

TIME								Tuesday, February 6, 2018							
8:00															
8:30 AM		<b>Opening Ceremony</b> <i>Chair: Prof. Jiyuan Tu</i>		Welcome and formal opening: <b>Prof. Peter Coloe</b> (Pro Vice Chancellor and Vice President of RMIT University)											
9:00-10:00		<b>Keynote Presentation</b> <i>Chair: Prof. Qingyan Chen</i>		<b>Prof. Reinhard RADERMACHER</b> (University of Maryland, Editor-in-Chief, HVAC&R) <b>Title:</b> Outlook on Emerging Heat Pump Technology Trends											
10:00-10:30								MORNING TEA							
Parallel Sessions (10:30-12:30)		AUDITORIUM <b>Heat Exchange Systems (1)</b> <i>Chair: Dr. Liangzhu Wang</i>		RED ROOM <b>Advanced Modelling &amp; CFD (1)</b> <i>Chair: Dr. Zhaofeng Tian</i>		YELLOW ROOM <b>Building Energy (1)</b> <i>Chair: Prof. Marco Perino</i>		BLUE ROOM <b>Indoor Air Quality &amp; Health (1)</b> <i>Chair: Prof. Kazuhide Ito</i>		ORANGE ROOM <b>Urban &amp; Environmental (1)</b> <i>Chair: Prof. Chung Sau Kenny KWOK</i>					
10:30 AM		131 C. Liu, Qingpeng Wei* (Tsinghua University), J Deng and E. Tian <i>Development of A Multiple Index Assessment Model of Domestic Hot Water System with A Case Study of Star Hotels in Shanghai</i>		6 Yihuan Yan* (RMIT University), X.D. Li, J.Y. Tu <i>Numerical study of the contaminants transport and distribution in the airliner cabin environment</i>		120 A. Luo, J. Xia, Yi Jiang* (Tsinghua University) <i>Standard for district heating systems consumption in northern China: guide for thermal companies and policy-makers</i>		121 Hualing Zhang* (Chongqing University), S.Y. Hong, Z.L. Fang, H.H. Feng, B.D. Wang, D. Li <i>Microbial level assessment of indoor air quality in hospital wards</i>		280 Yongxin Xie* (Hong Kong Polytechnic University), T. Huang, J. Li, J. Niu, C.M. MAK <i>The sensitivity of wind speed and solar radiation in determining outdoor thermal sensation and comparison with UC-Berkeley model</i>					
10:50 AM		205 Guang Zhou* (Guangzhou University), Y.Y. Ye, W.D. Zuo, X.Q. Zhou <i>Modelling Air-to-Air Plate-fin Heat Exchanger without Condensation</i>		82 Xingwang Zhao* (Tianjin University), W. Liu, Q. Chen <i>Selection of Air Supply Diffusers and Parameters for Optimal Indoor Environment Design by the CFD-based Adjoint Method</i>		172 Naoya Watanabe* (Graduate of Marine Science and Technology), S. Kametani <i>Estimation of Detailed Building Energy Consumption Using Building Energy Database and Simulation tool</i>		95 R. Chen, J. Liu, Jingjing Pei* (Tianjin University) <i>A Composite Purification Material Research of Indoor Purification for Particulate Matter and Gas Pollutants</i>		288 Xuefan Zhou* (HUST), H. Chen <i>Impact of upwind urbanization on the downwind urban heat island effect</i>					
11:10 AM		316 Rikito Nishioka* (Graduate School of Tokyo University of Marine Science & Technology), S.Kametani <i>Performance Evaluation of Newest Model GHP Air Conditioning System Under Actual Operation</i>		152 H. Chen, Borong Lin* (Tsinghua University), Z. Li, H. Zhou <i>Efficient Daylight Factor Rendering in Sketch Up Based on High Performance Computing of Radiance</i>		260 M. H. Hassan* (American University of Beirut), H. Khoury <i>Energy Modeling and Sustainability: A Review on Current Theories, Practices, and Challenges</i>		215 Haiguo Yin* (Xi'an University of Architecture and Technology), C. Liu, X. Zhu, Y. Fan, A. Li <i>Measurement for Indoor Pollutants Concentration Distribution of Natural Ventilation Residential Buildings in Northwest China during Heating Season</i>		16 Koorosh Gharehbaghi* (Rmit University), C. Scott-Young <i>Green Structures in High Rise Construction: Application and Functionality</i>					
11:30 AM		10 C.Y. Tso*(Hong Kong Uni. of Sci. and Tech.), Y.M. Wong, K. C. Chan, C.L. Wu, C. Chao <i>Numerical Simulation of an Adsorption Cooling and Desalination System employing a Novel Composite Adsorbent</i>		132 X. Sun, J. Park, Jung-Il Choi* (Yonsei University), G.H. Rhee <i>Uncertainty Quantification Analysis of Single-sided Natural Ventilation in a Building</i>		42 I-Ting Lai* (National Taiwan University), K.T. Huang, R.L. Hwang <i>Projection and mitigation of greenhouse gas emissions of residential building sector under climate change in Taiwan</i>		246 Qiwen Jiang* (Xi'an Jiaotong University), X.Z. Meng, Y.H. Liu, J.B. Chen and M. Zhao <i>Measurement and Evaluation on Air Quality of the University Library with HVAC System</i>		135 L. Li, Mingfang Tang* (Chongqing University) <i>The micro-climate environment of urban public transport platform in hot summer and cold winter region of china</i>					
