

Detailed program for RoomVent 2024

General:

For all **oral presentations**: 2 minute presentation by the moderator and change of presenting author + 12 minute presentation by the author + 4 minutes for questions/discussion - **in all 18 minutes per article**

For all **poster presentations**: 2 minute presentation by the moderator and change of presenting author + 3 minute presentation by the author - **in all 5 minutes per article and 15 + 15 minutes for questions/discussion**

Tuesday 23 April

09:00	Introduction to the conference	
09:30	Keynote speaker 1: Jarek Kurnitski	
10:00	Coffee break	
10:15	All presenting authors of the sessions 1 - 3 + poster session 1 gather in their respective rooms	
	Session 1	Chair:
10:30	Indoor climate: Health aspects	Xxx
10:30	364 Effect of ventilation and wearing a facemask in reducing indoor aerosol transmission	Brochot, Clothilde
10:48	535 Infection Risk-Based Ventilation Effectiveness Assessment in Cruise Ship Common Spaces Using Tracer Gas Measurements	Võsa, Karl-Villem
11:06	391 Experimental investigation of ventilation and breathing and their effect on the spread of exhaled aerosols between occupants	Al-Rikabi, Ihab Jabbar
11:24	474 Airflow network modeling of a virtually renovated school in Iceland to study the optimal design and regulation of ventilation systems	Rong, Li
11:42	522 Performance of local ventilation system under three different underfloor air distribution systems in consulting room	Yoshihara, Jun
	Session 2	Chair:
10:30	Indoor climate: IAQ	Xxx
10:30	429 An exploratory study on the influence of indoor-air parameters on discomfort and cognition performance in schools.	LITVAK, Andrés
10:48	469 CO ₂ , temperature and RH in Swedish primary school classrooms with and without automatic window operation	Cabovská, Blanka
11:06	467 The Effects of Nightly Shutdown of Ventilation on Indoor Air Pressure Difference Conditions and TVOC and radon concentrations	Raunima, Tuomas
11:24	502 Evidence of outdoor air quality events in classroom IAQ, RoomVent 2024	Wood, Samuel G. A.
11:42	521 Field investigation of perceived air quality : study case in Norwegian secondary school with Demand-Controlled Ventilation	Alam, Azimil Gani
	Session 3	Chair:
10:30	Ventilation & energy efficiency: Wind and natural ventilation	Xxx
10:30	409 Influence of Internal Partition with an Opening on Purging Flow Rate of Wind-Induced Ventilation	Toyosawa, Kota
10:48	435 Computational fluid dynamics of airflow rates for natural ventilation with opposing wind and buoyancy	Jiang, Zitao
11:06	375 Comprehensive testing of indoor ventilation in underground transit hubs and microclimate in adjacent sunken plazas	Wang, Chenxing
11:24	371 Effects of adjoining building structures on wind pressure coefficients	xxx
11:42	516 Windcatcher: A Sustainable Alternative for Improving Indoor Air Quality and Thermal Comfort in Educational Spaces in Germany	Nejat, Payam

Poster presentations 1**Chair:**

10:30	Indoor climate: Health aspects, pollution, IAQ	Xxx
10:30	384 Investigation on airflow distribution for operating rooms through numerical simulation and field measurement	Agharid, Alya Penta
10:35	473 Experimental and numerical study on the deflected wall-jet ventilation in an airborne infection isolation room (AIIR)	Zhang, Ying
10:40	484 Analysis of the input parameters for the infection risk model from CO2 measurements	Mäkinen, Antti Jaakko
10:45	501 CFD Analysis of a V-Shaped Desktop Fan for Near-field Control of Infected Respiratory Cloud	Rasam, Hamed
10:50	525 Effect of Infector's location and occupants' activity level on airborne spread in a gym – an experimental and CFD study	Ejaz, Muhammad Farhan
10:55	421 Three-stage analysis of the synergistic impact of electrosmog, positive ions and ultrafine particles on air quality and people's	Alic, Fikret
11:00	Questions/discussion	
11:15	427 Impact of temperature on the dust/gas partitioning of semi-volatile organic compounds in indoor environments	Mansouri, Aya
11:20	381 Analysing the Impact of Data Normalization on LMBP Neural Network Predictions for Indoor Air Quality	Kim, Moon Keun
11:25	404 Development of an indoor air quality index for continuous monitoring in French dwellings	Wei, Wenjuan
11:30	453 An investigation on CO2 concentration, energy use and differential performance of mixed-mode ventilation control strategies in a	Moghadam, Talie Tohidi
11:35	495 QAI-Sport project: Indoor air quality in sports facilities - Characterization of exposure to emerging VOCs and SVOCs and to	Desauziers, Valérie
11:40	520 Recommendations for residential kitchen hood solutions and airflow rates	Thunshelle, Kari
11:45	Questions/discussion	

