|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 7A: Refrigerants | | |
| 11:10-1:10 | ID | Authors | Title |
| 1 | 45 | Sejun Park, Yong Tae Kang, Hyung Won Choi, Jae Won Lee, Hyun Uk Cho and Nam Soo Lee | Performance analysis of simultaneous cooling and heating absorption system applying alternative working fluid with ionic liquid |
| 2 | 2 | [Wan Muhammad Zaid Wan Zaidi, Normah Mohd-Ghazali, Yushazaziah Mohd-Yunos, Jong-Taek Oh and Agus Sunjarianto Pamitran](http://www.fkm.utm.my/~normah/) | An Optimization Approach in the Development of a New Correlation for Two-Phase Heat Transfer Coefficient of R744 in a Microchannel |
| 3 | 50 | Pham Quang Vu, Thi Thu Ha Nguyen and Jong-Taek Oh | Flow condensation heat transfer of propane refrigerant inside a horizontal micro-fin tube |
| 4 | 10 | Hieu Hoang, Nurlaily Agustiarini, Vu Pham Quang and Oh Jong-Taek | The impact the multiport mini-channel tube cross sectional geometry on condensation pressure drop of R410A |
| 5 | 11 | Hieu Hoang, Nurlaily Agustiarini, Vu Pham Quang and Oh Jong-Taek | Condensation Heat Transfer Coefficient R410A Inside Multiport Mini-channels Tubes With Different Cross-sectional Geometry |
| 6 | 26 | Wenbin Ng, Haslinda Mohamed Kamar and [Nazri Kamsah](http://www.fkm.utm.my/~nazrikh) | Investigation of new refrigerant blends as R410A alternatives for air-cooled split air conditioner |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 7B: Refrigeration System | | |
| 3:25-6:20 | ID | Authors | Title |
| 1 | 7 | Jaehyeok Heo, Dong-Won Lee, Seong-hun Kang and Sang-Yuel Lee | Energy saving effect of the refrigerator truck by application of the latent heat storage |
| 2 | 25 | Ammar Syed Muhammad and Chan Woo Park | Heat Transfer Performance in a Plate-type Condenser of Absorption Refrigeration system |
| 3 | 49 | Hung Nguyen Tien, Jong-Taek Oh, Vinh Nguyen Dinh and Chien Nguyen Ba | Experimental and CFD Evaluation of Refrigeration Effect of Cellulose Evaporative Cooling Pads |
| 4 | 58 | Jongmin Choi, Seungyeon Lee and Min Soo Kim | An Experimental Test of A reciprocating Magnetic Heat Pump System at Room Temperature Using Irregular-Shaped Gadolinium Particles |
| BREAK | | | |
| 5 | 35 | Salman Muradi and Shazwin Mat Taib | Sources of Leakage in Refrigeration and Air conditioning Systems and Technical Solutions to Prevent the Leaks |
| 6. | 28 | Supriyadi Supriyadi, Adam Darmawan and Sentot Novianto | Efficiency of Precision Air Conditioning on Temperature and Cooling Load Change |
| 7 | 37 | Pham Quang Vu, Tran Van-Tuan and Jong-Taek Oh | Experimental study of flow condensation heat transfer of ammonia inside a multiport mini-channel tube |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 8A: AC/ AC system | | |
| 11:10-1:10 | ID | Authors | Title |
| 1 | 30 | Saleem Abbas and Chan-Woo Park | Study of frost and defrost characteristics of thermally conductive carbon fiber composite based heat exchanger |
| 2 | 43 | Marco Lao, Frantisek Miksik, Jie Lin, Kyaw Thu and Takahiko Miyazaki | Desiccant Air Conditioning (DAC) systems and their prospects for energy savings in tropical climates: The Philippines scenario |
| 3 | 57 | Jeong Kuk Hong, Inchan Hwang and Min Soo Kim | A Feasibility Study on the ED-Assisted Liquid Desiccant Regeneration Method |
| 4 | 3 | Seungrok Oh, Rin Yun, Hoseong Lee, Yujin Nam and Chang Yong Park | Energy consumption estimation for a hydrothermal energy used in building by ECO2 |
| 5 | 8 | Jeonggyun Ham, Gonghee Lee and Honghyun Cho | Numerical study for the temperature uniformity evaluation at the outlet of the gasket plate heat exchanger |
| 6 | 36 | Pham Quang-Vu, Phung Anh-Xuan and Jong-Taek Oh | Condensation heat transfer characteristics of R1234yf inside the multiport mini-channel tube |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 8B: Modelling of AC/Ref/Cooling | | |
| 3:25-6:20 | ID | Authors | Title |
| 1 | 6 | Jae Dong Chung, Woo Su Lee, Mahdi Koushaeian, Moon Yong Park and Xuan Quang Duong | Using an artificial neural network to optimize the time allocation strategy for three-bed adsorption chillers |
