

9 JUNE 2025

UNIVERSITY OF REYKJAVIK

SCHEDULE OVERVIEW

8:30 - 10:04

V-101 IAQ

M-101 THERMAL COMFORT

V-102 LIGHTING AND NOISE

M-201 IAQ

V-201 IAQ

9:50

M-103 WORKSHOP

10:04 - 10:28 BREAK

10:28 - 11:52

V-101 IAQ

M-101 THERMAL COMFORT

V-102 LIGHTING AND NOISE

M-201 IAQ

V-201 IAQ

11:00

M-103 WORKSHOP

12:04 - 13:16 LUNCH

13:10

M-103 WORKSHOP

13:16 - 14:40

V-101 IAQ

M-101 THERMAL COMFORT

V-102 CLIMATE CHANGE

M-201 IAQ

V-201 IAQ

14:52 BREAK

15:30

M-103 WORKSHOP

15:16 - 17:04

V-101 IAQ

M-101 THERMAL COMFORT

V-102 CLIMATE CHANGE/DAMPNESS AND MOISTURE IN

BUILDINGS

M-201 IAQ

V-201 IAQ





DETAILED SCHEDULE

V-101 IAQ

Technical chair: Pawel Wagocki | National chair: Björn K. Computer manager: Kristján Ingi | Time manager: Egill Grétar Andrason

8:30 Session Chair Introduction

8:40 Ventilation and air cleaning in the context of infection risk results from two large Dutch research projects

Marcel G.L.C. Loomans

8:52 Partitioning of semi volatile organic compounds between air and textiles

9:04 Should I open a window? Analysis of air change rates during cooking in real homes in Bradford, UK

Low-cost MOX sensor to detect indoor ppb-level VOC: a promote 9:16 with Schottky barrier modulation

9:28 Initial VOC Emissions from Consumer Products Determined in Micro-Scale Test Chambers: Results of a Round Robin Test

9:40 Factors that govern indoor SVOC uptake by particles experimental study using aerosol mass spectrometry

Quantifying Particle Emissions from Electric Toothbrush Use: In 9:52

sights from Real-Life Brushing Experiments

M-103 Workshops

Inclusion and indoor environment: definition and comparison of 9:50 primary challenges

Chair: Natalia Giraldo Vasquez

Category: Workplaces, schools and healthy environments

M-101 THERMAL COMFORT

Technical chair: Tham Kwok Wai | National chair: Aldís Computer manager: Elías Lúðvíksson | Time manager: Heiðdís

8:30 Session Chair Introduction

Frequency of moisture problems/damages in housing in Iceland 8:40

and health issues Biörn Marteinsson

Beyond linear regression: improving thermal comfort data 8:52

analysis through visualisation

Matteo Favero

9:04 Enhancing healthy indoor thermal environment of low-income households in a hot-humid climate through passive cooling

interventions - A case of Abuja, Nigeria

Timothy Adekunle

9:16 Increasing the thermal comfort in passenger rail: application of

personalized environmental control systems

Daniel Schmeling

9:28 Thermal comfort in a cruise ship passenger cabin

lingkai Wang

9:40 **Enhancing Thermal Comfort in Shared Building Spaces: Analysis**

of Subzone Division

Objective and Subjective Assessment of Indoor Environmental 9:52

Quality in German Nursing Homes Using the HTxCubes: A Multisite Field Study

Mahmoud ElMokadem

V-102 LIGHTING AND NOISE

Technical chair: Jennifer Veitch | National chair: Ásta Computer manager: Ásta Logadóttir | Time manager: Loki

8:30 Session Chair Introduction

An exploratory field study to identify the potential impact of 8:40

working in daylight-deprived spaces in hospitals

Maud van den Boomen

An Interpretable Machine Learning Approach to Analyzing 8:52 Soundscape Quality in Open Spaces: A Multisensory Perspective

Cross-modal effects of enviornmental factors on perception and 9:04

bodily responses

Philomena Bluyssen

The effect of a reduced reverberation time on students' 9:16

perceived comfort and performance in higher education

classrooms: a between-groups experiment

Promoting Cognitive Health in Older Adults through Light and Temperature Modulation in Indoor Environments 9:28

9:40 Indicators and methods for assessing students' acoustical

preferences and needs of their study places

9:52 Green Views, Sharp Minds: The Power of Nature in Enhancing

CSUN Students' Cognitive Performance

M-201 IAQ

Technical chair: Marta Gabriel | National chair: Vincent Merida Computer manager: Bjarki Már Sigmarsson | Time manager: Davíð Hafsteinsson

8:30 Session Chair Introduction

Wildland Urban Interface Smoke: Household Response Guideline 8:40

Evaluation

Dustin Poppendieck The PHARAON project: new bases for a cross-disciplinary 8:52

standard to assess indoor air mitigation

Frederic Thevenet

9:04 Indoor air quality in university libraries at Lublin University of

Technology - a case study

Marzenna Dudzinska

9:16 Innovative Visual Strategies for Indoor Environmental Quality

Analysis

Jorge Fernandes

Forth Environmental Resilience Array (Forth-ERA): co-developing 9:28 an indoor and outdoor air quality monitoring network in Scotland

Operational PM2.5 capture efficiency of filters in balanced 9:40

ventilation systems, a field study

Piet Jacobs

V-201 IAQ

Technical chair: James McGrath | National chair: Jóhann A. Computer manager: Árna Benediktsdóttir | Time manager: TBA

8:30 **Session Chair Introduction**

Comparison of agar plate culture and molecular biology 8:40

quantification of airborne microorganisms collected on air handling units filters

Delphine Deshaves

8:52 Influence of heat sources on personal protection performance of

biological safety cabinets

Ryota Muta

9:04	Relating Respiratory Aerosol Emission Rates, the Exhaled Carbon Dioxide Flux and the Airborne Survival of Pathogens to Assess Transmission Risk in Indoor Environments	11:16	Extension and recalibration of the thermophysiological comfort model NOODEL regarding the individual parameters gender, age and BMI	
	Jonathan Reid		Kai Rewitz	
9:16	Development of a breath-taking hood for airborne diseases	11:28	Multi-directional Simulated Natural Wind (MSNW): a novel	
	Chih-Chieh Chen		approach to creating indoor dynamic wind environment for biophilic design	
9:28	Assessing Performance of Portable Air Cleaner on Infection Risk and Draught Risk in Care Home		Zouyu Xie	
	Yik Chirt Teoh	11:40	A Skin Temperature–Based Conceptual Framework for Heat Load Estimation in Migrant Thermal Comfort	
9:40	Exploring the emission from reused carpet tiles and the impact on indoor air quality		Yu Dong	
	Rikke Bramming Jørgensen	11:52	2 Development of Human Physiological Model for predicting occupant's local skin temperature in contact with a heated and	
9:52	Health Risk Assessment from Indoor PM2.5-bound Metals Exposure: Evaluating Carcinogenic and Non-carcinogenic Risks for Newborns and Their Mothers		ventilated seat	
			Kyoungmin Lim	
	Joao Paulo Teixeira	V-102	LIGHTING AND NOISE	