Workshop 1

10:30	Ventilation and energy performance	Workshop leader:
	432 Challenges related to Demand Controlled Ventilation	Maripuu, Mari-Liis Mustakallio, Panu Olesen, Bjarne W.

Workshop 2

10:30	Indoor climate	Workshop leaders:
	599 Understanding Requirements for Ventilation and Indoor Climate, RoomVent 2024	Afshari, Ali Ekberg, Lars Persily, Andrew Kurnitski, Jarek Sekhar, Chandra

12:00 *Lunch break*

13:20 **Keynote speaker 2, main sponsor 1, Systemair**

13:50 All presenting authors of the sessions 4 - 7 gather in their respective rooms		
Session 4		Chair:
14:00	Indoor climate: Health aspects	Xxx
14:00	464 Design and testing of an emergency humanitarian tent for airborne risk mitigation with natural ventilation	Gentile, Vincenzo
14:18	419 Aerosol particle spreading in an operation room under dynamic condition	Schmeling, Daniel
14:36	564 Reducing patient to patient airborne exposure in patient and isolation rooms with 2 patients	Hagström, Kim
14:54	463 Contaminant exposure in a pharmacy cleanroom with mixing ventilation: Impact of air-change rates	Qin, Peng
15:12	442 Optimized Air Distribution for Contaminant Control in a Cleanroom: A Numerical Study	Bivolarova, Mariya P.
Session 5		Chair:
14:00	Indoor climate: IAQ	Xxx
14:00	458 Enhancing indoor learning environments through intelligent air conditioning control	Oppelt, Thomas
14:18	537 Effect of heat source conditions on vertical temperature distribution characteristics for attachment ventilated spaces	Han, Ou
14:36	555 An Interactive Biological Contaminant and CO2 Exposure Dose Calculation Tool	Gameiro da Silva, Manuel Carlos
14:54	451 Calculation tool for co-evaluating ventilation energy performance and indoor air quality	Siilin, Niko
15:12	567 The impact of inlet and obstacle conditions on the indoor environment with impinging jet ventilation system	Yamasawa, Haruna
Session 6		Chair:
14:00	Ventilation & energy efficiency: Wind and natural ventilation	Xxx
14:00	517 Experimental studies of Single-sided Ventilation for Semi-enclosed models with Horizontal Opening	Lin, Yuanyuan
14:18	438 Point-to-Point Scalar Transfer Efficiencies within a Cross-Ventilated Room Model Sheltered by Urban-Like Block Arrays	Itokazu, Ryu
14:36	395 Experimental validation of single-sided natural ventilation models on building simulation	Jiang, Jun
14:54	479 Measurements of ventilation airflow from pivot and side hung opened windows	Johansson, Dennis
15:12	568 Unsteady indoor airflow analysis of non-isothermal natural ventilation using domain decomposition technique with LES	Kobayashi, Tomohiro
Session 7		Chair:
14:00	Modelling & measuring: Control & data usage	Xxx
14:00	407 A novel Monte Carlo modelling method to support control strategies development in building ventilation	Zhang, Chen
14:18	539 Data analysis and modelling on a monitoring activity of social housing in the North-East of Italy	Tognon, Giacomo
14:36	538 Data-driven approach for assessing ventilation thermal performance based on main heat meter readings	Vasman, Sofia
14:54	440 Smart Indoor Air Quality (IAQ) measurement to enhance occupancy comfort in campus buildings	Shirazi, Arezoo
15:12	511 Effects of unsteady room ventilation on flow structures and the velocity field in a model room	Mesenhöller, Eva

