Sanni, Babatunde Olatunbosun, Godwin Anukan, Sylvanus Udoh, HARFIZ SALISU, Federal University of Technology Akure, Nigeria

15:00 15:30

Coffee Break

Venue

Keynote Session K2, Chikushi Hall, (Zoom Meeting)

Session Chair **Ayas Shaqour**

Co-chair **Zehua SI**

15:30	16:00	Title: Microgrid Protection: Heading off Its Complexities <i>Speaker: Assoc. Prof. Mohammad Lutfi Othman</i> , Electrical Power Engineering Universiti Putra Malaysia, Malaysia
16:00	16:30	Title: Unknown of Recycling for Innovative Solutions <i>Speaker: Assoc. Professor İbrahim BİLİCİ</i> , Chemical Engineering, Hitit University, Turkey

16:30 16:50

Coffee Break

Session 2

<i>Venue</i>	Chikushi Hall (Zoom Meeting)	WEEL Room (Zoom Meeting)
<i>Session Chair</i>	Butt Sannan Salabat	Elsayed Abdelhameed
<i>Co-chair</i>	Wang Yunfei	Kalbekov Alimzhan
16:50	17:00	The Geyser Type Mud Volcano Eruption in Sidoarjo, East Java Indonesia Adjat Sudradjat, Ildrem Syafri, M. Burhannuddinur, Karyono, Padjadjaran University, Indonesia
17:00	17:10	Comparative study of micro hydro model systems for powering the sub-village of Tulaun Lalumpe Minahasa of North Sulawesi province, Indonesia Meita Rumbayan, Rilya Rumbayan, Christy Pasiowan, Stefi Elkana, Naomi V Panjaitan, Sam Ratulangi University, Indonesia
		Advances with Metal Organic Framework based nanomaterials in 4th industrial revolution Sabbir Hossain Nipu, Newton Neogi, Kristi Priya

		Erni Puspanantasari Putri, Universitas 17 Agustus 1945 Surabaya, Indonesia	Choudhury, Shahjalal University of Science and Technology, Bangladesh
17:10	17:20	Energy Harvesting from Highway Traffic Vehicles Movement via VAWT Shoel Rana, Biplob Roy, Bidyut Baran Saha, Sampad Ghosh, Chittagong University of Engineering and Technology, Bangladesh	Multi-Classification of Brain MRI Tumor Using ConVGXNet, ConResXNet, and ConIncXNet Hafiza Akter Munira and Md. Saiful Islam, Chittagong University of Engineering and Technology, Bangladesh
17:20	17:30	The Effects of Rubber Keys' Structure and its Packaging Tape on Automatic Assembly of Rubber Key in PCB Holes Md Saiful Islam and Xiaosong MA, Guilin University of Electronic Technology, Bangladesh	Characterization of Mechanized Farming Operations in Butuan City, Philippines Neil Caesar M. Tado and Reca S. Bautista, Caraga State University, Philippines
17:30	17:40	Mathematical Modelling and Thin-Layer Drying of Sago Starch Using Infrared Dryer Jack O. Bertulfo, Pia Threcia Marie B. Butao, Jona M. Sordilla, Caraga State University, Philippines	Numerical Simulation of Highly Efficient Lead-free MAgel₃ Based Perovskite Solar Cell for Various ETL and HTL Layers Farjana Akter Jhuma, Mohammad Junaebur Rashid, Sharnali Islam, Kyushu University, Japan
17:40	17:50	Evaluate the possibility of adsorption heat pump application using Activate Carbon and Freon refrigerant pairs Seo Sang won, Frantisek Miksik, Kyaw Thu, Miyazaki Takahiko, Kyushu University, Japan	Study on prefabrication method for housing in Indonesia by utilization undegradable waste for building materials Siswanti Zuraida, Bart Dewancker, Romi Bramantyo Margono, Muhammad Arief Irfan, Anjar Primasetra, University of Kitakyushu, Japan
17:50	18:00	Investigating vaccination behavior and disease dynamics of a time-delayed two strain epidemic model: An evolutionary approach Md. Mamun-Ur-Rashid Khan, Md. Rajib Arefin, Jun Tanimoto, Kyushu University, Japan	
18:00	18:10	Closing Remarks	

Conference Program

❖ *The conference program time follows Japan Standard Time (JST)*

Second Day

Oct. 21st (Friday)