10:04 - 10:28 **BREAK**

V-101 IAQ

10:40

Technical chair: Lidia Morawska | National chair: Björn K. Computer manager: Kristján Ingi | Time manager: Egill Grétar Andrason

10:28 Bedroom ventilation and air quality during sleep: Insights from a pilot field study in Singapore

Xiaoiun Fan Partitioning of reactive oxygen species from oxidized indoor sur

face films Glenn Morrison

10:52 Comparison of Infection Risk in a Large and Small Classroom

James Bennett, Ph.D

11:04 Quantifying Person-to-Person Exhaled Air Exchange in Indoor Environments using Low-Cost CO2 and Particle Sensor in a Climate Chamber Study

Dennis Derwein

Research on high-efficiency purification technology of 11:16 three-effect nanofibers

11:28 Understanding the Relationship Between Indoor Enthalpy and Energy Use in Hospital Operating Rooms: A Year-Long Study

11:40 The impact of air recirculation on chemical, physical, and biological exposure in industrial settings: a literature review for the Recirculate IT project

Maria Justo Alonso

M-103 WORKSHOP

11:00 Towards an Open Database of Thermo-Physiological Experiments

Chair: Bilge Kobas

Category: Psychology, psychophysics, performance & productivity

M-101 THERMAL COMFORT

Technical chair: Xiaoiun Fan | National chair: Aldís Computer manager: Elías Lúðvíksson | Time manager: Heiðdís

10:28 What is the impact of indoor laundry drying on thermal comfort?

Investigating the Indoor Environmental Performance of Various 10:40 Floor Levels in High-rise Timber Buildings

10:52 Indoor Environmental Comfort in an Antarctic Station: Initial versus Final Phases

Huice Mag

11:04 Comparison of PMV model and thermophysiological comfort model NOODEL with subjective data at dynamic boundary conditions

Nicole Koczorek

Technical chair: Nina Sharp | National chair: Ásta Computer manager: Ásta Logadóttir | Time manager: Loki

10:28 Quantifying the Effects of Window View Features on Occupant Satisfaction: A Multilevel Analysis of Contributing Factors

Aicha Diakite-Kortlever

10:40 Exploring the Impact of Complex Indoor Thermal and Lighting Conditions on Occupant Comfort and Physiological Responses

10:52 Exploring the link between window view characteristics and occupant's satisfaction: results from a survey in home offices

Natalia Giraldo Vasquez

11:04 Augmentation of Comfort Post-Occupancy Evaluation Data for **Enhancing Machine Learning Performance**

Mohammad Salehi

11:16 Energy Efficiency Through a Thermally Adaptive Light Shelf

System Afnan Barr

11:28 Illuminating Minds: Investigating the Influence of Spatial Lighting Patterns and Color Temperature on Cognitive Performance in Older Adults Using Immersive Virtual Environments

Nasrin Golshany

Improving Indoor Air Quality and Awareness of Window 11:40 Operation Strategies in Primary School Classrooms Using

Light-Based Signaling Systems

Pedro de la Barra

Evaluating the role of glazing area, orientation, and latitude on 11:52 circadian health potential in a residential space

Siobhan Rockcastle

M-201 IAQ

Technical chair: Philomena Bluyssen | National chair: Vincent Merida Computer manager: Bjarki Már Sigmarsson | Time manager: Davíð Hafsteinsson

Performance-Based Approach Simulation to Compare IAQ and 10:28 Energy Performance of Ventilation Systems Inside Individual Houses

10:40 Negative Air Ions Dynamics in Green Walls: Assessing Plant and **Environmental Contributions**

Luowen Lyu

10:52 Development of a new adsorbent based on divinyl benzene for the measurements of airborne SVOCs with the SE-GC/MS method

11:04 CFD Study on Optimizing Personalized Exhaust Systems for Airborne Particle Removal in Hospital Rooms

Shahrzad Marashian

11:16 Investigation of Infection Risk Among Elevator Passengers with Varying Heights and Positions

11:28 PM1 in an Urban Primary School: Concentrations, Meteorological Influences, and Filtration During Spring Semester

Cağrı Şahin

V-201 IAQ

Technical chair: Erik Uhde | National chair: Jóhann A. Computer manager: Árna Benediktsdóttir | Time manager: TBA

Persistence of Smoke Chemicals from Residential Building 10:28 Structural Materials in a Test House **Dustin Poppendieck** 10:40 Carbon monoxide: a useful parameter for assessing indoor air quality? Tunga Salthammer 10:52 Predicting Dermal Exposure to Semivolatile Organic Compounds in Consumer Products under Direct Contact Scenarios

Influence of indoor temperature and humidity on quanta 11:04 emission rates during speaking and coughing

Zidong Song

Indoor air filtration impact on the microbiome - Vision of a 11:16 healthy indoor future

Bastian Bossmann

A Method for Accelerating Experimental Measurements of 11:28 Airborne Bacteria

Kanggi Guo

11:40 Indoor radon concentrations in European school buildings

Heidi Salonen

12:04 **LUNCH**

M-103 Workshops

Daylight Standards in Nordic Countries: Implementation 13:10 Challenges of EN 17037:2018

Chair: Ásta Logadottir

Category: Lighting, visual comfort, daylight, circadian lighting,

V-101 IAQ

Technical chair: Glenn Morrison | National chair: Alma Computer manager: Kristján Ingi | Time manager: Egill Grétar Andrason

Refining Particulate Matter Classification: Addressing Health 13:16 Risks of Smaller Fractions

Lisa Corneillie

Indoor Air Quality Assessment using different ventilation 13:28 strategies under typical pollutants emission scenarios in French **Dwellings**

Jeremy Depoorter

Evaluation of performance changes associated with medium-13:40 efficiency filters after long-term use

Naohide Shinohara

13:52 An Analysis of the Impact of Geology on Indoor Air Radon Concentration

Uttam Saha

14:04 Assessment of the Energy-health-comfort performance of buildings before and after deep energy retrofit by a simplified and low-cost method (QSE method)

María José Rueda López

14:16 On Associations between Volatile Organic Compounds and Dry Air Sensation in Indoor Environments

Al-Driven Behavioral Monitoring for Rapid Risk Assessment of 14:28 Respiratory Infections: Development and Validation of a Predictive Model

14:40 Impact of climate change on semi-volatile organic compounds concentrations in the Paris Area's dwellings

Aya Mansouri

M-101 THERMAL COMFORT

Technical chair: Janet Gaskin | National chair: Björn M. Computer manager: Elías Lúðvíksson | Time manager: Heiðdís

Thermal Comfort Beyond Expectations: Insights from Home and Office Environments in Two Climatic Regions

Kuniaki Mihara

Experimental Study on a Cooling Method for a Temporary 13:28 Negative Pressure Isolation (TNPI) Room using the Portable HEPA Filter Units (PHUs) in a Full-scale Simulated Chamber