Workshop 3, sponsor workshop

14:00 Main sponsor: Systemair

Xxx

Workshop leaders:

Xxx

Workshop 4, sponsor workshop

14:50 Gold sponsor: Bevent Rasch

VAS Visible Air System for energy and IAQ analyses in real time

Anders Hedström, IAQ Sweden (Will speak about the VAS system)

Anders Olsson, IAQ Sweden (Will show the on line measuring)

Kent Östby, KRO produksjon (Will speak about the Kitchen application)

Workshop leaders:

Anders Hedström

Anders Olsson

Kent Östby

15:30 Coffee break

15:45 All presenting authors of the sessions 8 - 11 gather in their respective rooms

Session 8

Chair:

16:00 Indoor climate: Health aspects

Xxx

16:00 575 Ventilation Effectiveness of Ceiling-Supplied Displacement Ventilation System for Office Room (Part 1) Comparison of Temperature and Contaminant Concentration Distributions under Different Ventilation Systems using Full-Scale Experimental

Yamanaka, Toshio

16:18 410 Ventilation Effectiveness of Ceiling-Supplied Displacement Ventilation System for Office Room (Part 2) A Parametric Study on the Indoor Environment Examined by CFD Analysis

Kuranaga, Mari

16:36 528 Feasibility of using mobile air cleaners in school classrooms to remove respiratory aerosols

Ding, Er

16:54 531 Ventilation effectiveness measurements and CFD simulations in classrooms for infection risk control

Vösa, Karl-Villem

17:12 414 The characteristics of airborne transmission and thermal comfort with the micro-environment systems and perforated duct system

Zhao, Weixin

Session 9

Chair:

16:00 Indoor climate: IAQ

Xxx

16:00 485 Numerical Investigation of Indoor Air Quality in a Multi-Storey building due to Traffic sources

Murali Mohan, Midhun

16:18 518 Input data for moisture profiles in multi-family residential buildings.

Holøs, Sverre Bjørn

16:36 482 Towards a new index to qualify indoor air quality and thermal comfort in storage areas

Guichard, Romain

16:54 494 QAI-Sport project : characterization of Indoor Air Quality in sports facilities

Desauziers, Valérie

17:12 556 Can different convective local cooling devices satisfy the demands of elderly people in warm conditions? Based on the air velocity and

Session 10		Chair:
16:00	Ventilation & energy efficiency: Energy efficiency	Xxx
16:00	566 Set-up and calibration methodology for real-scale twin test cells HYBCELL: A comprehensive approach for energy efficiency and	Taibi, Laila
16:18	431 Simulative design method for decentral air handling unit including air-to-air heat pump	Froehlingsdorf, Tobias
16:36	477 Capacity of a cooling system with active chilled beams at different air flow rates	Lukastsuk, Jevgeni
16:54	393 Comparison of multi-stage air treatment process divided by the same temperature and enthalpy difference	Wang, Wentao
17:12	388 A YEAR-ROUND ENERGY-EFFICIENT FRESH AIR HANDLING SYSTEM WITH TWO-STAGE HEAT PUMPS AND LAKE WATER PRE-TREATMENT	Liang, Chenjiyu

Session 11		Chair:
16:00	Modelling & measuring: Measuring	Xxx
16:00	459 Aerosol Transmission and Air Quality in a Generic Conference Room - Comparison of Aerosol- and Tracer-Gas-Based Methods	Mommert, Michael
16:18	549 FAST-AIR: Fast Analytic Systems for Tracer-gas Assessment in Indoor Research - Development and Testing of CO2 Tracer-gas System	Andersson, Harald
16:36	559 Evaluating airflow dynamics in operating rooms: a comparative study of low-cost and high-end air velocity sensors	Rosti, Behnam
16:54	448 Carbon dioxide conditions in the classroom and sensor location– CASE study	Uusitalo, Sakari
17:12	558 Performance investigation of staircase pressure differential systems in Norwegian high-rises - local practice and functionality	Lundblad, Jonathan

