

AUA-SEGT 2022 ORAL / POSTER PRESENTATION SLOTS:

ORAL PRESENTATION									
Day	1			2				3	
Date	21/02/2022			22/02/2022				23/02/2022	
Session	1	2		3		4		5	
Venue	ROOM A	ROOM A	ROOM B	ROOM A	ROOM B	ROOM A	ROOM B	ROOM A	ROOM B
Session Chair	Assoc. Prof. Ir. Dr. Chong Wen Tong	Dr. Nurin Wahidah binti Mohd Zulkifli	Assoc. Prof. Ir. Dr. Bernard Saw Lip Huat	Prof. Dr. Kazi Md. Salim Newaz	Dr. Teng Kah Hou	Assoc. Prof. Ir. Dr. Wong Yew Hoong	Assoc. Prof. Dr. Nasrin Agha Mohammadi	Dr. Mohd Nashrul Bin Mohd Zubir	Assoc. Prof. Ir. Dr. Tan Chou Yong
	Dr. Rubina Bahar	Ts. Dr. King Yeong Jin	Dr. Kenny Cheah Soon Lee	Dr. Wong Kok Hoe	Assoc. Prof. Ir. Dr. Yew Ming Chian	Dr. Mahendra Varman A/L Munusamy	Dr. Zulhelmi Bin Amir	Dr. Kang Hooi Siang	Dr. Che Hang Seng
Track	New and Renewable Energy	Waste Management	Sustainable Technologies, Smart Grid & Smart Cities	New and Renewable Energy, Energy Sciences	Green Materials, Green Buildings	New and Renewable Energy	Sustainable Technologies, Waste Management	New and Renewable Energy, Energy Sciences	Sustainable Technologies, Energy Sciences
9:00									
9:30								27	33
9:45								43	46
10:00								55	76
10:15								66	79
10:30								35	80
10:45								75	83
11:00				24	82			Break	Break
11:15				29	15				
11:30				38	19				
11:45				47	22				
12:00	50			62	40				
12:15	74			68	52				
12:30	77			Break	Break				
12:45	81								
13:00	Break								
15:00		10	4			36	11		
15:15		32	45			37	12		
15:30		51	56			39	31		
15:45		53	64			41	42		
16:00		65	14			58	44		
16:15		73	84			59	69		
16:30		Break	Break			Break	Break		

POSTER PRESENTATION	
Day	2
Date	22/02/2022
Venue	POSTER ROOM
*9:30	2, 25, 26, 30, 48, 78
10:30	Break
*16:30	3, 6, 17, 18, 20, 21, 23
17:30	Break

* Please make yourselves available for poster presentation evaluation. Two judges will be assigned to each poster evaluation

Session : 1
Track : New and Renewable Energy
Session Chairs : Assoc. Prof. Ir. Dr. Chong Wen Tong &
 Dr. Rubina Bahar
Time : 12:00 – 13:00
Venue : ROOM A

Starting Time	ID	Title of Presentation
12:00	50	Performance Study of Savonius Style Wind Turbines in a Solar Chimney Power Plant under Guided Flow Environment Sukanta Roy; Pavitri Apparavoo; Ke San Yam
12:15	74	Could Technological Improvements Make Microalgal Biodiesel More Economically Feasible? Kenneth R Szulczyk; Muhammad Cheema; Sayyed Ziaei
12:30	77	The significance of Energy Transition in BRICS Countries for a Decarbonized Future Kamal Kandewatta; Ashani N Fernando
13:00	81	Digital Twin Employed Comparison on Solar Hydrail and Diesel Locomotive Byunghwa Park Junseok Song; Sangwook Park

Session : 2
Track : Waste Management
Session Chairs : Dr. Nurin Wahidah binti Mohd Zulkifli &
 Ts. Dr. King Yeong Jin
Time : 15:00 – 16:30
Venue : ROOM A