13:40 The influence of thermal disposition on the thermal sensation of university students in mixed-mode classrooms located in a subtropical climate during the summer

Ricardo Forgiarini Rupp

13:52 The effect of low and high ventilation in combination with high and low temperature on physiological function and cognitive performance

14:04 Hygrothermal Performance of CLT External Walls Enhanced with Wood-Fibre-Based ETICS: Preliminary Field Measurement Insights

14:16 Paint Impacts on Mould Risk for Gypsum Interior Sheathing: Laboratory Testing in a Controlled Climate Chamber

Helen Stopps

A regenerative core-shell LTA@LDH adsorbent for indoor 14:28 dehumidification and its improved adsorption performance

14:40 Occupants' physiological responses to a dynamic thermal environment with temperature ramp: an experimental case study

Camilla Massucci

V-102 CLIMATE CHANGE

Technical chair: Kai Rewitz | National chair: Katarzyna Computer manager: Bergbóra | Time manager: Loki

The impact of global warming on high-performance buildings in 13:16 two European capitals: Analysing an optimistic scenario

Luka Pajek

Performance of An Adaptive Cooling Coil for Load Diversity and 13:28 Resilience

Kwok Wai Tham

13:40 Effects of passive solutions to reducing overheating in senior

housing in the Netherlands

Froukje van Dijker

13:52 Insights from a comparison of domestic energy asset rating

systems in Europe

Top-Down Analysis Framework for Common Characteristics of

14:04 Building Energy Based on Soft Clustering and Interpretable Machine Learning

14:16 Flexibility regulation strategy for campuses of higher education institutions

Zhenying Zhang

14:28 Land Surface Temperature and Outdoor Air Quality Impacts of

Urbanization: A Use Case in Limassol, Cyprus

Ravi Kumar Pandev

A Review of Existing Building Guidelines: How Well They Address 14:40

Health and Resilience in the Built Environment

Mina Moayyedi

M-201 IAQ

Technical chair: David Shaw | National chair: Gustaf
Computer manager: Bjarki Már Sigmarsson | Time manager: Davíð Hafsteinsson

13:16 Predicting Indoor Concentration in the Use of temporary Isolation Room in Healthcare Facilities

Shinhye Lee

13:28 Calibration of Optical Particle Counter Network for Air Quality Assessment in Passenger Trains

Darpan Das

13:40 Experimental Comparison of VOC Emissions Between New and Reused Construction Materials, Tested Individually and in

Fatimata SvII

13:52 Understanding Potential Radon Variability in Irish MHRV Homes; Case-Control Analysis

Mohsen Pourkiaei

14:04 Reducing the Transmission Risk of Influenza by Maximizing Airborne Viral Decay

Allen Haddrell

14:16 Challenges and Advancements in Environmental Monitoring at the Controlled Air Ventilation Environment (CAVE) Laboratory

Oliver Wild

14:28 Tackling the indoor exposure to H2S emissions from Sargassum seaweed stranding by an operational assessment of dwelling ventilation strategy

Marie Verriele

14:40 Developing a face-to-face manikin setup to mimic short conversations and understand airborne transmission in indoor settings

Arghyanir Giri

V-201 IAQ

Technical chair: Nicola Carslaw | National chair: Þórunn Computer manager: Árna Benediktsdóttir | Time manager: TBA

13:16 Experimental characterization of SVOC sorption on several indoor surfaces

Benoit Schmitt

13:28 The Impact of Occupant Behavior and Spatial Factors on Indoor Air Quality in Small Residential Units in Bangkok: A Post-Occupancy Study

Thanyatorn Khumpairo

13:40 Delivering Radon Testing to Smokers via Telephone Quitlines
Gary Schwartz

13:52 Determination of uptake rates of VVOCs in the indoor air on passive sampling systems

Luise Klein

14:04 Oral bioaccessibility of semivolatile organic compounds following dust ingestion: model review, input data inventory, and identification of key parameters

Aya Mansouri

14:16 Searching for the optimal CADR filter thickness of indoor air purifiers

Chih-Chieh Chen

14:28 Removal of CO2 in indoor air with alkaline solution and recovery of CO2 with electrodialysis

Akihiro Yamasaki

14:52 BREAK

M-103 Workshops

15:30 Disrupting Disease Transmission: Identifying Priority Spaces for Intervention in the Built Environment

Chair: James Montavon

Category: Indoor air quality, particles, aerosols, chemical pollutants, microbes

V-101 IAQ

Technical chair: Sanyogita Manu | National chair: Alma Computer manager: Kristján Ingi | Time manager: Egill Grétar Andrason

15:16 Multi-Component Transport Characteristics under Oxygen Supply and Carbon Removal Strategies in Oxygen-Enriched Buildings

Heng Zhou

15:28 Impact of different ventilation routes and ventilation rate on air pollutants dilution performance in residential kitchens in Taiwan

M.C. Jeffrey Le

15:40 Investigation of Infection Risk Among Elevator Passengers with Varying Heights and Positions

Sumei Liu

15:52 Microplastic Distribution in Indoor Dust: A Case Study of an Engineering College in Rajkot, India

Nisarg Mehta

16:04 Real-time measurement of reactive oxygen species emitted from indoor sources

Ionas Einarsson

16:16 Emissions of Chemicals of Emerging Concern in Water-based Paints

V:-- - V.

16:28 Optimizing Viral Aerosol Removal with Chitosan-Based Silver-Infused TiO2 Filters and Ionization

Wonder Dlamini

16:40 Chamber studies on the estimation of emission rates from commercial cleaning products during mopping

Sofia Eirini Chatoutsidou

16:52 Collocation Testing of Consumer-Grade Electronic Radon Sensors

in Canadian Homes

Tianyuan Li

M-101 THERMAL COMFORT

Technical chair: Henna Maula | National chair: Björn M. Computer manager: Elías Lúðvíksson | Time manager: Heiðdís

15:16 Human Volatile organic compounds emission characteristics at different metabolic levels

Meinan Qu

15:28 Thermal and visual perception of autistic people: a living lab study on environmental adaptation

Luca Zaniboni

15:40 Real-Time Touring Path Recommendation System Based on Outdoor Thermal Comfort for Complex Urban Settings

Wei Liu

15:52 Transient thermophysiological simulation and airflow analysis in non-uniform thermal environment for air-carrying energy

Yuting Huang

16:04 The benefits of Personalised Environmental Control Systems (PECS) as part of the mixed-mode building operations in India

Rajan Rawal

16:16 Assessing Cool Room Potential for Improving Heat Resilience in Disadvantaged Housing

Tianzhen Hong

16:28 Overheating in Dutch homes Field study in the search for suitable temperature limits

Froukje van Dijken

16:40 Analysis of air distribution and optimization of air-supply parameters under sleeping mode of the residential room

16:52 The Impact of Diffusion on Temperature Stratification in Buoyancy-Driven Displacement Natural Ventilation

Yeyu Xiang

17:04 Energy-Saving Wood Blinds Using Phase Change Materials: Development and Performance Evaluation

