



The 16th Asia Pacific Conference on the Built Environment

Net Zero Strategies For Existing Buildings



7 – 8 October 2022

Studio City Macau

Macau Special Administrative Region of
The People's Republic of China

中華人民共和國
澳門特別行政區

Version: 15 September 2022

The 16th APCBE in Macau (Webinar) – Schedule

Item	Local Time: Hong Kong, Macau, Singapore, Taiwan, Malaysia, Philippines (+1 Hour for Indonesia, Korea, Japan) (-1 Hour for Thailand)	Content	By
	DAY 1	Friday, October 7 2022	
1	10:00am – 10:05am 10:00pm – 10:05pm EST (October 6, 2022) (5 mins)	Opening Remark Chairman of The 16 th APCBE Organizing Committee	Ir Peter Chan Macao Chapter Founding President
2	10:05am – 10:10am (5 mins)	Welcome Speech Chairman of The 16 th APCBE Technical Committee	Professor Alfred Wong Macao Chapter President
3	10:10am – 10:15am (5 mins)	Address Region 13 Director and Regional Chairman	Mr. Leong Cheng Wee
4	10:15am – 10:25am 10:15pm – 10:25pm EST (October 6, 2022) 7:15am – 7:25 am Karachi (10 mins)	Address ASHRAE President	Mr. Farooq Mehboob, P.E., Fellow ASHRAE
5	10:25am – 10:55am (30 mins)	Keynote Speech (nZero Aspirations in Existing Buildings)	Professor Chandra Sekhar National University of Singapore
6	10:55am – 11:25am (30 mins)	Keynote Speech (Energy-efficient and Energy-flexible Buildings: The Key Roles and Technologies of Buildings in High-density Subtropical Cities toward Carbon Neutrality)	Ir Professor Shengwei Wang Hong Kong Polytechnic University
7	11:25am – 11:55am (30 mins)	Keynote Speech (Energy Generation of Tall Building)	Ir Peter Chan Macao Chapter Founding President
8	11:55am – 2:00pm	LUNCH BREAK	
	Paper Presentation 2:00pm – 3:00pm (1 Hour)	Session One – Theme : Fundamental / Component Technology (3 Papers @ max 20 mins including presentation & Q&A)	
9	2:00pm – 2:20pm (20 mins)	A1 : Energy-Efficient Approaches Through Energy Modelling for a Hotel Building 通過酒店建築的能源模型實現節能方法	Taiwan Chapter Presenter : Miss Alya Penta Agharid
10	2:20pm – 2:40pm (20 mins)	A2 : Performance Investigation of Energy Consumption in a Hotel Building 酒店建築能耗性能研究	Taiwan Chapter Presenter : Mr. Kusnandar
11	2:40pm – 3:00pm (20 mins)	A3 : Fast Function Extraction for Thermal Comfort Prediction 用於熱舒適預測的快速函數提取	Macao Chapter Presenter : Mr. Joseph Yen
	Paper Presentation 3:00pm – 5:00pm (2 Hours including 20 mins break)	Session Two – Theme : Building Retrofit (5 Papers @ max 20 mins including presentation & Q&A)	
12	3:00pm – 3:20pm (20 mins)	B1 : Validation of EnergyPlus and Trace 700 for Building Performance Simulation EnergyPlus 和 Trace 700 用於建築性能模擬的驗證	Hong Kong Chapter Presenter : Miss Amy To
13	3:20pm – 3:40pm (20 mins)	B2 : Finding The Value in Deep Energy Retrofits 尋找深度節能改造的價值	Japan Chapter Presenter : Mr. James Scott Brew



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14	3:40pm – 4:00pm (20 mins)	BREAK	
15	4:00pm – 4:20pm (20 mins)	B3 : A Computational Fluid Dynamics Airflow Simulation for Effective Removal of Air-Borne Contaminants in Operating Theatres 計算流體力學在手術室中有效去除空氣污染物的氣流模擬	Malaysia Chapter Presenter : Dr. Victor Nee Shin Bong
16	4:20pm – 4:40pm (20 mins)	B4 : On the Potential of Building Adaptation Measures to Counterbalance the Impact of Climatic Change in the Tropics 為抵消熱帶氣候變化影響的建築物適應措施潛力研究	Singapore Chapter Presenter : Dr. Yang Junjing
17	4:40pm – 5:00pm (20 mins)	B5 : The Case of Building Air Conditioning System Energy Saving Improvement in Chaoyang University of Technology 朝陽科技大學建築空調系統節能改造案例	Taiwan Chapter Presenter : Mr. Hwa-Nan, Chang (張華南 先生)
18	5:00pm	Meeting Adjourn	
	DAY 2	Saturday, October 8 2022	
	Paper Presentation 10:00am – 1:00pm (3 Hours including 20 mins break)	Session Three – Theme : Fundamental / Component Technology (8 Papers @ max 20 mins including presentation & Q&A)	
19	10:00am – 10:20am (20 mins)	C1 : Evaluation of Indoor Environment Quality and Thermal Comfort for a Senior Nursing Center 老年護理中心室內環境質量及熱舒適度評估	Taiwan Chapter Presenter : Mr. Tian Setiawan
20	10:20am – 10:40am (20 mins)	C2 : Numerical Simulation and Parametric Analysis of Building-Integrated Photovoltaic Design with Thermoelectric Generator and Phase Change Material 配合光伏建築一體化設計的熱電發電機與相變材料之數值模擬與參數分析	South Korea Chapter Presenter : Mr. Kang, Yong-Kwon 강용권
21	10:40am – 11:00am (20 mins)	C3 : Energy Performance of a Membrane for Maintaining The Solution Concentration in a Liquid Desiccant System 液體除濕系統中溶液濃度維持透膜的能效	South Korea Chapter Presenter : Miss Soo-Jin Lee 이수진
22	11:00am – 11:20am (20 mins)	C4 : Energy Saving Potential of a Heat-Pump-Driven Liquid-Desiccant Air-Conditioning System for Residential Buildings 住宅建築用熱泵驅動的液體除濕空調系統的節能潛力	South Korea Chapter Presenter : Miss Jae-Hee LEE 이재희
23	11:20am – 11:40am (20 mins)	BREAK	
24	11:40pm – 12:00pm (20 mins)	C5 : Investigate the Thermophysical Properties and Global Warming Potential of R410A and Its Alternatives in Air-Conditioning System 研究 R410A 及其替代品在空調系統中的熱物理性質和全球暖化潛勢	Malaysia Chapter Presenter : Ts. Ng Wen Bin
25	12:00pm – 12:20pm (20 mins)	C6 : Energy Performance Comparison between Photovoltaic-Thermal System and Proton Exchange Membrane Fuel Cell Applied to Heat Pump 光熱系統與質子交換膜燃料電池應用於熱泵的能源性能比較	South Korea Chapter Presenter : Miss Su-Young, Jo 조수영
26	12:20pm – 12:40pm (20 mins)	C7 : Energy Saving from High Solar Reflective Paint in Experimental Houses 實驗房屋中高太陽能反射塗料的節能效果	Thailand Chapter Presenter : Assistant Professor, Dr. Thosapon Katejanekam
27	12:40pm – 1:00pm (20 mins)	C8 : PMV and PPD Indices Comparison in SME Factory by Computational Fluid Dynamics (CFD) 通過計算流體動力學 (CFD) 對中小型企业工廠的熱舒適度指標進行比較	Thailand Chapter Presenter : Assistant Professor, Dr. Thibordin Sangsawang
28	1:00pm	Meeting Adjourn	

Registration Link : <https://reurl.cc/nOpny2>