Starting Time	ID	Title of Presentation
15:00	10	Effect of Heating Rate on Oil Yield and Composition in Co-Pyrolysis of Polypropylene and Triglyceride using ZrO₂/Al₂O₃-TiO₂ Catalyst Dijan Supramono; Fakhri Ramadhan; Ja'far Ashshiddiq
15.15	32	Exploring the Mitigation of Greenhouse Gas Emissions from the Current Municipal Solid Waste System of Kazakhstan: Case Study of Nur-Sultan City Dhawal Shah; Aknur Temireyeva; Khabiba Zhunussova; Madiyar Aidabulov; Yerbol Sarbassov
15.30	51	Eco-friendly Multiphase Flow Simulation Laboratory at Sharif University of Technology Hamed Sadeghi; Poya Alipananhi ; Hamed Nasiri; Ali Golaghaei Darzi; Aysa Hedayati Azar
15.45	53	Development of Biochar from Floral Waste for the Removal of Heavy Metal (Copper) from the Synthetic Waste Water Pradeepkumar Sugumar; Udayteja Racha; Purna Chand Sukhavasi; Aurooprao Pullaiahgari; Chaitanya Rapelli
16.00	65	An Assessment on the Potential of Tenebrio Molitor used for Biodepolymerization of Waste Papers, Plastics and Polystyrene: Influencing Factors, Various Feeding Cases, Gut Microbiota Pradeepkumar Sugumar; Dhaniyal Shaaz Moin sha; Shreya Gowda; Vijay Thipparapu; Keerthana Sonnaila
16.15	73	Evaluation of Waste Chicken Feather Protein Hydrolysate as Potential Biostimulant for <i>Chlorella vulgaris</i> Grown in Organic Fertilizer for Bilateral Enhancement of Microalgae Biomass and Lipid Uganeeswary Suparmaniam; Man Kee Lam; Jun Wei Lim; Hemamalini Rawindran; Yee Ho Chai; Inn Shi Tan; Bridgid Lai Fui Chin; Peck Loo Kiew

Session : 2
Track : Sustainable Technologies, Smart Grid & Smart Cities
Session Chairs : Assoc. Prof. Ir. Dr. Bernard Saw Lip Huat &
 Dr. Kenny Cheah Soon Lee
Time : 15:00 – 16:30
Venue : ROOM B

Starting Time	ID	Title of Presentation
15:00	4	Understanding of Iot Smart Home Environment Based on the Transformation of Domestic Interior Spatial Morphology: Case Study of Beijing Families Yanhua Yao
15.15	45	Wall Panels Using Thermoelectric Generators for Sustainable Cities and Communities: A Review Mahmoud M. Elgendi; Jawaher AL Tamimi; Aysha Alfalahi; Dana Alkhoori; Mariam Alshantqiti; Ayesha Aladawi
15.30	56	Interfacial Architectures Using Surface Engineered Graphene Oxide Shells for Hybrid Energy Storage Karthik Kiran Sarigamala; Shobha Shukla; Alexander Struck; Sumit Saxena
15.45	64	A Sustainable Organic Approach for Reclamation of Wastewater Treatment Neha Redkar; Madhurima Deb; Cathrine Manohar; Ashok Jagtap; Sumit Saxena; Shobha Shukla
16.00	14	Development of Hybrid Aluminum Air Battery-Fuel Cell System Weng Cheong Tan; Lip Huat Saw; Ming Chian Yew; Kuo Pei-Yu; Zheng Yu Khor; Dongyang Sun
16.15	84	Sustainable Biofuel from Green Energy Focusing On Circular Economy Nasrin Aghamohammadi; Dineshini Ganeshmoorthy

Session : 3
Track : New and Renewable Energy, Energy Sciences
Session Chairs : Prof. Dr. Kazi Md. Salim Newaz &
 Dr. Wong Kok Hoe
Time : 11:00 – 12.30
Venue : ROOM A