Ko Yu-Jeong

V-102 CLIMATE CHANGE

Technical chair: Miia Pitkaranta | National chair: Böðvar Bjarnason | BB/HJ/AÞ Enhancing Energy Resilience in Healthcare Infrastructure: A study to Evaluate Critical energy Demand 15:28 Overheating of buildings in future climate: A comparison of two climate zones in Sweden Building adaptation to climate change: performance-based 15:40 assessment of indoor air resilience (PAIR) Examine and classify residential buildings with integrated 15:52 renewable energy systems based on their energy resilience performance under typical and extreme climate conditions in cold climates 16:04 Estimation of urban wind profiles in built-up areas from GIS and WRF with a porosity model

V-102 DAMPNESS AND MOISTURE IN BUILDINGS

Technical cl	nair: Miia Pitkaranta National chair: Böðvar Bjarnason BB/HJ/AÞ	
16:28	Comparative analysis of Icelandic exterior walls Dorotea H Sigurdardottir	
16:40	Remediation efficacy of flood affected dwellings In Australia Heike Dr. Neumeister-Kemp	
16:52	Healthy building database: Microbial growth in building structures in indoor air problem and reference buildings	
	Vuokko Lappalainen	

M-201 IAQ

Technical chair: Federico Tartarini National chair: Gustaf Computer manager: Bjarki Már Sigmarsson Time manager: Davíð Hafsteinsson		
	15:16	Exploring how Far-UVC Air Cleaning Devices affect Indoor Air Chemistry
		Toby J. Carter
	15:28	Developing a User-Tracking Robot with a Nanofiber Air Cleaner for Personal Environmental Control
		Chengzhong Deng
	15:40	Interaction between Incense Particles and Metal Organic Framework-Nanofiber Filters
		Houhua Wu
	15:52	Evaluation of efficiency removal of PMs and bioaerosols by prototype of electrostatic air cleaner
		Amelia Staszowska
	16:04	From Surfaces to Air: How Germicidal UV (222 & 254 nm) Lamps Alter Volatile Organic Compound Levels in Indoor Environment

Sara Bjerre Sørensen 16:16 Contribution of human thermal plume to the microenvironmental distribution of indoor particles Evaluating Particle Clearance, Distribution Homogeneity, and 16:28

Energy Efficiency under Varying Ventilation Rates in a Sterile **Preparation Room**

Exploring microplastics sources in indoor environments, an 16:40 emerging pollutant

Marie-Astrid Dutoit

Fate Of Airborne Ultrafine Particles, Microfibers And Micro 16:52 organisms In The Human Respiratory Tract And Transport To The Olfactory Region In The Indoor Environment

Mihalis Lazaridis

V-201 IAQ

Technical chair: Uttam Saha | National chair: Þórunn Computer manager: Árna Benediktsdóttir | Time manager: Tinna Ingvarsdóttir Lessons learnt from real-time monitoring and analysis of the IAQ in CUT lecture rooms Michalis Michaelides 15:28 Locating Air Contaminant Source using a Sensing Robot with Pre-calculated Distribution Database Can Xiao Enhancing Indoor Air Quality Sensor Accuracy: An Optimized 15:40 Smoothing Algorithm for Reliable HVAC Control Maxence Mendez Increasing the passenger health: in-seat ventilation system for 15:52 reduced particle spreading **Daniel Schmeling** Emissions of Per- And Polyfluoroalkyl Substances (PFAS) from 16:04 Rain Jackets and Resulting Exposure Indoors 16:16 Towards developing an indoor emissions inventory for the UK: challenges and future directions Relationship of building material emissions and odour 16:28 perception: perceived intensity, hedonic tone and reasonableness Nicole Schulz

Detection of window opening events from CO2 and temperature

Virginie Desvignes

time series analyses in dwellings

16:40

Enhancing Thermal Comfort and Indoor Air Quality in Naturally 16:52 Ventilated Offices with Intermittent Personalized Ventilation

17:04 Influence of Direct Current Characteristics on Collection **Efficiency in Two-Stage Electrostatic Precipitators**