| 2 | 42 | Haolia Rahman, Mohammad Arief Indra Permana and Hwataik Han | Prediction of Indoor Air Quality based on Deep Learning in an Office Building |
| 3 | 40 | Joon Ahn and Ji Hyeok Kim | TRNSYS simulation of thermal environment according to outdoor conditions in desiccant cooling space driven by gas engine cogeneration |
| 4 | 20 | Hanim Mohd Yatim, Normah Mohd Ghazali, Agus Sunjarianto Pamitran, Sentot Novianto and Maziah Mohamad | Two-Phase Heat Transfer Microchannel System Identification with Particle Swarm Optimization (PSO) Approach |
| BREAK | | | |
| 5 | 47 | Fawad Ali, Lila Achour and Muhammad Ali Kamran | Numerical Investigation of Heat Driven Thermoacoustic Refrigerator Using Different Turbulence Models |
| 6 | 53 | Nurlaily Agustiarini, Hieu Hoang Ngoc, Normah Mohd-Ghazali and Oh Jong Taek | Prediction of boiling heat transfer coefficient of R1234yf inside multiport mini-channel tube by machine learning |
| 7 | 54 | Nurlaily Agustiarini, Hieu Hoang, Vu Pham Quang, Chien Nguyen Ba and Oh Jong-Taek | Application of machine learning to predict the heat transfer coefficient of R32 inside the multiport mini-channel tube |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 9A: Cooling Effects | | |
| 11:10-1:10 | ID | Authors | Title |
| 1 | 5 | Jae Dong Chung and Abhishek Awasthi | Sinusoidal surface roughness effect on solidification of water considering degree of supercooling |
| 2 | 19 | Hielfarith Suffri Shamsuddin, Normah Mohd-Ghazali, Patrice Estellé, Maziah Mohamad and Ummikalsom Abidin | Performance analysis of a double layer microchannel heat sink cooled with graphene nanofluid at various temperatures |
| 3 | 12 | Yunchan Shin, Minjun Kim, Honghyun Cho and Donghyeon Shin | Investigation on the improvement of driver's thermal comfort and energy saving by using various cooling seats |
| 4 | 29 | Hao Yu, Sang Won Seo, [Kyaw Thu](https://hyoka.ofc.kyushu-u.ac.jp/search/details/K006296/index.html) and [Takahiko Miyazaki](https://hyoka.ofc.kyushu-u.ac.jp/search/details/K003928/english.html) | Effect of temperature and humidity on the performance of desiccant dehumidification system under low-temperature regeneration |
| 5 | 4 | Mohamad Nur Hidayat Mat, Normah Mohd-Ghazali and Patrice Patrice Estellé | Thermofluid Behavior of Boron Nitride Nanotube Nanofluid in a Microchannel under Optimized Condition |
| 6 | 23 | [Phuong Thanh Nguyen and Chan Woo Park](https://com.jbnu.ac.kr/~emcsl/index.php) | The effect of fin and parameters on phase change material melting and solidification in storage tank |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 9B: Energy conservation and utilization | | |
| 3:25-6:20 | ID | Authors | Title |
| 1 | 13 | Yeonghun Kim, Minjung Lee and Honghyun Cho | Investigation of Thermal Comfort during Driving with Seat Heating Mode in Winter using Driver’s PPG |
| 2 | 59 | Sagar Saren, Sourav Mitra, Takahiko Miyazaki, Kim Choon Ng and Kyaw Thu | Equilibrium analysis of Adsorption Heat Transformer cycle with silica gel – water vapor pairs for waste heat upgrade |
| 3 | 52 | Norhayati Mahyuddin, Yee Choong Wong, Asrul Mahjuddin Ressang Aminuddin and Haoxiang Zhan | Comparison of ELV-Based Transparent Panels Integrated Residential Building in Kuala Lumpur and its Simulation Assessment of Building Thermal Performance |
| 4 | 32 | Solli Murtyas and Aya Hagishima | Investigating the effectiveness of passive cooling strategies for low-cost dwellings in Indonesia based on numerical simulations |
| BREAK | | | |
| 5 | 27 | Nguyen Nhan and Park Chan Woo | A study on modeling dynamic characteristics of battery cooling system for ESS system according to the configuration of water-cooled battery cooling module |
| 6 | 46 | Hyunjun Jung, Jaehyeok Heo and Rin Yun | Development of Stratification Analysis Model for Thermal Energy Storage Tank using CFD |
| 7 | 51 | Jaehui Jeong, Haye Min, Jinhee Jeong and Yong Tae Kang | Dynamic and static characteristics of absorption thermal battery system |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 10A: Energy conservation and the environment | | |
| 11:10-1:10 | ID | Authors | Title |