11:50 AM		80 Hansol Lim* (Hanyang University), H. S. Lim, S. Y. Li, W. J. Kim, B. J. Kim, J. W. Jeong <i>Empirical model for predicting the heat exchange efficiency of a thermoelectric cooling and heating unit</i>		262 F. Wenig* (Fachhochschule Burgenland GmbH), P. Klanatsky, M. Pichler, B. Derler, C. Heschl <i>Validation of a dynamic model for thermally activated building systems</i>		46 V.M. Barthelmes* (Politecnico Di Torino), R. Li, R.K. Andersen, W. Bahnfleth, S.P. Corgnati, C. Roede <i>Profiling Occupant Behaviour in Danish Dwellings using Time Use Survey Data - Part I: Data Description and Activity Profiling</i>		281 Huibo Zhang* (Shanghai Jiao Tong University), X. Wu, H. Yoshino, U Yanagi, K. Hasegawa, N. Kagi, T. Goto <i>Investigation on Old People's Cardio-cerebrovascular Disease and living environment in rural areas of Northeast China in Winter</i>		22 Yu-Hsuan Juan* (National Taipei University of Technology), A.S. Yang, Y.P. Chen, C.H. Cheng <i>CFD Simulations of Pollutant Dispersion for Optimized Half Open Spaces in Ideal Urban Street Canyons</i>					
12:10 PM		81 Hye-Won Dong* (Hanyang University), H.J. Cho, E.J. Choi, B.J. Kim, J.W. Jeong <i>Energy saving potentials of solar organic Rankine cycle in a liquid desiccant and evaporative cooling-assisted air conditioning system</i>		330 Yao Tao* (RMIT University), K. Inthavong, P. Petersen, K. Mohanarangam, W. Yan, J.Y. Tu <i>Numerical Simulation and experimental verification of wake flows induced by moving manikins</i>		47 V.M. Barthelmes* (Politecnico Di Torino), R. Li, R.K. Andersen, W. Bahnfleth, S.P. Corgnati, C. Roede <i>Profiling Occupant Behaviour in Danish Dwellings using Time Use Survey Data - Part II: Time-related Factors and Occupancy</i>		30 S. Sadriazadeh* (KTH Royal Institute of Technology), S. Stensson, I. Walker, S. Marashian, S. Holmberg <i>Airborne bacteria inactivation in a hospital ward by ultraviolet irradiation</i>		24 Yu-Hsuan Juan* (National Taipei University of Technology), C.Y. Wen, Y.M. Su, A.S. Yang <i>A Preliminary Assessment of Potential Wind Power Utilization in the Leeward Side of High-Rise Buildings</i>					
12:30-1:30								LUNCH & POSTER SESSION A							
1:30-2:30		<b>Keynote Presentation</b> <i>Chair: A/Prof. Sherman Cheung</i>		<b>Prof. NIU Jian-Lei</b> (Hong Kong Polytechnic University, Sydney University, Editor-in-Chief, Energy and Building) <b>Title:</b> Capturing thermal convection inside and around buildings with different levels of turbulence modeling											
Parallel Sessions (2: 30-3:50)		AUDITORIUM <b>Ventilation (1)</b> <i>Chair: A/Prof. Wei Liu</i>		RED ROOM <b>Thermal Comfort (1)</b> <i>Chair: Dr. Dong Chen</i>		YELLOW ROOM <b>Experimental Measurements</b> <i>Chair: Dr. Krishna Mohanarangam</i>		BLUE ROOM <b>Energy &amp; Policy</b> <i>Chair: Prof Vahid Nik</i>		ORANGE ROOM <b>Acoustic &amp; Noise</b> <i>Chair: Dr. Cheuk Ming Mak</i>					
2:30 PM		59 A. Zendejboudi, Xianting Li* (Tsinghua University), P. Song <i>A Dimensionless Model for Estimating the Dehumidification Effectiveness of Liquid Desiccant Dehumidifiers: Application of Least Square Support Vector Machine</i>		51 Y. Wang, Lei Zhao* (Xi'an University of Architecture and Technology) <i>Indoor Thermal Comfort Analyses Based on Human Body Exergy Exchange and Consumption Rates</i>		72 Jakub Dzedzic* (Norwegian University of Science and Technology), D. Yan, V. Novakovic <i>Measurement of Dynamic Clothing Factor (D-CLO)</i>		91 Somin Park* (Sungkyunkwan University), D. Song <i>Why the Balance Point Temperature in Degree-days should be changed?</i>		124 T. Sevilla, W Tian, Y Fu, Wangda Zuo* (University of Miami) <i>Low-Cost Acoustic Sensor Array for Building Geometry Mapping using Echolocation for Real-Time Building Model Creation</i>					
2:50 PM		142 Mei Liang, Q.P. Wei* (Tsinghua University), J.W. Deng <i>A method to measure natural air infiltration in the airport based on CO2 mass balance and energy balance</i>		222 Asako Hasegawa* (Kumamoto University) <i>Lessons from a Non-uniform Thermal Environment in a PC Seminar Room.</i>		112 H. Wang, Y. Lin, X. Li* (Tsinghua University), Y. Liu, S. Nan <i>Flow visualization and test in scale model tunnel with purification station</i>		145 Yeji Lee* (Sungkyunkwan University), J. Kim, D. Song <i>Limitation of building code in terms of building energy saving</i>		29 K.W. Ma, C.M. Mak* (The University of Hong Kong), H.M. Wong, Z.T. Ai <i>Effects of noise on dental professionals in a dental hospital in Hong Kong</i>					