Workshop 5		Workshop leaders:
16:00	Indoor climate	
	372 Occupant Targeted Ventilation	Melikov, Arsen K. Li, Xianting Li, Angui Lin, John Kosonen, Risto Cao, Guangyu Yang, Bin

Workshop 6		Workshop leaders:
16:00	Indoor climate	
	574 Ventilation and Air Distribution in Bedrooms	Wargocki, Pawel Bivolarova, Mariya Sekhar, Chandra

Wednesday 24 April	
09:00	Keynote speaker 3: Angui Li
09:30	Keynote speaker 4: Paula Olsiewski
10:00	Coffee break

10:15 All presenting authors of the sessions 12 - 14 + poster session 2 gather in their respective rooms

Session 12

Chair:

10:30 Indoor climate: Health aspects

Xxx

10:30 428 Enhancing Airborne Transmission Modelling of Respiratory Viruses in Enclosed Spaces through a CO2 Concentration Fitting Algorithm

Aleixo, Luis

10:48 423 Numerical modeling of upper-room UV germicidal irradiation — Validation and performance comparison under various airflow

Alanis Ruiz, Claudio

11:06 529 A Household Air-conditioner Adopting Low-Temperature Atmospheric Plasma (LTAP) for Sterilization of Airborne Microbes

Zhang, Tengfei

11:24 394 Displacement ventilation in conjunction with breathing zone air supply: Experimental study on distributions of droplet nuclei and

Choi, Narae

11:42 392 Numerical modeling of airborne transmission from airway mucosa of infected person to that of uninfected individual via indoor airflow

Ito, Kazuhide

Session 13

Chair:

10:30 Indoor climate: IAQ

Xxx

10:30 398 Evaluation of indoor environmental quality of civil aircraft cabins based on published data

Cao, Xiaodong

10:48 416 Local and individual demand-controlled ventilation in a passenger train

Schmeling, Daniel

11:06 418 Impact of walking passengers on the aerosol spreading in a passenger train

Schmeling, Daniel

11:24 460 Study on indoor air quality in wooden houses in Japan

MATSUMOTO, Yuuka

11:42 557 Are we on the right path towards indoor environmental well-being?

Rohde, Lasse

Session 14

Chair:

10:30 Ventilation & energy efficiency: Energy efficiency

Xxx

10:30 425 Study on Energy Saving Effects of ZEB Retrofit in University Facilities - Maki, Tanimoto
Based on the Impact of the Pandemic -

Mélois, Adeline

10:48 405 Performance 2 project - Winter IAQ campaigns in 13 dwellings equipped with Humidity-based DCV systems: analysis of the

Mélois, Adeline

11:06 443 INFLUENCE OF WORKING FROM HOME SCENARIOS ON ANNUAL HEATING ENERGY DEMAND FOR GERMAN RESIDENTIAL BUILDINGS

ElMokadem, Mahmoud

11:24 563 Possible effects of new Swedish ventilation regulations for residential buildings

Berggren, Björn

11:42 476 Building services and adaptive reuse – an overview of the regulations and potential in Swedish context.

Iarkov, Iliia

Poster presentations 2**Chair:**

10:30	Indoor climate: IAQ, Thermal comfort, Ventilation & energy efficiency	Xxx
10:30	551 Evaluation of air exchange rate and PM deposition rate in a classroom.	OGUNDIRAN, JOHN OMOMOLUWA
10:35	553 Think global, act local: How well does local climatization align with current indoor environmental quality standards?	Syndicus, Marc
10:40	433 Testing and comparing of portable air cleaners for indoor aerosol particle removal in laboratory environments	Xia, Lili
10:45	436 Rethinking clean air – How the composition of indoor air may differ and change based on four ventilation strategies	Li, Yiqun
10:50	472 Using portable air cleaners to restrict airborne transmission in an open plan office – a field measurement and CFD study	Kilpeläinen, Simo
10:55	445 Thermal environment evaluation of rural dwellings on the Tibetan Plateau based on room seasonality and temporality	Chen, Luyao
11:00	Questions/discussion	
11:15	570 Comfort aspects in buildings supplied by radiant systems with mechanical ventilation	Marigo, Marco
11:20	411 Cooling performance of direct expansion system using multiple stages and adjustable heat exchange areas for fresh air handling	Zha, Fuhai
11:25	503 Identification of multiple indoor heat sources based on accessibility index	Liu, Yemin
11:30	572 Potential of heat and moisture recovery to reduce future dehumidification and humidification demands in Swiss office	Dugaria, Simone
11:35	417 Bayesian network-based fault detection and diagnosis of heating components in heat recovery ventilation	Wang, Ziao
11:40	Questions/discussion	