Venue		Keynote Session K3, Chikushi Hall, (Zoom Meeting)	
Session Chair		Mohamed Suliman	
Co-chair		Mojtaba Purjam	
10:00	10:30	Title: Opportunities to exploit stored energy in wastewater Speaker: Assoc. Prof. Osama Eljamal , Environmental Engineering, Water and Environmental Engineering Lab., Interdisciplinary Graduate School of Engineering Sciences, Kyushu University	
10:30	10:50	Coffee Break	
Session 3			
Venue		Chikushi Hall (Zoom Meeting)	WEEL Room (Zoom Meeting)
Session Chair		Mutebi denis	Nguyen Dang Khoa
Co-chair		Seo Sang Won	Leila Mahmoudi
10:50	11:00	Linear stability analysis of an improved car-following model considering vehicle's inertia effect Zehua Si, Md. Anowar Hossain, Jun Tanimoto, Kyushu University, Japan	Guiding center orbit simulation of energetic particles in tokamak plasma Yunfei Wang, Kazuaki Hanada, Youjun Hu, Kaiyang He, Haiqing Liu, Jinping Qian, Xiang Gao, and Yinxian Jie, Kyushu University, Japan
11:00	11:10	LEED I(E) analysis of pseudomorphic Fe (111) on Ru (0001) surface and oxygen adsorption structure Dhiman Banik, Yuka Nagamatsu, Tomoya Jimba and Takeshi Nakagawa, Kyushu University, Japan	Evaluating the Social and Psychological Factors about the Public Acceptance of Treated Wastewater Reuse: A Review Bipasha Singha and Osama Eljamal, Kyushu University, Japan
11:10	11:20	An investigation on the behavior of the torch flame in the LBGE combustion process Elsayed Abdelhameed and Hiroshi Tashima, Kyushu University, Japan	Recent Advances in Reinforcement Learning Applications for Building Energy Management: A Mini Review. Ayas Shaqour and Aya Hagishima, Kyushu University, Japan
11:20	11:30	Low Emission Scenarios Analysis in the Urban Transportation in Dhaka, Bangladesh Farhana Nur Rahman, Homman Farzaneh, Kyushu University, Japan	Application of Organic Photodetectors (OPD) in Photoplethysmography (PPG) Sensors: A small review Farjana Akter Jhuma, Reiji Hattori, Kyushu University, Japan
11:30	11:40	The Study of Cyclist Body Posture Via CFD Simulation M. H. M. Noh, M. A. Abdullah, A. H. A. Hamid, Universiti Teknologi MARA, Malaysia	Development of Artificial Nose for Tumor Patient using 3D Printing Technology Abdul Halim Abdullah, Nazira Bolhassan, Muhammad Hazli Mazlan, Abdul Rahim Bahari, Shahrul Hisyam Marwan, Universiti Teknologi MARA, Malaysia
11:40	11:50	Topology Optimization for Transtibial Socket Prosthetic Leg Mohd Hazwan Mohamed Norli, Muhammad Shafiq Rusyaiddi, Jamaluddin Mahmud, Abdul Halim Abdullah, Jabatan Kejuruteraan Mekanikal, Malaysia.	Parametric analysis of a counter-flow dew point evaporative cooler Lao Marco, Kyaw Thu, Takahiko Miyazaki, Kyushu University, Japan
11:50	12:00	Development of a Shoulder Disarticulation Cosmetic Arm Prosthesis Muhammad Firas Zulkifli, Natiara Mohamad Hashim, Muhammad Hanif Ramlee, Abdul Halim Abdullah	Preliminary Design and Aerodynamic Performance Analysis of High-Lift Low Reynolds Number Airfoils Ahmad Hussein Abdul Hamid, Firdaus Mohamad, Mohd Hafiz Mohd Noh, Rizal Effendy Mohd