3:10 PM	155	Wenhui Ji* (Chongqing University), Q. Luo, Z.L. Zhang, H.H. Wang <i>Cooling Effect of Mechanical Night Ventilation over Internal Wall Surface: A Parametric Analysis</i>	133	Suyeon Kim* (Sungkyunkwan University), D. Song <i>Thermal comfort and energy consumption according to the control logic</i>	157	Thibault Péan* (Irec), E. Fuentes, J. Ortiz, J. Salom <i>Performance of a gas boiler under dynamic operation conditions: experimental studies in semi-virtual environment</i>	315	Xiang Zhang* (Harbin Institute of Technology), C.H. Zhan, G. H. Li <i>Comparison of Terminal Indicators Scoring Methods between ESGB and EEWB</i>	48	Joel Lee* (Arup/Rmit), J. Davy, N. Boulter, K. Dumichich <i>Performance of Rectangular Duct Attenuators under Non-ideal Configurations with an Unlined 90 Degree Bend</i>
	<b>3:30-4:00 AFTERNOON TEA &amp; POSTER SESSION A</b>									
Parallel Sessions (4:00-5:40)	Paper No.	<b>AUDITORIUM</b>	Paper No.	<b>RED ROOM</b>	Paper No.	<b>YELLOW ROOM</b>	Paper No.	<b>BLUE ROOM</b>	Paper No.	<b>ORANGE ROOM</b>
		<b>Heat Exchange Systems (2)</b> <i>Chair: Prof. Jae-Weon Jeong</i>		<b>Thermal Comfort (2)</b> <i>Chair: Prof Tengfei Zhang</i>		<b>Cooling &amp; Air Conditioning</b> <i>Chair: Prof. Fu-Jen Wang</i>		<b>Passive Building Design (1)</b> <i>Chair: Prof. Quan Zhang</i>		<b>Building Envelope &amp; Materials (1)</b> <i>Chair: Prof. Yanhua Liu</i>
4:00 PM	340	Guanping Jian* (Xi'an Jiaotong University), L. Sun, J. Wen, S. Wang <i>Numerical analysis of spiral wound heat exchanger based on fluid-structure interaction</i>	188	I. Nastase, Cristiana Croitoru* (Technical University of Civil Engineering Bucharest), I. Ursu, D. Guță, P. Danca <i>Advanced thermal manikin prototype with neuro-fuzzy control system</i>	202	C. Duarte* (Center For The Built Environment), P. Rafferty, S. Schiavon, F. Bauman <i>How High Can You Go? Determining the Highest Supply Water Temperature for High Thermal Mass Radiant Cooling Systems in California</i>	229	Peter Klanatsky* (Fachhochschule Burgenland GmbH), Franz Inschlag, Franz Hengel, Christian Heschl <i>Investigations of Solar Energy Systems for thermal self-sufficient Residential Buildings</i>	244	J.Y. Qiu, J.L. Liu, Y.X. Lu and Yanhua Liu* (Xi'an Jiaotong University) <i>A New Mathematical Model for Particle Penetration Factor Through Cracks of Building Envelope</i>
	4:20 PM	96	Lukas Zechner* (Forschung Burgenland), T. Schoberer, S. Schuh, J. Weyr, W. Stuterecker <i>Analysis of Thermoelectric Heat Pumps for Applications in Buildings</i>	208	A. Casalegno, E. Monticelli, Marco Perino* (Deneg - Politecnico Di Torino), F. Prospero <i>New methodology and perspective for the air flow and thermal comfort characterization of personalized devices</i>	243	J.H. Chen, Jing Song* (Chongqing University), Z.L. Wu <i>An Application Study of Ground Source Direct Cooling Complex System</i>	118	Hongli Sun* (Tsinghua University), B. Lin <i>The Simulation Study on the Adaptability of Passive House in China</i>	18
4:40 PM	228	Nannan Dai* (Southeast University), S.H. Li <i>Coupling Model of Heat Pump System and Water Tank with Immersed Condenser Coil in HPWH</i>	209	D.H. Qi, W.G. Li, J. Cheng, Lianzhu Wang* (Concordia University) <i>Scale Modelling of Thermal Airflows in Buildings</i>	89	S.Y. Li* (Hanyang University), H. S. Lim, J. H. Shin, M. S. Jo, J. W. Jeong <i>Energy Performance of a Desiccant and Evaporative Cooling-Assisted Air Conditioning System in Various Climatic in China</i>	190	A. Bejan, C. Croitoru, Florin Bode* (Technical University of Cluj-Napoca), I. Nastase, M. Sandu, A. Labihi <i>Inertial elements integration on thermal solar collectors</i>	34	Dmitrii Zheldakov* (Research Institute of Building Physics of Raacs), V.G. Gagarin <i>The development of method of determining climatic loads on the enclosing structures taking into account global climate change</i>
	5:00 PM	52	Shuyang Zhang* (Southeast University), L. Zhang, X. Zhang <i>Comprehensive evaluation of Ground Source Heat Pump system using statistical method</i>	230	Hossein Bakhtiari* (The University of Gävle), M. Cehlin and J. Akander <i>Thermal Comfort in Office Rooms in a Historic Building with Modernized HVAC Systems</i>	92	Chong Shen* (Tsinghua University), X. Li, A. Melikov <i>Experimental investigation on the performance of a window cooling system compared with a chilled ceiling system</i>	26	Shin Young Jeong* (Hkust), Chi Yan Tso, Yuk Ming Wong, Christopher Chao <i>FDTD simulations on Sahara silver ant inspired biomimetic thermal selective passive daytime radiative cooling</i>	43