Starting Time	ID	Title of Presentation
11:00	24	Influence of Pressure in RO Filtration of Crude Biodiesel Ramanan C J; Shivi Garg; Bhaskor J Bora; Abdulrajak Buradi; Sukanta Roy; Prabhakar Sharma; Nur Alom
11:15	29	What Has BRI Gas Cooperation Brought Us for — The Financial Benefits, the Modern Governance, or the Narrowed Distance among Cultures? Li Ding; Chunyan Dai; Huilin Liu; Anna Sun
11:30	38	Effects of Non-heating Users in Heating Residential Buildings on Heat Consumption Xinyu Gao; Chunli Tang; Xiangzhao Meng; Xilian Luo; Xiaohu Yang; Caiqiu Yan
11:45	47	Numerical Investigation of Phase Change Heat Transfer in a Confined Micro-Space by Lattice Boltzmann Method S.Y. Qin; R.Y. Ji; Z.X. Tong; Z. Lu; C. Yang; L.W. Jin
12:00	62	A Review on the Method for Investigating Carbon Dioxide Emissions in ASEAN Kiwon Richard; Noor Shieela Kalib
12.15	68	A Case Study on Long-Term Performance Optimization of a Geothermal Heating System Guosheng Jia; Kefeng Duan; Yuze Xue; Zhendi Ma; Jiawei Wang; Liwen Jin

Session : 3
Track : Green Materials, Green Buildings
Session Chairs : Assoc. Prof. Ir Dr Yew Ming Chian &
 Dr. Teng Kah Hou
Time : 11:00 – 12:30
Venue : ROOM B

Starting Time	ID	Title of Presentation
11:00	82	Effect of Moisture on Metal-Organic Frameworks Graphene Oxide Composite Structure T Ghanbari; Muhamad Fazly Abdul Patah; Yew Hoong Wong; Faisal Abnisa; Wan Mohd Ashri Wan Daud
11.15	15	A Pioneer Experiment of Applying Paper Material to Landscape Architecture Design Jiawei Lin; Limin Song; Dingding Ren
11.30	19	Experimental Study of a Heat Pump Clothes Dryer Using Air-Conditioner's Waste Heat Wan Lynn Lim; Rubina Bahar
11.45	22	Synthesis and Characterization of Green-Functionalized Graphene Nanofluids as An Enhanced Working Fluid in Heat Transfer Applications Ummi Zulaikha Abd Rahman; Kah Hou Teng; Swee Pin Yeap; Kazi Md Salim Newaz
12.00	40	Application of Synergic Evidence-Based Design and Sustainable Technology Strategies in Off-Grid Residential Nzebs in the Severe Cold Zone of China: A Case Study of the Steppe Ark Shaohang Shi; Lening Yu; Chao-Hung Liu; Yiqiao Wang; Ning Zhu
12.15	52	Investigation of Indoor Air Quality and Thermal Comfort of a College Building in Hyderabad, India Pradeepkumar Sugumar; Thulasirajan Krishnan; LVVDSS Abhinav Bommisetty; Murali Krishna Koganti; Bhavana Prodduturi; Srikavya Bammidi; Yeshwanth Veluvolu

Session : 4
Track : New and Renewable Energy
Session Chairs : Assoc. Prof. Ir. Dr. Wong Yew Hoong &
 Dr. Mahendra Varman A/L Munusamy
Time : 15.00 – 16.30
Venue : ROOM A

Starting Time	ID	Title of Presentation
15.00	36	Review on Validation Techniques of Blade Element Momentum Method Implemented in Wind Turbines Ashraf Mohamed; Mahmoud Elgendi
15.15	37	Analytical and Numerical Evaluation for Wind Turbine Aerodynamic Characteristics Ashraf Mohamed; Mahmoud M. Elgendi; Mohamed Sliem
15.30	39	Comprehensive Energy Efficiency Study of Different Climate-Adapted BIPV Roof Forms in Single-Family Houses for Five Climate Zones of China Based on PV Energy Substitution Rates (PVESR) Shaohang Shi; yehao Song; yingnan Chu; Yi He
15.45	41	A Three-Dimensional Full-Scale Model for Predicting the Performance of Deep-Buried Ground Heat Exchanger Considering Groundwater Flow Z.D. Ma; G.S. Jia; Y.P. Zhang; C.Y. Miao; Z.H. Xia; L.W. Jin
16.00	58	Security Assessment of Innovative Blades Applied to the Small Horizontal Axis Wind Turbine Yu-Jen Chen; Jui-Hung Liu; Chong Wen Tong
16.15	59	Management of Multiple Sources Energy Integration to Feeding the DFIG Rotor in the Wind Turbine System by Using the Power Algorithm. Mohammed Kendzi; Abdel Ghani Aissaoui