			Nasir, Mohd Azan Mohammed Sapardi, Universiti Teknologi MARA, Malaysia
12:00	12:10	Finite Element Analysis of Dental Adhesive for Four Classes of Direct Restoration Haszeme Abu Kasim, Ahmad Bazli Saari, Abdul Halim Abdullah, Shahrul Hisyam Marwan, Universiti Teknologi MARA, Malaysia	Development of Life-Size Flexible Jig for Handheld 3D Scanner Mohamad Hannan Yusof, Ahmad Hussein Abdul Hamid, Mohd Hafiz Mohd Noh, Helmi Rashid, Mohammad Azeeb Mazlan, Abdul Halim Abdullah, Universiti Teknologi MARA, Malaysia
12:10	12:20	A mini overview of miscellaneous uses of TiO₂ based nanomaterials Kristi Priya Choudhury, Newton Neogi, Sabbir Hossain Nipu, Tahzib Ibrahim Protik, Shahjalal University of Science and Technology, Sylhet, Bangladesh	Application of Computational Fluid Dynamics in Examining the Filtration Efficacy of Fine and Coarse Particles in a Baffle Integrated-Vertical Ventilation Duct Chau Hoang Bao, Le Tan Dat, Nguyen Dang Khoa, Hua Minh Quang, Tran Huynh Chieu, Nguyen Lu Phuong, University of Natural Resources and Environment, Vietnam.
12:20	12:30		Development and Characterization of Briquettes made from Unsalable Banana Peel Wastes: A Preliminary Evaluation Kenneth N. Sindol, Andrea Suzette T. Gadat, Joan Jane J. Sanchez, Philip Donald C. Sanchez, College of Engineering and Geosciences, Philippines
12:30	14:00	Lunch Break	
<i>Venue</i>		Keynote Session K4, Chikushi Hall, (Zoom Meeting)	
<i>Session Chair</i>		<i>Elsayed Abdelhameed</i>	
<i>Co-chair</i>		<i>Butt Sannan Salabat</i>	
14:00	14:30	Title: Reverse Osmosis Desalination Systems Powered by Renewable Energy: Preheating Techniques and Brine Disposal Challenges <i>Speaker: Assoc. Prof. Swellam W. Sharshir</i> , Mechanical Engineering department, Faculty of Engineering, Kafrelsheikh University, Egypt	
14:30	15:00	Coffee Break	
Session 4			
<i>Venue</i>		Chikushi Hall (Zoom Meeting)	WEEL Room (Zoom Meeting)
<i>Session Chair</i>		<i>Mohamed Suliman</i>	<i>Wang Yunfei</i>
<i>Co-chair</i>		<i>Pepe Haoulomou</i>	<i>Ayas Shaqour</i>
15:00	15:10	Occupant’s thermal preference diversity in residential air-conditioning use: A study in Osaka, Japan Jiajun Lyu, Aya Hagishima, Kyushu Univ., Japan	A Mini Review of Organically Bound Tritium in The Environment Portuphy Michael Ofotsu, Katayama Kazunari, Kyushu University, Japan.
15:10	15:20	Measurement of Interfacial Thermal Resistance at Microstructured Si–water Interface Using Steady State Method Yankun Yu, Gyoko Nagayama, Kyushu Institute of Technology, Japan	Properties of ZnO and Zn Nanoparticles Produced by Electrical Discharge in Liquid Method Alimzhan Kalbekov, Emil Omurzak, Kyushu University, Japan
15:20	15:30	Thermodynamic Analysis and Optimization of Helium Ericsson Power Cycle: A Novel Model for Pseudo-isothermal Compression and Expansion Mojtaba Purjam, Kyaw Thu, Takahiko Miyazaki, Kyushu University, Japan	Antibiotics Removal from Aqueous Environments: A Mini Review on Graphene Oxide-based Nanomaterials Application Mohd Faizul Idhama, Omar Falyouna, Ramadan Eljamal, Ibrahim Maamoun, Osama Eljamal, Kyushu University, Japan.

15:30	15:40	The role of coated nanoscale zero-valent iron with magnesium hydroxide in improving methane production during the anaerobic digestion of waste sludge Ramadan ELjamal, Ibrahim Maamoun, Mohd Faizul Idham, Osama Eljamal	Design, Fabrication, and Performance Evaluation of Village-Type Coconut Coir Dust Compacting Machine Art M. Dalman, Mercedith D. Bagtilay, Neil Caesar M. Tado, Caraga State University, Philippines
15:40	15:50	Energy Efficiency Reality with Reference to the Residential Sector in Uganda Denis Mutebi and Kyaw Thu, Kyushu University, Japan	Present Situations of Dust Storms in Iran for Seeking Numerical Predictions Leila Mahmoudi, Naoki Ikegaya, Kyushu university, Japan.
15:50	16:00	Design, Fabrication, and Performance Evaluation of Sago (Metroxylon sago Rottb.) Starch Extractor Aljon E. Bocobo, Juliet R. Maureal, Anamarie P. Sajonia, Caraga State University, Japan	UTILIZATION AND EVALUATION OF RICE HUSK ASH AND COCONUT SHELL ASH AS PARTIAL CEMENT REPLACEMENT FOR CONCRETE HOLLOW BLOCKS PRODUCTION May Rose Boston-Osoteo, Aldwin Jason B. Pontillo, Arnold G. Apdohan, Caraga State University, Philippines
16:00	16:10	Co-Benefits of replacing personal motorized transport with active transportation under different scenarios in Delhi (India) Tavoos Hassan Bhat and Hooman Farzaneh, Kyushu University, Fukuoka, Japan	Numerical Investigation of Fine particle Transportation and Deposition in the Human Lower Airway: Impact of airflow and particle size on deposition efficiency Nguyen Dang Khoa, Nguyen Lu Phuong, Kazuhide Ito, Kyushu University, Japan
16:10	16:20	ANALYSIS OF GLYCEROL IN NIPA (<i>Nypa fruticans</i> Wurmb.) KERNEL EXTRACT (NKE) USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) Mario Dario L. Berdolaga Jr., Philippine Science High School, Mimaropa Region Campus	Catalytic Activity and Kinetic Studies of Core@Shell Nanostructure Cu/Zn Ferrite /Al₂O₃, CuO for Degradation of Para-Nitro Phenol Sannan Salabat Butt, Erum Pervaiz, Kyushu University, Japan.
16:20	16:30	Utilization of ZIF based nanomaterials for clean environment purposes Newton Neogi, Kristi Priya Choudhury, Sabbir Hossain Nipu, Tahzib Ibrahim Protik, Shahjalal University of Science and Technology, Sylhet, Bangladesh	A mini review on a study of Helium behavior for fusion reactor development Pakkapawn Prapan, Kyushu University, Japan

