

## 9th Annex 79 Meeting and OB-22 Symposium Programme - Singapore

Please note: ALL TIMES ARE IN Singapore Time (SGT)!

OB-22 Symposium (Wednesday): September 21, 2022	
8:30 - 9:00	The program timing is in Singapore Time (SGT) Registration and log-in <i>Location: SDE4-EXR1-2</i>
9:00 - 9:30	Welcome, introduction and agenda
	<i>Session 1: Data</i>
9:30 - 9:40	<b>Data-driven framework to extract the occupant-related profiles in institutional archetype buildings</b> — <i>Sanam Dabirian, Department of Building, Civil, and Environmental Engineering, Concordia University (Online)</i>
9:40 - 9:50	<b>Beyond occupant surveys and interviews: exploiting big data from User-Generated-Content to improve IEQ and human-building interactions</b> — <i>Giorgia Chinazzo, Department of Civil and Environmental Engineering, Northwestern University (Online)</i>
9:50 - 10:00	<b>CityLearn V2: Data-driven occupant-centric district control</b> — <i>Zoltan Nagy, UT Austin (Online)</i>
10:00 - 10:10	<b>Exploring urban scale human mobility through big data analysis and machine learning</b> — <i>Yapan Liu, Department of Mechanical and Aerospace Engineering, Syracuse University (Online)</i>
10:10 - 10:20	<b>Levels of detail for occupant representation in building performance simulation: A case study of office building</b> — <i>Jeetika Malik, Building Technology and Urban Systems, Lawrence Berkeley National Laboratory (Online)</i>
10:20 - 10:30	Open discussion/Q&A
10:30 - 11:00	Break

	<i>Session 2: IEQ/Covid-19</i>
11:00 - 11:10	<b>International Survey on the Perceived Indoor Environmental Quality of Home-based Workplaces During COVID-19: deployment and early results</b> — Donna Vakails, University of British Columbia (Online)
11:10 - 11:20	<b>Window operation behaviour in naturally ventilated classrooms during the COVID-19 pandemic</b> — Paula Brumer Franceschini, School of Civil Engineering, Architecture and Urban Design, University of Campinas (In person)
11:20 - 11:30	<b>Effect of Covid-19 lockdowns on indoor environment in apartments</b> — Rune Korsholm Andersen, Technical University of Denmark (In person)
11:30 - 11:40	<b>Individual and Group-wise Classroom Seating Experience: Effects on Student Engagement in Different Courses</b> — Nan Gao, Royal Melbourne Institute of Technology (Online)
11:40 - 11:50	<b>Occupant-centric zoning design: A case study at activity-based workspaces</b> — Eikichi Ono, Department of the Built Environment, National University of Singapore (In person)
11:50 - 12:00	Open discussion/Q&A
12:00 - 13:00	Lunch break
	<i>Session 3: Residential</i>
13:00 - 13:10	<b>User behaviour after renovation of dwelling</b> — Marleen Spiekman, TNO, Centre for Technical Sciences (In person)
13:10 - 13:20	<b>Wellbeing in the Built Environment: Developing assessment tools for multi-family buildings</b> — Marianne Touchie, Civil & Mineral Engineering, University of Toronto (In person)
13:20 - 13:30	<b>Patterns of Residential Thermal Comfort and Human-Building Interactions: Findings from a Novel Data Set</b> — Katherine Bassett, Department of Civil and Environmental Engineering, Northeastern University (In person)
13:30 - 13:40	<b>The impact of sensor grid density and configuration on the efficacy of RP-1747 demand-controlled ventilation: Simulations and the introduction of a real-world testbed</b>

	— <i>Brodie Hobson, Department of Civil and Environmental Engineering, Carleton University (In person)</i>
13:40 - 13:50	<b>Developing Residential Occupant Archetypes for Canada</b> — <i>Mohamed Ouf, Department of Building, Civil and Environmental Engineering, Concordia University (In person)</i>
13:50 - 14:00	Open discussion/Q&A
14:00 - 14:30	Break
	<i>Session 4: Behaviour</i>
14:30 - 14:40	<b>Towards smartwatch-driven just-in-time adaptive interventions (JITAI) for building occupants</b> — <i>Chua Yun Xuan, Department of Built Environment, National University of Singapore (In person)</i>
14:40 - 14:50	<b>How built environments affect our social systems at multiple scales</b> — <i>Andrew Sonta, School of Architecture, Civil and Environmental Engineering, EPFL (In person)</i>
14:50 - 15:00	<b>Impact of Behavioral and Non-Behavioral Intervention on Building Energy Use</b> — <i>Zachary Colligan, Integrated Design and Construction Laboratory, Washington State University (In person)</i>
15:00 - 15:10	<b>Consideration of occupant preferences and habits during the establishment of occupant-centric buildings: a critical review</b> — <i>Xiangchao Lian, Institute of HVAC Engineering, Tongji University (Online)</i>
15:10 - 15:20	<b>Empowering building occupants with advanced intelligent solutions towards energy-efficient and healthy buildings</b> — <i>Giorgia Spiglianini, Integrated Environmental Solutions R&amp;D; Rina Consulting Spa (Online)</i>
15:20 - 15:30	Open discussion/Q&A
15:30 - 16:00	Break
	<i>Session 5: Behaviour</i>
16:00 - 16:10	<b>High quality indoor environments for human occupancy: Reflections on the role of standards</b> — <i>Christiane Berger, Department of Architecture, Design and Media Technology; Aalborg University (Online)</i>