Workshop 7

10:30	Ventilation and energy performance	Workshop leaders:
	498 Ventilation effectiveness in the infection risk control	Kurnitski, Jarek Aganovic, Amar Nielsen, Peter Kosonen, Risto

Workshop 8

10:30	Ventilation and energy performance	Workshop leaders:
	456 Performance gap for ventilation in buildings in cold climate	Kempe, Per Widström, Torun Ruud, Svein

12:00 *Lunch break*13:20 **Keynote speaker 5, main sponsor 2, Camfil:**

13:50 All presenting authors of the sessions 15 - 18 gather in their respective rooms

Session 15

Chair:

14:00 Indoor climate: Health aspects	Xxx
14:00 497 Propagation characteristics of exhaled flow and its role in indoor airborne transmission-A review	Xiao, Lingjun
14:18 396 Airborne transmission of infectious diseases in rooms ventilated by mixing ventilation	Nielsen, Peter V.
14:36 540 Assessing Airborne Infection Risk through a Model of Airflow Evacuation & Recirculation Dynamics	Kabanshi, Alan
14:54 471 Effect of Aerosols on Hazardous Species Dispersion	TRIPATHI, Amita
15:12 546 Flooding Of Ventilation Air and its Consequences	Sandberg, Mats Gunnar

Session 16

Chair:

14:00 Modelling and measuring: Modelling and measuring	Xxx
14:00 380 Experimental measurement and validation of louvred opening for ventilation	Rong, Li
14:18 508 CFD-aided ventilation design for a large experimental chamber to study aerosol dispersion and removal	Kang, Luyang
14:36 408 Ventilation flow reconstruction in a simplified airplane cabin model using measured mean velocities and physics-informed neural	Kikumoto, Hideki
14:54 534 Ventilation rate in three types of opening ratio at the domestic kitchen	Lee, Jeffrey
15:12 382 Field measurement analyses and improvement simulation of airflow parallelism in a wafer-grinding cleanroom	Permana, Indra

Session 17

Chair:

14:00 Ventilation & energy efficiency: Energy efficiency	Xxx
14:00 569 Impact of design conditions on energy use: the case study of a health care facility	Carnieletto, Laura
14:18 387 Evaluation of dehumidification and energy-saving effects for a passive dehumidification system combined with energy recovery	Chen, Yulu
14:36 397 Energy cost of clean air delivery with portable air cleaners - a case study in two kindergartens	Säämänen, Arto
14:54 545 Moisture-proof Control of Balanced Ventilation Systems with Rotary Wheel Heat Recovery in Single Family Detached Houses	Ruud, Svein
15:12 554 Life cycle assessment and comparison of an evaporative cooling system and a conventional vapour-compression cooling system for	Heuvelmans, Ruud

Session 18

Chair:

14:00 Special applications: Fire safety, smoke extraction, asbestos, preservation	Xxx
14:00 462 Engineering tool for designing a ventilation strategy for small school fires based on the comfort ventilation system	Haukø, Anne-Marit
14:18 524 The impact of smoke extraction strategy on indoor air quality and ventilation components	Aamodt, Andreas
14:36 487 Case study of ventilation solutions and strategies for Li-ion battery rooms	Olso, Brynhild Garberg
14:54 481 Towards a maximum wind speed for ventilated asbestos removal worksites	Guichard, Romain
15:12 478 Field test of dehumidifiers for avoiding condensation in unheated historical wooden houses	Mattsson, Magnus