Thilhara Tennakoon



10 JUNE 2025

University of Reykjavik

SCHEDULE OVERVIEW

8:30 - 10:04

V-101 IAQ

M-101 THERMAL COMFORT

M-201 HEATING, VENTILATION, AIR CONDITIONING &

COOLING

V-201 PUBLIC HEALTH, OCCUPATION &

ENVIRONMENTAL HEALTH

V-102 WORKPLACES SCHOOLS AND HEALTHY

ENVIRONMENTS

8:40

M-103 WORKSHOP

9:50

M-103 WORKSHOP

10:04 - 10:28 BREAK

10:28 - 12:04

V-101 IAQ

M-101 THERMAL COMFORT

M-201 HEATING, VENTILATION, AIR CONDITIONING &

COOLING

V-201 WORKPLACES, SCHOOLS AND HEALTHY

ENVIRONMENTS

V-102 WORKPLACES, SCHOOLS & HEALTHY

ENVIRONMENTS

11:00

M-103 WORKSHOP

12:04 - 13:16 LUNCH

13:10

M-103 WORKSHOP

14:20

M-103 WORKSHOP

13:16 - 14:52

V-101 IAQ

M-101 THERMAL COMFORT

M-201 HEATING, VENTILATION, AIR CONDITIONING &

COOLING

V-201 PUBLIC HEALTH, OCCUPATIONAL & ENVIRONMENTAL

HEALTH

V-102 WORKPLACES, SCHOOLS AND HEALTHY

ENVIRONMENTS

14:52 - 15:16 BREAK

15:30

M-103 WORKSHOP

15:16 - 15:52

V-101 IAC

M-201 HEATING, VENTILATION, AIR CONDITIONING &

COOLING

V-201 PUBLIC HEALTH, OCCUPATIONAL & ENVIRONMENTAL

HEALTH

15:52 - 17:17 MEETING





DETAILED SCHEDULE

	IAILLD SCIILDOL			
V-101 IAQ			Cooling strategies to reduce classroom overheating in future climates	
Technical chair: Kerry Kinney National chair: Indriði Nielsson			Karin Maria Soares Chvatal	
Computer 8:30	manager: Egill Grétar Andrason Time manager: Kamile Morkute Session Chair Introduction	9:16	A Fourier Neural Operator-Based Method for Rapid Prediction of 3D Indoor Airflow Dynamics	
8:40	INCHEM-Py, applications and developments		Xiaoxiao Ding	
	David Shaw	9:28	Indoor temperature framework with IoT and AI for smart	
8:52	Pressure-Based Attribution of Naturally-Driven Infiltration in Residential Buildings		low-carbon control of urban district heating system in China Junjie Liu	
	Daniel Rodriguez	9:40	Sizing of Heat Pumps for Space Heating: Current and	
9:04	Clothing to reduce transdermal uptake of semi-volatile plasticizers from indoor environments Glenn Morrison		Future Projections in Irish Residences Adam O Donovan	
0.16		V-201	PUBLIC HEALTH, OCCUPATIONAL &	
9:16	Net4CleanAir-Network for Indoor Air Cleaning Sofia Sousa		ENVIRONMENTAL HEALTH	
9:28	Influence of Relative Humidity on the Emissions of Volatile Organic Compounds from Bio-based Building Materials Kasper Kristensen		chair: Anna Conzatti National chair: Gustaf manager: Árna Benediktsdóttir Time manager: TBA	
9:40		8:30	Session Chair Introduction	
9.40	Effects of blending hydrogen with natural gas on gas stove and oven NOx emissions Daniel Rush	8:40	Health benefits of proposed building code changes to address radon and extreme heat, Canada	
			Janet Gaskin	
9:52	Towards understanding air pollution in homes: the INGENIOUS project	8:52	Local tracer emission mimicking air-borne disease spreading in	
	Nicola Carslaw		an office space with mixing ventilation Mikael Björling	
M-101	THERMAL COMFORT	9:04	Low-Cost Wearable Sensors: Assessing Worker Exposure to Particulate Matter Across Various Construction Site Tasks	
	chair: Jelle Laverge National chair: Jóhann A.		Maria Justo Alonso	
Lúðvíkssor		9:16	Exploring dynamic environmental conditions effect on sleep quality: a longitudinal study comparing day and nighttime	
8:30 8:40	Session Chair Introduction Dynamic Model for Enhancing Indoor Environmental Quality:		exposure Veronica Martins Gnecco	
0.10	A Proactive Approach to Health and Comfort Hiba Ajib	9:28	Complex models and simple results in airborne disease	
8:52	Unraveling the Effects of Urban Heat on Summer Outdoor E		transmission lames Bennett	
0.02	xercise Capacity Boze Huang	9:40	Ethical Considerations of Inclusive Learning Environments:	
9:04	Dual potential of Garden Rooftop Farms for heat island		Addressing how Environmental Factors have an impact to Students with Sensory Needs	
9.04	mitigation and spatial productivity		Theodora Mavridou	
	Xin Dong	9:52	Understanding the role of ventilation in airborne transmission	
9:16	Overheating Risk in Dwellings: A global review on Factors, Assessing Methods, Indicators and Adaptation Strategies		risk: A Monte Carlo approach. Alexander Edwards	
	Shivani Dolas			
9:28	Exploring thermal satisfaction variability by occupant exposure in tropical semi-outdoor workspaces	V-102	WORKPLACES, SCHOOLS AND HEALTHY ENVIRONMENTAL	
	Toby Cheung	Technical	chair: Ulla Haverinen Shaughnessy National chair: Böðvar Bjarnason	
9:40	Modelling IEQ Factors in Home Offices: Predicting Satisfaction, Work Performance, and Well-Being Using Ordinal Logistic Regression		manager: Bergþóra Time manager: Ásta Logadóttir	
	Sanyogita Manu	8:30	Session Chair Introduction	
M-201	HEATING, VENTILATION, AIR CONDITIONG &	8:40	Sustainable Workplaces Catalysts for productivity and profitability in Indian Business	
	COOLING		Ayesha Syeda	
	chair: Hua Qian National chair: Dórotea manager: Hjördís Time manager: Davíð Hafsteinsson	8:52	Quantifying the impact of workplace environment features on physical activity for hybrid workers: a feasibility wearable sensors study	
8:30	Session Chair Introduction		Charu Srivastava	
8:40	Type Of Ventilation Hvac Systems In Large School District Study And Associated Ventilation Rates Per Person, Prior To	9:04	Perceived and Measured Indoor Environment on a Cruise Ship	
	Extensive Hvac Renovation/Upgrades Richard Shaughnessy	9:16	Thermal preferences of autistic people and coworkers in the	
8:52	Classification of Consumption Patterns for HVAC Systems in		workplace: Preliminary insights from a pilot study Maria Lackovicova	
	Terminal Buildings. Based on Feature Extraction and Cluster Analysis	9:28	First real-world exemplar of implementing a Blueprint Indoor Air	
	Chao Chen		Quality Standards	

Lidia Morawska

Comparison of Office Worker Perceptions of Two Innovation 9:40 11:28 A review of kitchen ventilation strategies for residential **Centers with Different Concepts** buildings located in cold climates Jaya Mukhopadhyay Haruka Matsubara 9:52 IEQ, occupant well-being and energy efficiency in school M-201 HEATING, VENTILATION, AIR CONDITIONING buildings under climate change: A literature review Hsing-Yu Ou Technical chair: Karin Maria Soares Chyatal | National chair: Dórotea M-103 WORKSHOPS Computer manager: Hjördís | Time manager: Davíð Hafsteinsson 8:40 A Universal Framework for Monitoring & Verification Of 10:28 Recirculation of return air in Norwegian buildings: Control Operational Performance of Heat Pump Based Heating strategies, air quality, and operational challenges Chair: Paul D O'Sullivan 10:40 Calibration of Single-Sided Bottom-Hung Window Ventilation Category: Heating, ventilation, air conditioning & cooling Models Ventilation and air cleaning: a new era begins 9:50 **Chair: Marcel Loomans** Application of Dynamic Carbon Intensity for TABS operation in 10:52 Category: Indoor air quality, particles, aerosols, chemical Denmark and Japan pollutants, microbes 10:04 - 10:28 BREAK 11:04 Air flow patterns and draught risk in a cruise ship cabin Arttu Sivula V-101 IAQ 11:16 Integrating phase change materials into buildings to improve indoor thermal environment and energy efficiency: a short Technical chair: Aneta Wierzbicka | National chair: Indriði Nielsson Computer manager: Egill Grétar Andrason | Time manager: Kamile Morkute Ou Han Fine Particulate Matter Exposures in Kitchens 10:28 11:28 Effect of Teachers' Awareness on CO₂ Levels and Ventilation Rates in Classrooms Natalie Bain-Reguis 10:40 Catalytic converter filters for airborne pathogen inactivation Underfloor Cooling in Residential Buildings: Addressing (viruses and bacteria) 11:40 Condensation Risks and Temperature Control Miguel A. Bañares Kätriin Onemar 10:52 A Blueprint for Using Far-UVC to Mitigate Airborne Pathogens in the Built Environment V-201 PUBLIC HEALTH, OCCUPATIONAL & **James Montayon ENVIRONMENTAL HEALTH** Low-cost formaldehyde sensors and their performance under 11:04 realistic conditions. Technical chair: Giorgio Buonanno | National chair: Gustaf Computer manager: Árna Benediktsdóttir | Time manager: TBA Energy retrofits, a just transition to better indoor air quality: 11:16 10:28 The development of a global Indoor Environmental Quality findings from the Irish HAVEN study guideline database: Observations and recommendations Magdalena Hajdukiewicz Phase partitioning and source apportionment of 11:28 10:40 Exploring the Nexus Between Housing Inequalities and Health: A organophosphate esters (OPEs) in vehicle cabins under the Systematic Review and Bibliometric Network Analysis temperature influence Meinan Ou 10:52 The first-trimester internal dose of novel and legacy Exploring Relationships between Microbial and Chemical 11:40 flame-retardant mixture and doctor-diagnosed asthma at age six Contaminants in Residential Dust David Iarma 11:04 Indoor Exposure Measurements in Vulnerable Communities using Dust and Silicone Wristbands as Passive Samplers M-101 THERMAL COMFORT Technical chair: Matteo Favero | National chair: Jóhann A. Promoting Building Occupant Safety and Indoor Air Quality (IAQ) 11:16 During and Following Emergencies Computer manager: Bjarki Már Sigmarsson | Time manager: Elías Lúðvíksson Danny Malashock The Impact of Material Thickness on the Thermal Performance 10:28 of Wattle and Daub Residences in Sri Lankan vernacula 11:28 The Finnish Indoor Air and Health Programme 2018-2028 architecture Oshanie Kumudika Rammuthupura 11:40 Building a model to predict the contribution to epidemic by each 10:40 Age-related differences in heat acclimatization influenced by transmission route and countermeasure effectiveness based on muscle mass infection risks Aya Yokoe Atsushi Mizukoshi 10:52 Numerical analysis of individual thermal comfort effectiveness V-102 WORKPLACES, SCHOOLS AND HEALTHY through an occupant-centric optimization control strategy for package air conditioning system **ENVIRONMENTS** Yunging Fan Technical chair: Amelia Staszowska | National chair: Böðvar Bjarnason 11:04 Improving sleep quality by applying thermoregulation mat to Computer manager: Bergþóra | Time manager: Ásta Logadóttir healthy adults in cooling season 10:28 Implications for indoor environmental quality and health of a district-wide school renovation and upgrading bond 11:16 The Impact of Material Thickness on the Thermal Performance program of Wattle and Daub Residences in Sri Lankan vernacular