5:20 PM	201	Kuei-Peng Lee* (National Taipei University of Technology), C.K. Chuang, B. H. Wu <i>Applying Data Mining Technology in Diagnosis for the Operation of Chiller Plant</i>	270	Hari Dalal* (Taep) <i>Evaluation of air conditioning system design of swimming pool complex</i>	204	K.P. Lee* (National Taipei University of Technology), K.T. Lin, B.H. Wu <i>A Case Study of Energy and Condensation Analysis for Chilled Beam Systems in the Office Building Located in Hot and Humid Climate Zone</i>	64	Alexander Floss* (University of Applied Sciences Biberach), M. Schaub <i>Sizing of Energy Storages for Zero Energy Buildings</i>	56	Y. Xu, C.H. Lin, Z. Wei, Tengfei Zhang* (Dalian University of Technology), S. Wang <i>Measuring Moisture Content in a Porous Insulation Package with a Finite Geometric Domain</i>
	5:40 PM	213	Qing Cao* (Tianjin University), Q. Xu, C-H Lin, Z. Wei, Q.Chen <i>Modeling Particle Deposition on a Plate-Fin Heat Exchanger</i>	33	Dayi Lai, Xiaojie Zhou, Qingyan Chen* (Purdue University) <i>Developing A Dynamic Thermal Sensation Model for Outdoor Spaces</i>					
6:00 PM	<b>END OF DAY</b>									

<b>POSTER SESSION A</b>	41	Dachuan Shi* (Chongqing University), Yafeng Gao <i>Energy Savings and Thermal Performance of Containerized Planting Roof: A Case Study in Chongqing of China</i>	79	Joon-Young Park* (Hanyang University), Hye-Won Dong, Seong-Yong Cheon, Yoo-Suk Byon, Jae-Weon Jeong <i>Impact of Multi-Stage Liquid Desiccant Dehumidification in a Desiccant and Evaporative Cooling-Assisted Air Conditioning System</i>	148	Yuting He* (Guangxi University) <i>Development of a sun-shading louver unit with evaporative cooling effect – Design concept and unit components</i>	151	Aymeric Delmas* (Piment Laboratory) <i>Towards Context &amp; Climate Sensitive Urban Design: An integrated simulation and parametric design approach</i>
	65	Junsong Wang* (South China University of Technology), Lei Zhang, Qinglin Meng <i>Study on Hygric Properties of Porous Pavement Bricks</i>	119	Junhui Yan* (Southeast University) <i>Analysis of the Non-uniform Temperature Distribution and Performance Optimization of a Nanofluid-based Direct Absorption Solar Collector</i>	149	Yigang Li* (Guangxi University) <i>Development of a sun-shading louver unit with evaporative cooling effect – Numerical analysis of the improvement effect on the thermal environment</i>	159	Sumei Lu, Q.L. Meng, Q. Li <i>Effects of the emissivity of inner wall of the building envelope on the thermal comfort of human body</i>
	78	Lingling Li* (South China University of Technology) <i>CFD Study on the Characteristics of Temperature and Velocity in a Environmental Wind Tunnel</i>	137	Xiao Juan* (Xi'an Jiaotong University), Wang Jiarui, Jian Guanping, Wang Simin, Wen Jian <i>Performance investigation on shell-and-tube heat exchangers with different baffles based on fluid-structure intersection</i>	150	Ruey-Lung Hwang* (National Kaohsiung Normal University), Feng-Yi Lin, Tzu-Ping Lin <i>Effect of Urban Micro-climate on Home Energy Consumption</i>	177	Lujian Bai* (Xi'an University of Architecture and Technology) <i>The impacts of climate change on thermal climate zone and building energy efficiency in China</i>

TIME						Wednesday, February 7, 2018					
8:00											
8:30 AM		<b>Doors Open</b>		Late registrations							
9:00-10:00		<b>Keynote Presentation</b> <i>Chair: Prof. Guan Yeoh</i>		<b>Prof. Bert BLOCKEN</b> (Eindhoven Uni.of Tech, Built Env & KU Leuven, Chair of Urban & Bldg Physics) <b>Title: Advances in Computational Fluid Dynamics for Building Energy and Environment</b>							
10:00-10:30						MORNING TEA					
Parallel Sessions (10:30-12:30)		AUDITORIUM <b>Ventilation (2)</b> <i>Chair: Prof. Huang Chen</i>		RED ROOM <b>Advanced Modelling &amp; CFD (2)</b> <i>Chair: A/Prof. Sherman Chipok Cheung</i>		YELLOW ROOM <b>Sensors, Controls &amp; Monitoring (1)</b> <i>Chair: Prof. Junjie Liu</i>		BLUE ROOM <b>Indoor Air Quality &amp; Health (2)</b> <i>Chair: Dr. Lin Tian</i>			
10:30 AM		199 Cristina Croitoru* (Technical University of Civil Engineering Bucurest), M. Sandu, I. Nastase, F. Bode, L Tacutu <i>Scale Model Study for a Ventilation System Optimization inside a Sludge Dewatering Area</i>		11 Wei Liu* (Purdue University), Q. Chen <i>Inverse Design of Indoor Environments by a Fast Fluid Dynamics-based Adjoint Method</i>		196 Laura Bineau* (Cstb), P. Michel, B. Vinot <i>System dynamics modeling of building-scaled refurbishment: a resource-based analysis for BIM adoption</i>		50 J. Zemitis, Janis Lusis* (Riga Technical Univeristy), A. Borodinecs, A. Prozumts <i>Preliminary Study on IAQ in Indoor Shooting Ranges</i>			