16:30 16:50

Coffee Break

Session 5

<i>Venue</i>	Chikushi Hall (Zoom Meeting)	WEEL Room (Zoom Meeting)
<i>Session Chair</i>	<i>Pepe Haoulomou</i>	<i>Farjana Jhuma</i>
<i>Co-chair</i>	<i>Marco Lao</i>	<i>Seo Sang Won</i>
16:50	17:00	
	A Two-model Automatic Towel Defect Detection Method Based on YOLOv5 Zhaodong Ding, Jingyu Zhou, Guanghui Du, Shuangshuang Zhao, Tetsuya Furukawa, Ke Lu, Anhui University of Technology, China	Heat Transfer Analysis of Al₂O₃ Nanoparticles Nazim Ali, M. Javaid Afzal, Farah Javaid, Shahzadi Tayyaba, M. Waseem Ashraf, G. F. Ishraque Toki, M. Khalid Hossain, Government Islamia Graduate College Civil Lines Lahore, Pakistan
17:00	17:10	
	Laminar Flow Analysis of NACA 4412 Airfoil Through ANSYS Fluent M. Shehzad Arif, M. Javaid Afzal, Farah Javaid, Shahzadi Tayyaba, M. Waseem Ashraf, G. F. Ishraque Toki, M. Khalid Hossain, Government Islamia Graduate College Civil Lines Lahore, Pakistan	Application of Magnetotelluric Geophysical Technique to Study the Subsurface Structural Setting in Marsa Alam, Eastern Desert, Egypt Ahmed Khalil and Osama Eljamal, National Research Institute of Astronomy and Geophysics, Egypt

17:10	17:20	Deep Learning-based Image Recognition for Disaster Prevention Application Jye-Hwang Lo, Lee-Kuo Lin, Hung-po Cheng, Chu-Chun Hung, National Taipei University of Technology, Taiwan.	On the Multivariate Regression Modeling for Performance Prediction of Dew-point Evaporative Desalination System Muhammad Imran Haider, Hafiz Muhammad Asfahan, Muhammad Sultan, Bahauddin Zakariya University, Pakistan
17:20	17:30	Investigation of Land Cover Change in Kahramanmaraş Province (Turkey) Erdi Ekren, Kahramanmaraş Sutcu Imam University, Turkey.	The Risk Assessment Management of Disaster Prevention on Roads Chun Chen, Lee-Kuo Lin, National Taipei University of Technology, Taiwan
17:30	17:40	Service area determination of fire stations in an urban setting through a GIS-based multi-criteria analysis: the case of Quezon City, Philippines Chester Cruz, Tian Ruy Ong, Mathew Harvey Peralta, Institute of Civil Engineering, University of the Philippines Diliman, Philippines	ANSYS simulation of Temperature of Cooling System in Li-ion Battery Zia ul Qasmi, M. Javaid Afzal, M. Tariq Nadeem, Farah Javaid, Shahzadi Tayyaba, M. Waseem Ashraf, G. F. Ishraque Toki, M. Khalid Hossain, Government Islamia Graduate College Civil Lines Lahore, Pakistan
17:40	17:50		Catalytic Converter Simulation for Pressure and Velocity Measurement Muhammad Sufian, M. Javaid Afzal, Farah Javaid, Shahzadi Tayyaba, M. Waseem Ashraf, G. F. Ishraque Toki, M. Khalid Hossain, Government Islamia Graduate College Civil Lines Lahore, Pakistan
17:50	18:00	Best Presentation Awards & Closing Remarks	