Session : 4
Track : Sustainable Technologies, Waste Management
Session Chairs : Assoc. Prof. Dr. Nasrin Agha Mohammadi &
 Dr. Zulhelmi Bin Amir
Time : 15.00 – 16.30
Venue : ROOM B

Starting Time	ID	Title of Presentation
15.00	11	Assess the Potential of Implementation of Sustainable Development Goal 4: “Quality Education” in Higher Education Sector Dulani Kuruppu
15.15	12	Thermoelectric Properties of Pbte Based Single-Walled Carbon Nanotube (SWCNT) Composites Kaleem Ahmad; Zeyad Almutairi
15.30	31	Treatment of Produced Water Using Immobilized Algae Shibin Nadersha; Ashraf Aly Hassan
15.45	42	Sustainable Spatio-Temporal Pattern Evolution of Solid Waste Landscape in Urban Context and Its Space-Design Intervention Approaches: A Case Study of Hong Kong, China Yuxin Wang; Xiaodi Zheng; Shuangbin Xiang
16.00	44	Novel Sustainable Wall Panel Using Thermoelectric and Phase Change Materials Mahmoud Elgendi; Ayesha Aladawi, Mariam Alshantiti; Aysa Alfalahi; Dana Alkhoori; Jawaher AL Tamimi
16.15	69	Pineapple Leaf Fiber Supply Chain Analysis for a Sustainability of Community Enterprise: A Case Study in Thailand T Apipatpapha; P Ongkunaruk; R Chollakup

Session : 5
Track : New and Renewable Energy, Energy Sciences
Session Chairs : Dr. Mohd Nashrul Bin Mohd Zubir &
 Dr. Kang Hooi Siang
Time : 9:30 – 11:00
Venue : ROOM A

Starting Time	ID	Title of Presentation
9:30	27	Flow Characteristic Investigation of a Novel Power-Augmented Water Kinetic Turbine for Energy Capturing Christopher Rusli; Chong Wen Tong; Kong Keen Kuan
9:45	43	A Comparative Study on Renewable Energy Policies in Japan and Malaysia Chong Wen Tong; Kok Hoe Wong
10:00	55	Facile Synthesis of α-Fe₂O₃ Nano-Cubes with Superior Electrochemical Performance Umisha Singh; Karthik Kiran Sarigamala; Shobha Shukla; Sumit Saxena
10:15	66	Wave Drag Reduction of a Small Waterplane Area Trimaran Hull by Adjusting the Outrigger Positioning Gong Xiang; Xianbo Xiang
10:30	35	Study on Sustainable Defluoridization Approaches in Rural Drinking Water Treatment in China Mingru Chen; Lyu Zhou; Zehan Zhang; Xu Guo
10:45	75	Development of Enhance Evaporative Cooling System with Independent Dehumidification Shekh Abdullah; MD Shadab Alam; Mohd Nashrul Bin Mohd Zubir; Mohd Ridha Bin Muhamad; Kazi MD. Salim Newaz

Session : 5
Track : Sustainable Technologies, Energy Sciences
Session Chairs : Assoc. Prof. Ir. Dr. Tan Chou Yong &
 Dr. Che Hang Seng
Time : 9:30 – 11:00
Venue : ROOM B