10:50 AM		13 Wei Ye* (Tongji University), H. Wang, X. Zhang <i>A preliminary discussions on base levels of ventilation rates for public buildings in China</i>		55 Y. Wei, W. Liu, Y. Xue, Z. Zhai, Q. Chen, Tengfei Zhang* (Dalian University of Technology) <i>Inverse Design of Enclosed Air Environment by Integrating Three Methods</i>		69 J. K. K. Petersen, J. K. Kristensen, H. Elarga, R. K. Andersen* (Technical University of Denmark), A. Midtstraum <i>Accuracy and air temperature dependency of commercial low-cost NDIR CO2 sensors: An experimental investigation</i>		146 Sung-Jun Yoo* (Kyushu University), K. Ito <i>Quantitative risk assessment of transient inhalation exposure using PBPK-CFD hybrid model with computer simulated person</i>			
11:10 AM		38 K. Vachaparambil, Mathias Cehlin* (The University of Gävle), T. Karimipannah <i>Comparative Numerical Study of the Indoor Climate for Mixing and Confluent Jet Ventilation Systems in an Open-plan Office</i>		61 Zhenjun Ma* (University of Wollongong), K. Li, D. Robinson, J. Ma <i>A Two-level Clustering Strategy for Energy Performance Evaluation of University Buildings</i>		122 T.Y. Zhao, Jiaming Wang* (Dalian University of Technology) and M. Xu <i>Study on Predictive Control for Chiller Plants Based on T-S Fuzzy Model</i>		156 D.C. Zhang, J.J. Liu, R.Q. Chen, J.L. Ren, Jingjing Pei* (Tianjin University) <i>A Study on Decomposition of Cooking Oil Fume by UV, VUV and VUV/ O3</i>			
11:30 AM		53 Z. Cao* (Xi'an University of Architecture and Technology), Y. Wang, M. Wang <i>A Comparison of Concentrated Contaminant Removal in enclosure by Using Mixing Ventilation and Vortex Ventilation</i>		136 Yunyang Ye* (University of Miami), G. Wang, W. Zuo <i>Creation of a Prototype Building Model of College and University Building</i>		128 Shohei Miyata* (The University of Tokyo), Y. Akashi, J. Lim and Y. Kuwahara <i>Energy Conservation by Optimization of Set Values in Heat Source Systems Considering Controllability</i>		169 Y. Yin* (Tianjin University), J. Pei, J. Cao, Y. Sun, J. Liu, Y. Zhang <i>Time dependence of characteristic parameter for semi-volatile organic compounds (SVOCs) emitted from indoor materials</i>			
11:50 AM		57 Lei Zhao* (Xi'an University of Architecture and Technology) <i>Comparison of Cooling Performance of Rooms with Cooling Radiant Ceiling Panel and Constant Air Volume System</i>		104 J. Cheng, H. Wang* (University of Shanghai For Science and Technology), Z. Zhai <i>Inverse Modeling of Airborne Pollutant Based on Adjoint Probability Method under Unsteady Airflow Conditions with Multizone Model</i>		166 A.S. Lamano* (Eri@N), S. Yang, M. P. Wan, M. Zhou, J. Zhou, S. Babu, J. N. Sarvaiya, Z. Zhang, D.E.V.S. K. Kumar, K. Krishnasayee <i>Energy Performance of an Integrated Automated Blinds and Dimmable Lighting System with Model-Predictive Control (MPC)</i>		171 Akemi Iwaki* (Shibaura Institute of Technology), Takashi Akimoto <i>Survey on the Effect of Sleep on Summer Using Personal Humidifier and on the Skin and Blood Pressure of Middle-Aged People</i>			
12:10 PM		90 Younhee Choi* (Sungkyunkwan University), D. Song, W. Cho, J. Kim <i>Effect of the fixed and variable heat exchange efficiency of room ventilation system on heating energy demand</i>		127 Doyun Lee* (The University of Tokyo), R. Ooka, S. Ikeda and W. Choi <i>Case Study of ANN Modeling of Stratified Thermal Energy Storage and Ground Source Heat Pump Systems for Model Predictive Control</i>		175 Ilinca Nastase* (Technical University of Civil Engineering of Bucharest), I. Ursu, D. Enciu, V. Iordache, S. Zaharia, M. Gustiuc, M. Sandu <i>Real Time Monitoring Network System for Urban Air Quality Management</i>		217 J.L. Ren, Junjie Liu* (Tianjin University), W.D. Li <i>Study on fine particle and volatile organic pollutants in the terminal building of Tianjin Airport, China</i>			
12:30-1:30						LUNCH & POSTER SESSION B					
1:30-2:30		<b>Keynote Presentation</b> <i>Chair: Dr Kiao Inthavong</i>		<b>Prof. Christian HESCHL</b> (FH Burgenland, Forschung Burgenland: Director Center for Building Technology) <b>Title: The European Way to Energy Efficient Buildings</b>							
Parallel Sessions (2: 30-3:50)		AUDITORIUM <b>Heat Exchange Systems (3)</b> <i>Chair: Prof. Lei Zhao</i>		RED ROOM <b>Thermal Comfort (3)</b> <i>Chair: Dr. Sara Vahaji</i>		YELLOW ROOM <b>Building Energy (2)</b> <i>Chair: Prof. Jian-Lei Niu</i>		BLUE ROOM <b>Passive Building Design (2)</b> <i>Chair: Prof Royzo Ooka</i>			