Workshop 9, sponsor workshop**14:00 Main sponsor: Camfil**

Xxx

Workshop leaders:

Xxx

Workshop 10, sponsor workshop**14:50 Silver sponsors:**

Xxx

Workshop leaders:

Xxx

15:30 *Coffee break***15:45 All presenting authors of the sessions 19 - 22 and poster session 3 gather in their respective rooms****Session 19****Chair:****16:00 Indoor climate: Health aspects**

Xxx

16:00 454 Vertical transmission of aerosols in building drainage pipes: A review

Chang, Min

16:18 486 Impacts of ventilation designs on airborne particle transportation

Chen, Huijuan

16:36 468 Sensors for ventilation: evaluation of indoor air quality sensors measuring volatile organic compounds

Askemar, Hanna Sofia

16:54 430 Evaluation of various improvements to an innovative wet scrubber concept to increase particle removal efficiency

Nguyen, Nhat

Session 20**Chair:****16:00 Modelling and measuring: Modelling and measuring**

Xxx

16:00 533 CFD simulation study of the performance of personalized ventilation system with coaxial air supply device

Dong, Song

16:18 513 Towards eddy resolving CFD in room ventilation: a comparative precursor study of LES and SAS models

Jacobs, Steffen

16:36 489 An assessment of a new activation function: leaky-sigmoid

Hu, Xuesong

16:54 562 Influence of the inlet boundary conditions on the LES performance for the cavity flow benchmark

Georges, Laurent

17:12 365 A statistical approach combined with numerical simulations for ventilation problems

Wargocki, Pawel

Session 21**Chair:**

16:00	Ventilation & energy efficiency: Energy efficiency	Xxx
16:00	504 Improvement of the Performance of Mechanical Ventilation Systems with Earth-Air Heat Exchangers (EAHEs) for Detached Rural	Hu, Xinyi
16:18	512 Stepwise verification of functions and energy use for central residential AHU in apartment buildings	Kempe, Per
16:36	514 Moisture loads in apartment buildings and their impact on central AHU functions and energy use	Kempe, Per
16:54	424 Development of a control strategy for air handling units equipped with membrane-based enthalpy exchangers	Kremer, Martin
17:12	452 Energy and exergy analysis of an energy system based on an earth-air heat exchanger.	Lapertot, Arnaud

Session 22**Chair:**

16:00	Technical articles: Indoor climate, Ventilation & energy eff., Industrial vent.	Xxx
16:00	483 A practical feedback on the ventilation of portable site sheds	Guichard, Romain
16:18	406 Thermal Performance Evaluation of Cooling Solutions with Three ITE Power Densities	Cho, Jinkyun
16:36	523 Urban design with the wind: pedestrian-level wind field in the street canyons	Lai, Chi-Ming
16:54	573 Comparison of local exhaust ventilation with other exposure controls used in electrolytic nickel plating	Saunders, Christopher John
17:12	499 Evaluation of the Efficiency of Source Control for the Capture of Aerosols Generated by Dental Care	Chéron, Jonathan

Poster presentations 3**Chair:**

16:00	Ventilation & energy efficiency, Modelling & measuring	Xxx
16:00	An emissions barrier can be used to stop the spread of harmful emissions from building into the indoor air	Larsson, P Lennart
16:05	377 Number of ambulance transportation due to indoor heatstroke classified by perception time	
16:10	441 Ventilation Behaviour Changes by Employing Environmental Monitoring Systems in Schools in Japan	Tokairin, Takayuki
16:15	447 Effect of solar shielding and thermal insulation for comfortable energy-efficient residential building in mild climate	FUJII, Ryohei
16:20	506 User comfort in a laboratory assessed through CFD simulation	Kawamura, Tomoka
16:25	496 Performance assessment and improvement of mixing in ventilation outlets using CFD simulation	TRIPATHI, Amita
16:30	488 Air Cleaning Technologies for Bus and Rail Applications	TRIPATHI, Amita
16:45	475 Questions/discussion	Stavova, Petra

Workshop 11

16:00 Debate

The future of ventilation and indoor climate

Debate leaders:

Xxx

Panel:

Thursday 25 April

09:00 **Keynote speaker 6: Andrew Persily**

09:30 **Keynote speaker 7: Runa T. Hellwig**

10:00 *Coffee break*

10:15 **All presenting authors of the sessions 23 - 25 + poster session 4 gather in their respective rooms**

Session 23

Chair:

10:30 **Indoor climate: Thermal comfort**

Xxx

10:30 389 Correlation between indoor and outdoor temperatures during hot summers in Finnish residential buildings Farahani, Azin

10:48 434 Assessment of thermal comfort performance of membrane-assisted radiant cooling outdoors Yang, Junran

11:06 505 Experimental study on overall and local thermal comfort under different radiation intensities Zeng, Yingqi

11:24 565 Impact of Recirculation Rates on Indoor Environment and Occupant Comfort: A Case Study in Norway Justo Alonso, Maria

11:42 507 A comparative study of extreme and typical weather on indoor thermal performance of a residential building LALL, SHWETA

Session 24

Chair:

10:30 **Modelling and measuring: Modelling and measuring**

Xxx

10:30 422 Large eddy simulation of thermal effect on flow field around a building model with a scale ratio of 1:1:2 Zhao, Yi

10:48 426 Numerical analysis of hygrothermal environment and energy conservation in biophilic building by coupling zonal energy Yang, Xianzhe

11:06 444 Numerical Investigation of the Aeroacoustic Properties of a Slot Diffuser Krüger, Lisa

11:24 446 Simulating air-conditioning use in Office Buildings by Modeling the Relationship between Psychological Factors and Occupants' He, Qingyi

11:42 455 Evaluation of ventilation performance and occupants' ventilation practice in a renovated multi-floor apartment building with hybrid Chen, Ligu

Session 25**Chair:****10:30 Industrial ventilation:**

Xxx

10:30	412 Numerical study on the effects of pollution source surface roughness on vortex ventilation performance	Bai, YuQing
10:48	470 Air showers: can they help prevent dust exposure of workers?	Jenft, Alexandre
11:06	547 The influence of source heterogeneity on the environmental characteristics of a multi-layer vertically connected plant under	Cao, Yingxue
11:24	399 Experimental characterization of the aeraulic behaviour of centrifugal fans in specific functioning modes and numerical	Le Roux, Nicolas
11:42	490 Development of an Experimental Cell to Study the Thermo-aeraulic Behavior of an Electrical Cabinet Room	Moulouel, Rafik

Poster presentations 4**Chair:****10:30 Ventilation & energy efficiency, Modelling & measuring**

Xxx

10:30	449 The effects of wind speed and wind angle on the PM2.5 removal efficiency using different protection window screens	Lee, Wen-Hua
10:35	552 Evaluation of Indoor Air and Natural Ventilation Complexity in Hospital Wards in the Democratic Republic of Congo (DRC.)	Nyembwe, Jean-Paul kapuya Bulaba
10:40	400 Capacity Design Method for Integrated Convective/Radiant Terminals to Guarantee Overall and Local Environment	Chi, Junjie
10:45	420 Combining perforated ceiling and attic ventilation for night cooling in a single-zone building: CFD analysis	Sudirman, Mutmainnah
10:50	491 Analysis of the Optimal Air Curtain Outlet Velocity for a Convenience Store	Lee, Kuei-Peng
10:55	526 Aerodynamic design optimization of a bell-mouth shaped air outlet	Lv, Wenchao

11:00 Questions/discussion

11:15	527 Research on Air Distribution in Restricted Space Based on Multi-perturbation Jet Flow	Li, Huimei
11:20	571 Thermal performance simulation of buildings' envelope with micro encapsulated Phase Change Materials (mPCMs)	Zhou, Hongxia
11:25	536 Improving the measurement of air change rates using the decay method: Quantifying the uncertainty of the well-mixed assumption	Qi, Dahai
11:30	550 Development of an optical, real time measurement method for Air Change Rates in indoor areas	Friebe, Christian
11:35	560 Impact of cable length on the performance of low-cost sensors in single-board computer monitoring systems	Rosti, Behnam
11:40	437 Fire source heat release rate prediction and tunnel downstream smoke propagation velocity under longitudinal ventilation	Jiang, Li