Starting Time	ID	Title of Presentation
9:30	33	Correlation Comparison for Prediction of Density and Viscosity of Aqueous 2-(Ethylamino)ethanol (EAE) for Carbon Capture Romal Ramadhan; Kreangkrai Maneeintr
9:45	46	Experimental and Numerical Investigation of a Hollow Fiber Membrane-Based Evaporative Cooler Xin Cui; Hui San Thiam; Weichao Yan; Liwen Jin
10:00	76	Development of Dew Point Evaporative Cooling Heat Exchanger Incorporating Chemically and Mechanically Enhanced Surface Texturing Md Shadab Alam; Shekh Abdullah; Mohd Nashrul Bin Mohd Zubir; Mohd Ridha Bin Muhamad; Kazi MD. Salim Newaz
10:15	79	Techno-Economic Study of Smart Grid System Based on PV, Hydrogen Microturbine and Fuel Cell – Case of Data Center Junseok Song; Byunghwa Park
10:30	80	Correlations of Heat Transfer and Flow Resistance in Rectangular Channels with Various Configurations Based on Response Surface Method Yanhui Zou; Rongjie Duan; Ziyuan Liu; Lianying Zhang; Liwen Jin
10:45	83	Turbidity Reduction in Palm Oil Mill Effluent (POME) by Submerged Fermentation with Immobilized Aspergillus Niger Spores Using Coconut Husk Paveethra Thegarathah; Jegalakshimi Jewaratnam; Khanom Simarani

Session : POSTER
Date / Time : 22-FEB-2022 / 9:30 – 10:30
 16:30 – 17:30
Venue : POSTER ROOM

ID	Title of Presentation
2	The Influence of the Carbon Emission Price Stimulation (China’s Emission Trading Schemes) on Enterprises’ Total Factor Productivity Qingyang Wu; Yanying Wang
3	Particulate Matter Exposure and Cumulative Inhaled Dose During Commuting by Subways in a Northeast City, China Li Chang; Wen Tong Chong; Yat Huang Yau; Fei Pei; Yanyun Zhang; Yiqiao Liu; Xinru Wang; Song Pan
6	Citric Acid Fermentation by Aspergillus Niger Dr.Amal ALmousa; Mohamed N. Abd El-Ghany; Eman H. Ashour
17	Rethinking the Limitations of Research on Occupants’ Window-Opening Behavior: A Review Yiqiao Liu; Wen Tong Chong; Yau Yat Huang; Li Chang; Sijia Gao; Yijuan Cao; Haowei Yu; Song Pan
18	Measurement and Modeling of Residential Window Opening Behavior in Hot Summer and Warm Winter Area of China Yuting Wang; Jinshun Wu; Desheng Sun; Xiangrui Kong; Yiqiao Liu; Wen Tong Chong; Liang Xia; Song Pan
20	Energy Estimating of Photovoltaic/Thermal (PV/T) Collector Using Neural Network Artificial Xinru Wang; Liang Xia; Fei Pei; Li Chang; Chong Wen Tong; Yiqiao Liu; Jinshun Wu; Song Pan
21	Emission Accounting and Drivers of the Emerging Least Developed Countries: An Example of the East Africa Yida Sun; Yuli Shan; Dabo Guan
23	Study on Biomass Direct Fired Cogeneration System Su He; Lu Wei
25	Multiple-Factor Analysis of Dehumidification Performance and Flow Resistance for the Cross-Flow Membrane Module Based on Orthogonal Test Y L Liu; J C Su; N Li; X Cui; W C Yan; L W Jin

26	<p>The Distribution and Influential Factors of PM2.5 in The Carriages of Beijing Subway Fei Pei; Yat Huang Yau; Bee Teng Chew; Xinru Wang; Song Pan</p>
30	<p>Stable Inorganic Fluoride Perovskite Solid Electrolyte Interface for Dendrite-Free Lithium Metal Anodes Yu Zhang; Chenyi Yi</p>
48	<p>Anti-oxidant and UV-Protective Chemically Modified Lignin/ PLA Bio composites for Active Food Packaging Sadaf Mearaj; Choi Joon Weon</p>
78	<p>Bridging BIM and LCSA to Greening Existing Buildings: From a Literature Review to Development of Conceptual Framework Nur Syamimi Zulkefli; Faizul Azli Mohd Rahim; Nurshuhada Zainon</p>