| 1 | 41 | Didi Asmara Bin Salim, Dr. Adzuieen Binti Nordin, Mohamad Asyraf Bin Othoman, Mohd Zulhairi Bin Zulkipli and Shahrul Nahar Bin Omar Kamal | Development of Chilled Water Turbine Inlet Air Cooling Model for Enhancement of Turbine Performance |
| 2 | 48 | Chien Nguyen Ba, Dzung Nguyen Viet and Oh Jong-Taek | Experimental Investigation of Two-phase Flow Boiling Heat Transfer and Pressure drop of Propane inside Multiport Minichannel |
| 3 | 16 | Yong Junhyeok, Kwon Ohkyung and Cho Honghyun | Heat transfer performance of LiBr solution-water in a plate heat exchanger according to LiBr concentration |
| 4 | 56 | Samuel Ayo and Normah Mohd-Ghazali | NUMERICAL SIMULATION OF THE INTERFERENCE EFFECTS TO OUTDOOR AIR FLOW AND VENTILATION AROUND ADJACENT BUILDING ARRAYS |
| 5 | 21 | [Van Cong Le, Jun Cong Ge, Sung Joo Hong and Chan Woo Park](https://com.jbnu.ac.kr/~emcsl/index.php) | A study on performance of heat and water vapor recovery from flue gas with Transport membrane condenser material |
| 6 | 9 | Huiyi Tan, Keng Yinn Wong, Syie Luing Wong, Wai Shin Ho, Bemgba Bevan Nyakuma, Mohd Hafiz Dzarfan Othman, Chew Tin Lee, Haslinda Mohamed Kamar and Meng Choung Chiong | Numerical Assessment of Ceiling-Mounted Air Curtain on the Particle Distribution in Surgical Zone |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 10B: Cooling/Environmental Analysis | | |
| 3:25-4:45 | ID | Authors | Title |
| 1 | 33 | Nor Atiqah Zolpakar and Mimi Muzlina Mukri | The Prospective of Particle Image Velocimetry (PIV) Measurement in Measuring Velocity Profile in Thermoacoustic System |
| 2 | 15 | [Syazwan Ismail](http://kajidataonline.com/), Haslinda Mohamed Kamar, Nazri Kamsah, Mohd Ibtisham Ardani, Nazri Che Dom, Farah Ayuni Shafie, Izwyn Zulkapri and Lim Kuang Hock | Predictive Analytics application in building diagnostic for testing the health risk assessment tool of indoor air quality and sick building syndrome in educational building |
| 3 | 60 | Muhammad Aliff Haikal Ghazali, Normah Mohd-Ghazali, Agus Sunjarianto Pamitran and Jong-Taek Oh | Development of a new correlation for pre-dry out evaporative heat transfer coefficient of R290 in a microchannel |
| 4 | 38 | Haolia Rahman, Paulus Sukusno, Mohammad Arief Indra Permana and Hwataik Han | Bayesian estimation of air exchange rate based on occupant exhaled carbon dioxide |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 10C: Others | | |
| 5:00-6:20 | ID | Authors | Title |
| 1 | 39 | Mohammad F. Suhaimi, Nicholas J. Y. Liew, Jungkyung Kim and Hyunjin Lee | Thermal Simulation for A First-Degree Skin Burn Injury Assessment |
| 2 | 18 | Muhamad Hafizul Ariff Muhamad Hazli, Adzuieen Nordin and Ummikalsom Abidin | Evaluation of Calcium Chloride as Sorbent Bed Material for Atmospheric Water Generation |
| 3 | 44 | Ummi Aqila Norhaidi, Nurshamimi Amirah Md Sunhazim, Natrah Kamaruzaman and Ummikalsom Abidin | Porous Media Characterization for Self-powered Micropump |

|  |  |  |  |
| --- | --- | --- | --- |
| ICSERA | 11B: Others | | |
| 3:25-5:20 | ID | Authors | Title |
| 1 | 22 | Mohd Faizal Hasan, Mohd Najib Shawalluddin, Naqila Mohd Mustaat, Bemgba Bevan Nyakuma, Mohd Rosdzimin Abdul Rahman and Mohd Farid Muhamad Said | Physical Characteristics of Palm Kernel Shell Torrefied by Multilevel Torrefaction Reactor |
| 2 | 24 | Eny Kusrini, Muhammad Idrus Alhamid, Mufiid Fatkhurrahman, Dwi Aprillia Wulandari and Anwar Usman | Separation of Multicomponent Lanthanides Using Zeolite A Modified Pectin Biopolymer |
| 3 | 55 | Mun Oon Fong and Norhayati Binti Ahmad | Effect of Cold Plasma Voltage and Treatment Duration to the Microstructure and Hydrophilicity of Mushroom Grain Spawn |
| 4 | 14 | [Syazwan Aizat Ismail](http://kajidataonline.com), [Haslinda Mohamed Kamar](https://www.utm.my/directory/staff/haslinda), Nazri Kamsah, Mohd Ibtisham Ardani, Nazri Che Dom, Farah Ayuni Shafie, Izwyn Zulkapri and Lim Kuang Hock | Classification technique of health risk assessment of indoor air quality and Sick Building Syndrome investigation among learners in educational building |
| 5 | 61 | Muhammad Hilmi Ibrahim, Mohd Fairus Mohd Yasin and Norikhwan Hamzah | Transient size analysis of carbon nanotubes synthesis in methane diffusion flame |