2:30 PM		304 James Van Strien* (Rmit University), K. Inthavong <i>Computational Comparison of simulation performance for a Chilled Thermal Energy Storage Tank</i>		271 Yuxin Wu* (Chongqing University), H. Liu, B. Li <i>Impact of adaptive behaviours on evaluation of thermal comfort in aircraft cabins</i>		49 Rongling Li* (Technical University of Denmark), Y. Chen, C. Rode <i>Heat Flexibility as a Function of the Outdoor Climate: A Study of Danish Dwellings</i>		144 Tetsuya Kawamura* (The University of Tokyo), R. Ooka, S. Ikeda <i>Shape Optimization of a Detached House Considering Daylight Utilization Using Metaheuristics</i>			
2:50 PM		306 Fan Zhang* (Southeast University), Y. Yin, X. Zhang <i>Performance analysis of a liquid desiccant evaporative cooling air-conditioning system powered by solar energy</i>		312 Moon Keun Kim* (Xian Jiaotong - Liverpool University), S. Cui <i>Evaluation of PMV and PPD Model of a Hybrid Radiant Cooling System</i>		68 Ying Zhu* (Xi'an University of Architecture and Technology), Y. Li, Y. Liu, B. Shao, Q. Tong <i>Development of A Distributed Energy Systems Optimization and Carbon Emission Management Model under Uncertainty: A Case Study of New Countryside Building in Guanzhong area, China</i>		235 Haoyu Wang* (The University of Sydney) and C. Lei <i>Combined Solar Chimney and Water Wall for Ventilation and Thermal Comfort</i>			
3:10 PM		307 Li Ling* (Hunan University), Q. Zhang, Y. Yu, S. Liao <i>Energy saving analysis of the water cooled multi-split heat pipe system (MSHPS) in a data center</i>		347 Xinying Fan* (Dalian University of Technology), B. Chen, T. Zhao <i>An experimental and theoretical study on the indoor thermal environment of a new cave dwelling in the northwest of China</i>		84 Shunyong Yin* (Tsinghua University), J. Xia, H. Fang, Y. Li, Y. Jiang <i>Challenges for Clean Heating in Northern China</i>		126 Kwanho Lee* (Ulsan College), Geoffrey Levermore <i>Estimation of surface solar irradiation using sky view factor, sunshine factor and solar irradiation models according to geometry and buildings</i>			
3:30-4:00						AFTERNOON TEA & POSTER SESSION B					
Parallel Sessions (4: 00-5:40)		AUDITORIUM <b>Phase Change Materials</b> <i>Chair: Prof. Yonggao Yin</i>		RED ROOM <b>Building Envelope &amp; Materials (2)</b> <i>Chair: Prof. William Yang</i>		YELLOW ROOM <b>Urban &amp; Environmental (2)</b> <i>Chair: Prof. An-Shik Yang</i>		BLUE ROOM <b>Indoor Air Quality &amp; Health (3)</b> <i>Chair: Prof. Lennart Larsson</i>			
		158 Ximing Chen* (Shenzhen Institute of Building Research Co. Ltd.), J. Ren, Y. Wang		138 Xiandong Su* (Chongqing University), Z.J. Yang		63 Sumei Liu* (Tianjin University), W. Pan, X. Cheng, H. Zhang, Z. Long, Q. Chen		344 Lumeng Liu* (University of Queensland), J. Liu, D. Do			

4:00 PM	<i>Preparation and Characterization of BioPCM for Building Envelope applications</i>	<i>The Influence of Energy Usage Modes and Envelope on Energy Consumption of Buildings</i>	<i>CFD Simulation of Urban Wind Flow in an Actual Urban Area with a Full-scale Geometrical Model</i>	<i>Toward a better understanding of how functional groups and pore size affect formaldehyde adsorption in carbonaceous materials: A Monte Carlo simulation study</i>
4:20 PM	184 Xiaofeng Niu* (Nanjing Tech University), Y. Zhang, Y.F. Yan, T. Liu, J.J. Liu <i>Effect of Micro-Encapsulated Phase Change Materials on the Performance of Liquid Desiccant Dehumidification</i>	192 S. Fantucci, E. Fenoglio, F. Isaia, Valentina Serra* (Politecnico Di Torino), M. Perino, M. Dutto, V. Marino <i>Development of aerogel based internal thermal plasters for the energy retrofit of existing buildings: First results</i>	178 Fanxing Zeng* (Tongji University), N. Gao <i>Evaluation of urban thermal characteristics at microscale using energy balance models</i>	349 J. Zhang, C. Sun, R. Lu, W. Liu, C. Huang* (University of Shanghai For Science and Technology) <i>The Status of Exposure Level and Assessment of Phthalic Acid Esters in Household Dust</i>
4:40 PM	239 Yuan Zhang* (School of Energy and Power Engineering, Jiangsu University) and Q. Wang <i>Hollow block's structural impact on the thermal behaviour of PCM wall</i>	220 Z. Zhuang* (Tongji University), J.Y. Ying, H. Ye, Y. Yu <i>Thermal and energy analysis of an integrated building envelope with ventilated air layers for utilization surplus heat</i>	273 Pui Kwan Cheung* (The University of Hong Kong), C.Y. Jim <i>Thermal benefits of Chinese Banyan in subtropical Hong Kong</i>	351 Chao Chen* (Beijing University of Technology), C. Chen, Z. Chen, H. Qin, Y. Wu, Z. Hao <i>Determination of the key design parameters of indoor PM2.5 load under air infiltration</i>