Richard Shaughnessy

Yuta Shiozaki

Research on the Development of Environmental Evaluation

Methods for Healthcare Facilities Aimed at Achieving Well-being

10:40

architecture

Oshanie Kumudika Rammuthupura

10:52 Indoor climate is not indoor climate - How employees perceive classroom settings indoor climate differently at home and at the office Er Ding Marianne Skaar 14:28 Challenges and opportunities in monitoring air purifiers in 11:04 An Analysis of Colorado Workplace Indoor Air Quality and classrooms Ventilation: Data and Beyond Sverre Holøs Beniamin Swanson M-101 THERMAL COMFORT Indoor Environment Cleaning Questionnaire and Hygiene 11:16 Measurements for Cruise Ships Technical chair: Toby Cheung | National chair: Kristján Guðlaugsson Leila Kakko Computer manager: Bjarki Már Sigmarsson | Time manager: Elías Lúðvíksson Scratching the surface: a water-only cleaning intervention in 11:28 Dynamic Model for Enhancing Indoor Environmental Quality: A Finnish classrooms Proactive Approach to Health and Comfort Martin Täubel Long-Term Indoor Air Quality Data in Naturally Ventilated Class 11:40 13:28 Introducing a standard effective temperature scale adapted for rooms and Offices Undergoing Energy Retrofits French residential buildings based on field study Adam Collison M-103 WORKSHOP Optimization of Thermal and Visual Comfort in a Safe Indoor 13:40 Ambient Temperature of a Composite Climate 11:00 Development and Exploitation of the First Global IAQ Database Chair: Bowen Du and Dusan Lucina Research on metabolic rate estimation by image analysis 13:52 using machine learning Category: Indoor air quality, particles, aerosols, chemical Aoi Tanaka pollutants, microbes 14:04 **Energy-Saving Wood Blinds Using Phase Change Materials:** Development and Performance Evaluation 12:04 LUNCH Heritage and Comfort: Indoor Environmental Quality in Belgium's 14.16 M-101 Heritage Townhouses Luca Maton 12:00 ISIAQ General Annual meeting M-201 HEATING, VENTILATION, AIR CONDITIONING & COOLING M-103 WORKSHOPS Technical chair: Dusan Lucina | National chair: Aldís Computer manager: Hjördís G. | Time manager: Róbert Gunnar Einarsson 13:10 Requirements for Building Thermal Conditions and Indoor Air Quality under Emergency Operations in Cold Climates **Data Driven Estimates of Home Thermal Control Parameters** Ansel Early Chair: Alexander Zhivov Category: Thermal comfort, temperature, hygro-thermal 13:28 Investigation on Impacts of Geometry Features of Supply Vents humidity, dampness on Optimization of Multi-jet Stratum Ventilation 14:20 Towards Sustainable, Energy-efficient and Healthy Environment **Xuchao Wang** in Service Buildings Simulating wind- and buoyancy-driven flow using scale model 13:40 Chair: Ulla Haverinen-Shaughnessy measurements in an atmospheric wind tunnel Category: Workplaces, schools and healthy environments Christina Higgins 15:30 Retrofitting for Healthier Indoor Air: Challenges and Best 13:52 Personalised Environmental Control Systems (PECS): a paradigm shift for the indoor climate control Chair: Filip Fedorik Marco Perino Categories: Indoor air quality, particles, aerosols, chemical pollutants, 14:04 Bioinspired Design of Heat Exchanger for Maisotsenko Indirect **Evaporative Cooling Cycle** V-101 IAQ 14:16 Whole Life Carbon Comparison of Air Source Heat Pump with Technical chair: Frederic Thevenet | National chair: Þórunn Natural gas Boiler Computer manager: Egill Grétar Andrason | Time manager: Kamile Morkute 13:16 Evaluating the use of CO2 as a quantitative indicator of indoor 14:28 Analysis of the Stack Effect in High-Rise Buildings Considering **Time-Varying External Conditions** Sonali Deshmukh 13:28 Application of PM2.5 low-cost sensors for indoor air quality compliance monitoring V-201 PUBLIC HEALTH, OCCUPATIONAL & Lidia Morawska **ENVIRONMENTAL HEALTH** 13:40 Excellent Antibacterial Performance of ROS-mediated Cu-doped ZIF-8 and the Mechanism of ROS Generation Technical chair: Marie Verriele | National chair: Alma Ívarsdóttir **lingkun Zhang** Computer manager: Bjarki Már Sigmarsson | Time manager: Ásta Logadóttir 13:52 Assessing IoT low-cost sensor networks for long-term outdoor 13:16 The LungCHEM-Py Project and indoor air quality monitoring **Toby Carter** Inhalation Exposures and Work-Related Factors in Co-Residential 13:28 Application of indoor air quality pre-assessment model based on 14:04 Dry-Cleaning Facilities Following PERC Phase-Out two-parameter C-history method. Haipeng Chen 13:40 How can healthcare environments be health promoters?

