

2024

AIVC-ASC TECHNICAL CONFERENCE

VENTILATION, IEQ & SUSTAINABILITY

ASHRAE Singapore Chapter, in collaboration with Air Infiltration & Ventilation Centre (AIVC), is organizing a 1½ day conference led by experts from the AIVC & ASHRAE Singapore Chapter.

This conference is intended for engineers, architects, and other professionals who want to learn more about ventilation, IEQ, energy efficiency and sustainability.

The conference concludes with a half-day technical tour to a notable Green Building, demonstrating the futuristic sustainability features and innovation in the built environment.



TECHNICAL CONFERENCE

18 APRIL
9AM – 5PM

19 APRIL
9AM – 1PM

 **SURBANA JURONG CAMPUS**

TECHNICAL TOUR

19 APRIL
3PM – 5:30PM

 **SURBANA JURONG CAMPUS
& DULWICH COLLEGE**

CONFERENCE THEMES



**OPTIMIZING INDOOR AIR QUALITY
FOR CLIMATE RESILIENCE**



**REDUCING CARBON
FOOTPRINTS**



**SMART BUILDING
AUTOMATION**

REGISTRATION & PAYMENT LINK

Conference fee

ASC/SGBC/SIFMA Member – S\$ 150
Non-members – S\$ 200

Technical tour fee

ASC/SGBC/SIFMA Member – S\$ 50
Non-members – S\$ 80

SCAN TO REGISTER



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Strategic
Partner



Supporting
Organization



SPEAKERS



DR. SHUZHEN SIM

Director at the Environmental Health Institute, National Environment Agency



DR. PORNPOT (JOE)

Head of Building Performance and Management, Smart Building Solution and Technology Director of Zifisense Asia



DR. ARNOLD JANSSENS

Professor at Ghent University, Belgium
AIVC Operating Agent



DR. IAIN WALKER

Scientist at LBNL, USA



DR. HILDE BRESCH

Associate Professor at KU Leuven Faculty of Engineering Technology, Belgium



DR. PAWEL WARGOCKI

Professor at Technical University of Denmark
IEA Annex 78 Operating Agent



DR. DOUAA AL-ASSAAD

FWO Postdoctoral Researcher at KULeuven, Belgium



DR. JELLE LAVERGE

Associate Professor at Ghent University, Belgium
IEA Annex 87 Operating Agent



MR. TOBIAS ZIMMER

Vice President Global Product Management & International Standards bei Camfil



DR. MAKOTO SHIBAHARA

Founder, SCx Solutions Pte Ltd



DR. CHANDRA SEKHAR

Professor And Programme Director,
NUS



DR. CLAYTON MILLER

Associate Professor at NUS



DR. MAX SHERMAN

Professor at University of Nottingham
Faculty of Engineering, UK



DR. ONGUN BERK KAZANCI

Associate Professor at Technical University of Denmark, IEA Annex 87 Operating Agent



DR. BJARNE OLESEN

Professor at Technical University of Denmark
IEA Annex 78 and 87 Operating Agent



DR. ADRIAN CHONG

Assistant Professor at NUS



MR. ROHAN RAWTE

Managing Director
Operational Board Member at IES Ltd.



MR. KEITH TAN

Sales Manager, ebm-papst SEA Pte Ltd



DR. VALÉRIE LEPRINCE

Project Manager for Indoor Environmental Quality and Ventilation, Cerema, France

DAY 1 PROGRAMME

Time	Rundown	Speaker
9.00	Welcome Address	Mr. Praveen Hassan
9.15	Indoor air quality risk assessment and management in Singapore	Dr. Shuzhen Sim
9.35	Overview of AIVC, Tightvent, Venticool and IEQ-GA	Dr. Arnold Janssens
9.45	Quantitative Assessment Framework of IAQ Resilience in Buildings	Dr. Hilde Breesch, Dr. Douaa Al-Assaad
10:15	ASHRAE 241 - Impact on Air Filtration Recommendations	Mr. Tobias Zimmer
10:45	Coffee break	
11:05	An overview of ASHRAE Standard 62.1	Dr. Chandra Sekhar
11:30	ASHRAE 241-2023 Control of Infectious Aerosols	Dr. Max Sherman
11:55	International Standards for the Indoor Environment Revision of ISO17772-1 dealing with Indoor Environmental Quality	Dr. Bjarne Olesen
12:20	Panel discussion	Moderated by Mr. Praveen
13:00	Lunch	
14:00	Digital Twins for the Built Environment - IAQ & Energy Efficiency	Mr. Rohan Rawte
14:20	Can gas phase air cleaning partly substitute outside air? Results of Annex 78	Dr. Pawel Wargocki
14:40	Defining KPI for smart ventilation in the new French regulation	Dr. Valérie Leprince
15:00	Coffee break	
15:30	Indoor Air Quality Procedure Method	Dr. Pornput (Joe) Jarumongkonsak
15:50	Ventilation and IAQ in US Schools: systems, strategies and extreme events	Dr. Iain Walker
16:10	Well-being, learning efficiency and ventilation	Dr. Pawel Wargocki
16:30	Panel discussion	Moderated by Mr. Tsubasa Bolt
17:00	End of Day 1	

DAY 2 PROGRAMME

Time	Rundown	Speaker
9:00	The balance between EE and IAQ	Dr. Makoto Shibahara
9:20	Evaluation methods for demand-controlled ventilation systems: the persistence of the equivalence principle	Dr. Jelle Laverge
9:40	Operation and maintenance of residential mechanical ventilation systems in homes	Dr. Iain Walker
10:00	Durability and maintenance of smart ventilation components: analysis of the ventilation performance after 15 years of use of Humidity-based DCV systems	Dr. Valérie Leprince
10:20	Using wearable and IoT data to better understand buildings and cities	Dr. Clayton Miller
10:40	Coffee break	
11:10	Personal Environmental Control Systems (PECS): Fundamentals, Opportunities and Challenges	Dr. Ongun Berk Kazanci
11:30	Towards effective mixed-mode ventilation in the tropics	Dr. Adrian Chong
11:50	Unlocking active sustainable design with energy-efficient ventilation strategies	Mr. Keith Tan
12:10	Panel discussion	Moderated by Mr. Sriman
12:40	Conclusions	Mr. Sriman, Dr. Arnold Janssens
13:00	Lunch & Networking	
15:00	Surbanajurong Campus Technical Tour	
16:00	Start to Dulwich College	
16:30	Dulwich College Technical Tour	
17:30	End of Technical Tour	