5:00 PM	266 Xiangli Li* (Dalian University of Technology), C. Tong, L. Duanmu, Z. Zhai <i>Preparation and thermal energy storage properties of polyethylene glycol / silica /expanded graphite as shape-stabilized phase change material</i>	232 Peng Xue* (Beijing University of Technology), J.C. Xie, C.M. Mak and J.P. Liu <i>An index linked with luminous environment and energy saving for daylighting and shading design</i>	274 Jiawei Yao* (Tongji University), F. Yang, Z. Zhuang, Y. Shao, Q. Ban, J. Li, F. Yuan <i>Outdoor Natural Ventilation and Construction Sequence based Urban Planning Strategies in Extended District of Lujiazui CBD, Shanghai</i>	348 Bin Chen* (Dalian University of Technology), X. Fan, T. Zhao, Y. Chen, C. Zeng <i>Life style and Requirement on Indoor Environment</i>
5:20 PM	END OF DAY			

POSTER SESSION B	187 Kimhyegi@Ajou.Ac.Kr, Kss@Ajou.Ac.Kr <i>Development of an ECM recommendation model considering the combined effect on the building energy performance</i>	231 Tong-Bou Chang* (National Chiayi University), Jer-Jia Sheu, Jhong-Wei Huang, Yu-Sheng Lin, Che-Cheng Chang <i>Effects of outdoor air ventilation rate on vehicle cabin indoor air quality</i>	255 Fu-Jen Wang* (National Chin-Yi University of Technology), Jing-Syong Huang <i>Performance Improvement Analysis for a Negative-pressured Biosafety Level Laboratory</i>	346 Annicka Chetty, (Rmit University), S. Safari Pour, L. Tian, and K. Inthavong <i>Feasibility of solar pond performance and efficiency for building energy consumption</i>
	226 Zhao Yi* (Tianjin University) <i>The Status of Indoor Formaldehyde in Residential Buildings in North China</i>	231 Tong-Bou Chang* (National Chiayi University), Jer-Jia Sheu, Jhong-Wei Huang, Yu-Sheng Lin, Che-Cheng Chang <i>Effects of outdoor air ventilation rate on vehicle cabin indoor air quality</i>	265 Saadia Ansari (Reading University), L. Shao, G. Larsen <i>A warm welcome? You're out of Lux</i>	234 Yuwen You (Chengjian University), C. Guo, B. Tang, Z.F. Tian, H. Wang <i>Thermal Balance Analysis of Partitioned Large Scale Underground Heat Exchangers</i>
	227 Y-L. Wu, K-S Yang, S-K Wu* (Industrial Technology Research Institute, Hsinchu), C-W Lin, S-X Liao <i>Experimental Analysis on Moisture Absorption and Desorption Properties by Enhancement Design</i>	253 Weiqiang Zhao* (Southeast University), Shuhong Li, Lei Fang, Xiaosong Zhang <i>Analysis on the Variable Frequency Control of Hybrid Heat Sources Heat Pump Water Heater</i>	345 Pippa Boyd, (University of Reading) <i>The Performance Gap: the practicalities of integrating solar technologies into building projects</i>	213 Qing Cao* (Tianjin University), Q. Xu, C-H Lin, Z. Wei, Q.Chen <i>Modeling Particle Deposition on a Plate-Fin Heat Exchanger</i>

Thursday, February 8, 2018						
8:00						
8:30 AM Doors Open						
9:00-10:00 <b>Keynote Presentation</b> Prof. Shin-Ichi TANABE (Waseda University, Director Tanabe Laboratory) <b>Chair: Prof. Wangda Zuo</b> Title: Indoor Climate and Energy after Fukushima – Toward Zero Energy Building						
10:00-10:30 MORNING TEA						
Parallel Sessions (10:30-12:30)	Paper No.	AUDITORIUM	RED ROOM	YELLOW ROOM	BLUE ROOM	
		Heat Exchange Systems (3) Chair: Prof. Jie Wen	Advanced Modelling & CFD (3) Chair: Prof. Guan Yeoh	Building Energy (3) Chair: Prof. Ivo Martinac	WORKSHOP: Design Methodologies in Urban Environment Chair: Prof. Mak and Prof. Niu	
10:30 AM	252	J. Lua, T. Longa, R. Hua, J. Chenb, Yongcai Li* (Chongqing University) Effects of Various Parameters on Thermal Performance of a SWHS-LHS System: A Numerical Study	197	Wei Tian* (University of Miami), Y. Fu, Q. Wang, T.A. Sevilla, W. Zuo Optimization on Thermostat Location in An Office Room Using The Coupled Simulation Platform in Modelica Buildings Library: A Pilot Study	99	Issa Jaffal* (Christian Inard), C. Inard A Study of Building Energy Consumption for Cooling Using a Metamodel
10:50 AM	257	Jiang Weixue* (Southeast University), Kai Du, Xu Jianyong Experimental Investigation on Convective Heat Transfer Characteristics of TIO2 Ammonia Water Nanofluids	141	Jianlin Liu* (The Hong Kong Polytechnic University), J. Niu, Y. Du and C. Mak Large Eddy Simulation of Pedestrian Level Wind around a building community: Evaluation of Influencing Factors	129	P.L. Yuan, Lin Duanmu* (Dalian University of Technology) and Z.S. Wang Predicting Daily Heating Energy Consumption of Rural Residences in Northern China Using Support Vector Machine