Definition of design and management best practices of healthy

Indoor Air Quality
Marco Gola

A pilot study to explore the use of a personalized air cleaner as a

localized exhaust for short-range respiratory aerosols in

14:16

	coupled hygiene criterion for heterogeneous surface networks	16:28	Indoor Air Quality Prediction at Building Stock Scale Using MATHIS-QAI
Shengla	an Xiao		Thierno Diallo
14:04 Assess spaces	sing glycol vapors as a tool for air disinfection in occupied s	16:40	Indoor Air Quality Classification Based on PM2.5 Measurements from Numerous Buildings
Aman P	Patel		Martin Thalfeldt
	omes, Heat and Healthy Kids Study: The role of	16:52	Identification of PFAS sources in indoor environments
	underheated homes in preschool respiratory infections.		Aurélie Della-Puppa
Olivia S	wann	17:04	Linking material emissions and indoor air quality: experimental evaluation and simulation
	Challenges in Setting Indoor Environmental Health & Wellness		
Metric	Metrics		Nicole Schulz
Charlen	ne Bayer		

V-102 WORKPLACES, SCHOOLS AND HEALTHY ENVIRONMENTS

Technical chair: Richard Shaughnessy | National chair: Vincent Merida Computer manager: Bergbór | Time manager: Davíð Hafsteinsson

Computer manager: Bergpor Time manager: Davio Haisteinsson			
13:16	Changing office layout implementing vertical acoustic panels: evaluation of the impact on workers' perception and behaviour		
	Anna Pisello		
13:28	Assessing indoor environmental quality in schools using IoT devices: Insights from renovation projects		
	Samy Clinchard		
13:40	Integrating 24-hour personal monitoring of environmental stressors: a literature review		
	Hailin Zheng		
13:52	Study on human thermal comfort during moderate and high intensity physical activity in large sports venues		
	Shi Liu		
14:04	Using Wearable Devices to Evaluate the Impact of Indoor Environmental Quality on Teachers' Performance: A Field Study		
	Giulia Lamberti		
14:16	A study on the correlation between work patterns of workers in ABW-oriented offices and Transactive Memory Systems, employee wellness		

Takeeto Suzuki

14:28 Integrating the WHO ICF Model into Age-Friendly Housing Design Strategies: A Scoping Review of Spatial Interventions

Jieun Kim

14:40 Assessment of Air Quality in Primary Schools in Denmark using

Multimodal Sensor Nodes

Louise Frederickson

14:52 BREAK

V-101 IAQ

Technical chair: Maria Justo Alonso | National chair: Þórunn Computer manager: Egill Grétar Andrason | Time manager: Kamile Morkute

15:16	Evaluating the Effectiveness of Reducing PM2.5 Levels by Green Curtain System at Schools in Taiwan
	Yaw-Shyan Tsay
15:28	Acoustic-Enhanced Aerosol Filtration: An Energy-Saving Approach for Improved Indoor Air Quality
	Xin Zhang
15:40	Characterization of ultrafine particles number concentration and size distribution in the school environment
	Stavroula Katsikari
15:52	How Does Personal Hygiene Influence Indoor Air Quality?
	Nijing Wang

16:04 Indoor Air Quality of Offices: Beyond CO2 to Chemical Pollutants
Sarah J.D. Nauwelaerts

16:16 Indoor concentrations and exposure levels of carbon monoxide, sulfur dioxide, nitrogen dioxide, and ozone in residences, schools, and offices in China from 2000 to 2021: A systematic review

Jin Sun

M-201 HEATING, VENTILATION, AIR CONDITIONING & COOLING

Technical chair: Daniel Schmeling | National chair: Aldís Computer manager: Hjördís | Time manager: Róbert Gunnar Einarsson

15:16	Energy-Efficient Chiller Sequencing for Hospitals: Prioritizing Critical Air conditioning during Power Outage Restoration
	Manoj Kumar V
15:28	Classification of HVAC Electricity Consumption in Airport Terminal Buildings Based on Interpretable Feature Extraction and Feature Clustering
	Nana Su
15:40	Optimization of air conditioning operating parameters using machine learning
	Yuya Baba
15:52	Energy efficiency in selected rooms in the multi-family residential building
	Martyna Bocian
16:04	3D Printed Bioinspired Heat Exchangers for Maisotsenko Cycle
	Patrik Rapta
16:16	Simulating dynamic warm-up process in a room heated by the split-type air conditioner
	Zi Cheng

V-201 PUBLIC HEALTH, OCCUPATIONAL & ENVIRONMENTAL HEALTH

Technical chair: Raillard Cécile | National chair: Alma Ívarsdóttir Computer manager: Bjarki Már Sigmarsson | Time manager: Ásta Logadóttir

15:16	Health risk assessment of exposure to semi-volatile organic compounds-contaminated floor dust in housing in Japan
	Kenichi Azuma
15.28	Effects of indoor air quality in schools on respiratory health

among children: a systematic review

Jouni J.K. Jaakkola

15:40 Epidemiological study on School environment and health

5:40 Epidemiological study on School environment and health (InChildHealth)

Aino Rantala

15:52 In vitro bioaccessibility method for SVOCs in indoor dust

Marie Dufresne

16:04 Exposure to airborne food allergens in elementary schools in Finland, Portugal and United Kingdom: environmental assessment and health effects

Inês Paciências

16:16 Preliminary Assessment of Microbial Contamination in Urban and Rural Homes of Elementary School Children

16:28 Occupational inhalation exposure to welding fumes: distance, level, composition and health effects

16:40 Respiratory and Cardiovascular Effects of Ozone Reaction Products (ORPs): Emerging Epidemiologic Evidence

Jim Zhang

16:52 Removal of Microplastics from Wastewater using a Non-invasive



11 JUNE 2025

UNIVERSITY OF REYKIAVIK

SCHEDULE OVERVIEW

8:30 - 9:40

V-101 ARCHITECTURE, AESTHETICS, PASSIVE DESIGN, BIOPHILIA, **BUILDING PHYSICS, BUILDING TECHNOOGY**

M-101 COMMUNITY/ECO-LABELLING M-201 **OCCUPANT BEHAVIOR & CONTROLS** V-201 IAQ - ALL OTHER IEQ, ERGONOMICS &

HEALTH TOPICS

8:40

M-103 WORKSHOP

9:50

M-103 WORKSHOP

10:04 - 10:28 BREAK

10:28 - 11:28

ARCHITECTURE, AESTHETICS, PASSIVE DESIGN, BIOPHILIA, BUILDING PHYSICS, BUILDING TECHNOLOGY

HEATING AND VENTILATION M-101

PSYCHOLOGY, PSYCHOPHYSICS, PERFORMANCE & M-201 **PRODUCTIVITY**

11:00

M-103 WORKSHOP

11:28 - 12:15

CLOSING CEREMONY

DETAILED SCHEDULE

V-101 ARCHITECTURE, AESTHETICS, PASSIVE **DESIGN, BIOPHILIA, BUILDING PHYSICS, BUILDING TECHNOLOGY**

Technical chair: Tunga Salthammer | National chair: Dórotea Computer manager: Kristján Ingi | Time manager: Árna Benediktsdóttir