16:10 - 16:20	<b>A wearable device for the built environment based on an open-source ecosystem and low-cost sensors: the first phase</b> — Francesco Salamone, <i>Construction Technologies Institute - National Research Council of Italy, Department of Architecture and Industrial Design - Università degli Studi della Campania “Luigi Vanvitelli” (Online)</i>
16:20 - 16:30	<b>Optimizing Automated Shading System by Exploring Occupant Behaviour and Comfort in Office Environment: An Experimental Study</b> — Ghadeer Derbas, <i>Building physics and technical building equipment (b+tga), Wuppertal University (Online)</i>
16:30 - 16:40	<b>Rethinking energy retrofit: how thermal comfort could lead to a user centric process</b> — Athina Petsou, <i>Institute of Environmental Design and Engineering, UCL (Online)</i>
16:40 - 16:50	<b>Visual comfort hierarchy: describing occupant preferences to the dynamic façade configuration</b> — Pedro de la Barra, <i>Department of Architecture and the Built Environment. Delft University of Technology (Online)</i>
16:50 - 17:20	Open discussion/Q&A
17:20 - 17:30	End of OB-22 Symposium
17:30 - 19:30	Happy Hour (Optional) Hop onto the internal shuttle bus with us to enjoy a happy hour drinks at Good Beer Company:  2 Science Park Dr, Ascent #01-23 Singapore 118222  We can lead willing participants to Holland Village for dinner options as well at about 17:30

## Annex 79 Meeting Day 2 (Thursday): September 22, 2022

8:30 - 9:00	The program timing is in Singapore Time (SGT) Registration and log-in Location: SDE4-EXR1-2
9:00 - 9:10	Opening speech by Khee Poh Lam — <i>Provost's Chair Professor of Architecture and the Built Environment at National University of Singapore</i>
9:10 - 9:30	Welcome, introduction, roll call & adoption of the agenda
9:30 - 10:00	Overview and general information about Annex 79 by Operating Agents  Agenda for breakouts (Slides from STLs presented by the OAs)
10:00 - 10:30	Break
11:00 - 11:30	Overview of activities in all Subtasks and discussion, Agenda for breakouts
11:30 - 13:00	Group photo + Lunch Break
13:00 - 15:00	Breakout sessions for presentations, discussions, further work plan, and planning of deliverables
	Subtask 1 - Location : SDE4-EXR1-2 Subtask 2 - Location : SDE2-ER1 Subtask 3 - Location : SDE1-SR1 Subtask 4 - Location : SDE1-SR5-6
15:00 - 15:30	Break

15:30 - 16:15	Open Blue Innovation Center Presentation
16:15 - 16:30	Prepare to leave for Lau Pa Sat
17:00 - 20:00	<p>Singapore food tasting tour at Lau Pa Sat (Optional) Experience Singapore's unique food culture with us!</p> <p>A chartered bus will pick everyone up at SDE4 and head to Lau Pa Sat.</p> <p>Lau Pa Sat address: 18 Raffles Quay, Singapore 048582</p>

<b>Annex 79 Meeting Day 2 - (Friday) September 23, 2022</b>	
8:30 - 9:00	<p>The program timing is in Singapore Time (SGT) Registration and log-in Location: SDE4-EXR1-2</p>
9:00 - 9:30	Brief agenda for breakouts from STLs for each ST
9:30 - 11:30	<p>Breakout sessions (continued)</p> <p>Subtask 1 - Location : SDE4-EXR1-2 Subtask 2 - Location : SDE2-ER1 Subtask 3 - Location : SDE1-SR1 Subtask 4 - Location : SDE1-SR5-6</p>
11:30 - 12:30	Lunch Break
12:30 - 13:00	Plenary session for cross-subtask activities
13:00- 13:45	STs' summary presentations and discussion

13:45 - 15:15	Discussion about next Annex Proposal
15:15 - 15:45	Break
15:45 - 16:15	Dissemination issues: seminars/workshops at conferences, special issues of journals, website, newsletters, outreach to other organisations
16:15 - 17:00	Ending presented by host - Summary and closing remarks

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## Time Zone Assistance

[World Time Buddy Link](#)