11:45 Questions/discussion**Workshop 12****10:30 Indoor climate****Workshop leaders:**

577 Ventilation and purifiers filtration and its effect on IAQ

Hedström, Anders
Morawska, Lidia

Workshop 13

10:30 Ventilation and energy performance

598 New perspective to analyze ventilation based on trajectories using particle tracking

Workshop leaders:

Sandberg, Mats Gunnar
Tomohiro, Kobayashi
Kabanshi, Alan
Jian, Zitao
Toyosawa, Kota

12:00 *Lunch break*

13:20 **Keynote speaker 8, main sponsor 3, Swegon:**

13:50 **All presenting authors of the sessions 26 - 29 gather in their respective rooms**

Session 26

Chair:

14:00 **Indoor climate:** Thermal comfort

Xxx

14:00 439 Development of Low-Cost IoT Units for Thermal Comfort Measurement and AC Energy Consumption Prediction System

CHEN, YUTONG

14:18 450 Thermal responses and comfortable evaluations under variable dynamic environment: a case study of MAV

Zhang, Weijia

14:36 548 Assessment of thermal comfort at the building level: Evaluation of aggregation methods with a Danish case study of a campus building

Melgaard, Simon P.

14:54 413 Analysis of Air-Conditioning Usage Behavior in Residential Buildings in Hot and Humid Climates: Evidence from Vietnam

Wang, Yuanchen

15:12 543 Innovative thermal manikin for assessing local thermal comfort - development of a new hardware architecture

Cernei, Alexandru

Session 27

Chair:

14:00 **Modelling and measuring:** Modelling and measuring

Xxx

14:00 466 Numerical simulation of a moisture leak

Faure, Xavier

14:18 509 Parametric simulation to optimize moisture removal from urban apartment blocks

Aamodt, Andreas

14:36 493 Summary statistics for quasi-stationary air velocity timeseries based on asynchronous velocity components

Mamulova, Eugene

14:54 515 The role of vegetation in outdoor thermal comfort for traditional alleyways in hot arid areas

Al Hashim, Jawahar Abdul Sattar

15:12 480 Assessment of transport methodologies for dispersion modelling for Indoor Air Quality analysis

Murali Mohan, Midhun

Session 28

Chair:

14:00 **Industrial ventilation:**

Xxx

14:00 373 Physiological evaluation of the cognitive performance under sustained hot-humid exposure

Zhu, Hui

14:18 378 Minimizing the flow resistance of an exhaust system by shaping the exhaust hood with a discrete adjoint method

Liu, Wei

14:36 492 Investigation on the storage performance of expanded volume exhaust hood for intermittent high-temperature smoke

Huang, Yanqiu

14:54 500 Preliminary Study on Estimating the High-temperature Particles Concentration from Smoke Images in Industrial Sites

Rong, Junhao

Session 29**Chair:**

14:00	Technical articles: Industrial ventilation, Special applications	Xxx
14:00	363 New pre-ventilation techniques to eliminate hazardous chemicals in container air	Johanson, Gunnar
14:18	401 SYLVIA - a software to study ventilation network, fire and airborne contamination	JORET-GALY, Jean-Paul
14:36	402 Smoke spread in a ventilation system - Room fire experiments and technical solutions in a prison environment with active ventilation	Nyman, Hans
14:54	483 A practical feedback on the ventilation of portable site sheds	Guichard, Romain

Workshop 14, sponsor workshop

14:00	Main sponsor: Swegon	Workshop leaders:
	Xxx	Xxx

Workshop 15

10:30	Indoor climate	Workshop leaders:
	385 Energy and Indoor Environmental Quality Performance of Personalised Environmental Control Systems (PECS) - IEA Annex 87	Perino, Marco Kazanci, Ongun Berk Khovalyg, Dolaana Gentile, Vincenzo Meggers, Forrest

15:30 *Coffee break*

16:00 ***Keynote speaker 9: Chandra Sekhar***

16:30 ***Closing session, official closing of RoomVent 2024 and announcement of RoomVent 2026***