8:30	Session Chair Introduction
8:40	Nordic Sustainable Construction – Results from a 3 year
	collaboration project by Nordic authorities and industries on
	reducing emissions and waste in the construction industry

Biorn Karlsson

8:52 A Initial Review of Personalized Environmental Control Strategies in Outdoor and Semi-Outdoor Spaces

9:04 Development of Floor Plan Retrofit Methods to Reduce Thermal Health Risks in Low-Insulated Houses in Temperate Regions of Japan

Avaka Kani

9:16 Comparative Analysis of Heat Transfer in Polyurethane with Phase Change Materials: Advancing Multi-Scale Modeling for Energy Efficiency

9:28 Exploring climate resilience and the indoor environment in Pakistan's higher educational buildings through stakeholder perspectives

Madeeha Altaf

9:40 Designing for wellbeing: the role of architecture in educational spaces

Beatriz Piderit-Moreno

M-101 COMMUNITY/ECO-LABELLING

Technical chair: Ricardo Almeida | National chair: Alma Ívarsdóttir

	•	
Computer manager: Heiða	Time manager: Bergþóra	

8:30 Session Chair Introduction 8:40 Environmental loads and benefits of hybrid offices in the Nordics

Thorhildur Fjola Kristjansdottir

Empowering School Children to Understand and Improve Air 8:52

Quality in Rural Settings through Citizen Science

Shuangyu Wei

Community-Engaged Frameworks for Healthy and Sustainable 9:04

On-Reserve Housing

Sarah Haines

Enhancing dynamic metabolic rate estimation using calibration 9:16

models for portable devices

Yuchun Zhang

Analysis and standardization of Energy Performance Certificates 9:28 and Smart Readiness Indicators across the EU: first results from

the tunES project

Luca Zanihoni

Are traditional and historic buildings more efficient than their 9:40

rating label says?

Oliver Kinnane

Specification study of building envelope based on LCA and GHG 9:52

emissions

Miyu Matsunobu





M-201 OCCUPANT BEHAVIOR & CONTROLS

Technical chair: Sverre Holos | National chair: Björn K. Computer manager: Kristín | Time manager: Margrét Diljá Ívarsdóttir

8:30 Session Chair Introduction
 8:40 Evaluation of the space efficiency and functionality of residential buildings based on possible activities

Janine Bardey

8:52 Research on cooling control behavior and indoor thermal environment in Korean households, focusing on a comparative study over 20 years

Hyunji Lee

9:04 Profiling the Link Between the Objective Indoor Environment and the Subjective Experience of Occupants

Carl Grimes

9:16 Testing a smartphone-enabled real-time data approach to encourage IAQ-promoting behaviors at home

Marta Gabriel

9:28 From Individual to Occupant Profiles: Aggregated Personal Comfort Models for Occupant-Centric Building Controls

Pablo Martinez-Alcaraz

9:40 Environmental Sustainability, Thermal Performance, and Occupant Behavior: A Danish Case Study in Circular Construction

Sofie Amalie Sjøberg Buur-Mouridsen

9:52 Non-Intrusive Multi-Zone Occupancy Sensing via WiFi:

Applications in Office Environments

Yeeun Kim

V-201 IAQ - ALL OTHER IEQ, ERGONOMICS & HEALTH TOPICS

Technical chair: Giorgio Buonanno | National chair: Ásta Computer manager: Bjarki Már Sigmarsson | Time manager: Tinna Ingvarsdóttir

8:30 Session Chair Introduction

8:40 Quantification of semi-volatile organic compounds in nurseries during CRECH-PEFree project

Mélanie Nicolas

8:52 Assessing occupant ear comfort inside trains: Modeling of pressure variation using subjective feedback and real-time data monitoring

Yibin Lu

9:16 Co-creation of an airflow and COVID-19 transmission risk model for humanitarian shelter design

Anna Conzatti

9:28 The Four Factors of the Indoor Environment and How They Interact

Carl Grimes

9:40 Health Performance Indicators (HPIs)-How do they present and measure the Impact of Buildings on Health-A Systematic Review

Katerina Tatsiopoulou

9:52 CFD Modeling of PM2.5 Transport and Deposition in the Upper Airways: Integrating Biomedical Aspects through User-Defined

Wall Functions
Hashir P K

M-103 Workshops

8:40 Advancing quality of sleeping environments and sleep research

Chair: Xiaojun Fan

Category: Heating, ventilation, air conditioning & cooling

9:50 InChildHealth

Chair: Heidi Salonen

Category: Indoor air quality, particles, aerosols, chemical pollutants,

microbes

10:04 - 10:28 BREAK

V-101 ARCHITECTURE, AESTHETICS, PASSIVE DESIGN, BIOPHILIA, BUILDING PHYSICS, BUILDING TECHNOOGY

Technical chair: Martin Täubel | National chair: Dórotea Computer manager: Kristján Ingi | Time manager: Árna Benediktsdóttir

10:28 The Bauhaus architects and their indoor climate solutions

Atze Boerstra

10:40 Effect of different heights of photovoltaic on the comprehensive performance of photovoltaic-green roofs

XiaoTong Feng

10:52 Effects of indoor greenery in the workplace: Considerations and insights from a pilot study development

Lisi Freitas Camboim

11:04 Research on the evolution of environmental and equipment technologies in ultra energy-efficient buildings from the past to the present

Naoya Sugiura

M-101 HEATING & VENTILATION

Technical chair: Marco Perino | National chair: Alma Ívarsdóttir Computer manager: Róbert Gunnar Einarsson | Time manager: Bjarki Már Sigmarsson

10:28 Evaluating the concurrent operation of gaspers for controlling the airborne disease transmission in an economy-class aircraft cabin

Yunge Hou

10:40 Energy savings in existing ventilation systems for residential buildings with small apartments

Michael Johansson

10:52 Tubular Membranes for Enthalpy Exchangers

Wiebke Wiessner

11:04 Optimized PID Control for Adaptive Heating in Buildings: A Model-Based Approach to Enhance Thermal Comfort and Energy

Efficiency

Makram Abdellatif

M-201 PSYCHOLOGY, PSYCHOPHYSICS, PERFORMANCE & PRODUCTIVITY

Technical chair: Carl Grimes | National chair: Björn K. Computer manager: Kristín | Time manager: Margrét Diljá Ívarsdóttir

10:28 Session Chair Introduction

10:40 Different perceptions of health risks related to indoor air in neighboring countries Finland, Sweden and Estonia

Kati Huttunen

10:52 Indoor Air Quality and Adolescents' Cognitive Performance: First Results of CO2 and VOC Levels of a Longitudinal Large-Scale Field Study

Andreas Schütze

11:04 Facilitating Cumulative Occupant-Centric Building Science Through Bayesian Region of Practical Equivalence

Jian Pan

M-103 Workshops

11:00 Linking Buildings and Occupant Experience with Symptom Start

Chair: Carl Grimes

Category: Occupant behavior & controls

11:28 - 12:15 CLOSING CEREMONY