11:10 AM	277	Wenke Fan* (University of Wollongong), G. Kokogiannakis, Z. Ma Design optimisation of a double pass PV/T-solar air heater integrated with heat pipes	154	Nguyen Phuong* (Kyushu University), N.D. Khoa, T.V. Quang, K. Ito Comparative Computational Modeling of Airflow and Inhaled Particles Residence Times in the Human and Monkey Upper Respiratory Tracts	143	Jisoo Shim* (Sungkyunkwan University), D. Song Impact of typical weather data considering regional climate condition on building energy consumption
11:30 AM	278	Alison Subiantoro* (University of Auckland), A.N. Iman, K.T. Ooi Improving the Efficiency of Portable Air Conditioners in Open-Air Shops and Cafes in the Tropics by Separation of Dehumidification and Cooling Processes	160	Alicia Murga* (Kyushu University), K. Ito Dynamical downscaling and hybrid CFD - transient network modelling analysis for estimating inhaled air quality	256	Enrico Fabrizio* (Politecnico Di Torino), A. Costantino and L. Comba A calculation model for the energy performance assessment of fattening pig houses
11:50 AM	285	N. Shan, Yonggao Yin* (Southeast University), F. Zhang Study on Performance of A Novel Energy-Efficient Heat Pump System Using Liquid Desiccant	212	M. Mortezaadeh, Liangzhu Wang* (Concordia University) Modelling Urban Airflow by a New Parallel High-Order Semi-Lagrangian 3D Fluid Flow Solver	283	T. Du* (Delft University of Technology), M. Turrin, S. Jansen, A. Van Den Dobbelsteen, N. Bilorla A Review on Automatic Generation of Architectural Space Layouts with Energy Performance Optimization
12:10 PM	298	Wenxin Li* (RMIT University), X. Li, Y. Wang, J. Tu Effect of material properties on the thermal performance of tubes in a layered subsurface	268	K.P. Gokulraj* (Indian Institute of Technology), S. Tiwari, M.P. Maiya Three-dimensional Numerical Study on Flow and Thermal characteristics of Wall jet Diffuser in an Enclosure	248	Letizia Roccamena* (Ecole Nationale Des Travaux Publics De L'état), Mohamed El Mankibi Optimization of an innovative thermal energy storage technology at low temperatures.
12:30-1:30 LUNCH & POSTER SESSION C						
1:30-2:30 <b>Keynote Presentation</b> Prof. Qingyan CHEN (Purdue University, Editor-in-Chief, Building and Environment) <b>Chair: Prof. Jiyuan Tu</b> Title: Indoor Air Quality Control Strategies for Residential Buildings in China						
Parallel Sessions (2:30-3:50)	Paper No.	AUDITORIUM	RED ROOM	YELLOW ROOM	BLUE ROOM	
		Ventilation (3) Chair: Prof. Yong Wang	Advanced Modelling & CFD (4) Chair: Dr. Zhaofeng Tian	Urban & Environmental (3) Chair: Dr. Wei Yang	Indoor Air Quality & Health (4) Chair: Dr. Xiangdong Li	
2:30 PM	153	Y. Gao* (Shenzhen Institute of Building Research Co. Ltd.), S. Wang, B. Liu, X. Chen, J. Ren The Investigation of Ventilation Performance and Indoor Air Quality of Residential Buildings in South China	302	Lin Yang* (Rmit University), X. Li, J. Tu Numerical study of cabin interior air environment response of high-speed trains passing each other	276	Jia Nong Li* (The Hong Kong Polytechnic University) Validation of the ability of outdoor thermal index on assessing the outdoor thermal comfort in hot-humid regions
2:50 PM	218	M. Cehlin* (University of Gävle), U. Larsson, H.J. Chen Numerical Investigation of Air Change Effectiveness in an Office Room with Impinging Jet Ventilation	350	Chen Huang* (University of Shanghai For Science and Technology), L. Yu, Y. Liu, Y. Xue, J. Liu and H. Liu Comparison and analysis of vertical temperature distribution prediction models in large space buildings	287	Hashem Akbari* (Concordia University) Effects of Increasing Surface Reflectivity on Urban Climate and Air Quality over North America
3:10 PM	314	P. Zhou, Haidong Wang* (University of Shanghai For Science and Technology) Optimization of HVAC system in typical residential buildings in northern China	211	A. Katal, Liangzhu Wang* (Concordia University), W. Stuart Dols, B.J. Polidoro An investigation of different strategies for solving coupled thermal airflows by multi-zone network method	293	Yi Xu* (Tianjin University), G. Liu, R. Dang, L.X. Wang Field Study and Energy Sensitivity Analysis of the High-Speed Railway Station in Cold Regions of China
3:30-4:15 CLOSING CEREMONY (Auditorium)						
4:15-5:00 AFTERNOON TEA - Social Networking Session						
5:00 PM END OF DAY						