Arsen Krikor Melikov - Research outputs - DTU Orbit (10/02/2019)

**Improved performance of displacement ventilation by a pipe-embedded window**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Accurate assessment of exposure using tracer gas measurements**
Kierat, W., Bivolarova, M., Zavrl, E., Popiolek, Z. & Melikov, A. 2018 In : Building and Environment. 131, p. 163-173
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Airborne spread of expiratory droplet nuclei between the occupants of indoor environments: a review**
Ai, Z. T. & Melikov, A. K. 2018 In : Indoor Air Online. 28, 4, p. 500-524
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Cooling load for the design of air terminals in a general non-uniform indoor environment oriented to local requirements**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Effect of airflow interaction on temperature and velocity at the breathing zone of seated person**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Energy Saving Potential of a ventilated Seat Cushion**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Factors influencing the Evaluation of Bed thermal Environment**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Flow characteristics in occupied zone – An experimental study with symmetrically located thermal plumes and low-momentum diffuse ceiling air distribution**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Identification of human body physiological response to bed micro-environment**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Thermal Comfort Assessment of The Bed Micro-environment**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**A comparison between tracer gas and aerosol particles distribution indoors: The impact of ventilation rate, interaction of airflows, and presence of objects**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**Advanced airflow distribution methods for reducing exposure of indoor pollution**
Research output: Research - peer-review › Paper – Annual report year: 2018

**Displacement ventilation**
Effect of airflow interaction in the breathing zone on exposure to bio-effluents

Exposure to human body bio-effluents: impact of airflow interaction at the breathing zone

Measurement of exposure to gaseous contaminants

Thermal environment in a simulated double office room with convective and radiant cooling systems

Airflow characteristics and pollution distribution around a thermal manikin - Impact of specific personal and indoor environmental factors

Bed-integrated local exhaust ventilation system combined with local air cleaning for improved IAQ in hospital patient rooms

Energy Saving by Novel Bed-Integrated Local Exhaust Ventilation

Exposure Reduction to Human Bio-effluents Using Seat-integrated Localized Ventilation in Quiescent Indoor Environment

Exposure to aerosol and gaseous pollutants in a room ventilated with mixing air distribution

Individually controlled localized chilled beam in conjunction with chilled ceiling: Part 1 – Physical environment

Individually controlled localized chilled beam in conjunction with chilled ceiling: Part 2 – Human response
Particle deposition in a realistic geometry of the human conducting airways: Effects of inlet velocity profile, inhalation flowrate and electrostatic charge: Effects of inlet velocity profile, inhalation flowrate and electrostatic charge
Research output: Research - peer-review › Journal article – Annual report year: 2016

Seat-integrated localized ventilation for exposure reduction to air pollutants in indoor environments
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Subjective Evaluation of the Microenvironment Generated by a Hospital Bed with Localized Ventilation System
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

The effects of mixing air distribution and heat load arrangement on the performance of ceiling radiant panels under cooling mode of operation
Research output: Research - peer-review › Journal article – Annual report year: 2017

Thermal environment in simulated offices with convective and radiant cooling systems under cooling (summer) mode of operation
Research output: Research - peer-review › Journal article – Annual report year: 2016

Advanced air distribution: Improving health and comfort while reducing energy use
Research output: Research - peer-review › Journal article – Annual report year: 2015

Advanced air distribution method combined with deodorant material for exposure reduction to bioeffluents contaminants in hospitals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Air quality Performance of Ductless Personalized Ventilation in Conjunction with Displacement Ventilation: Impact of Walking Person
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Air temperature investigation in microenvironment around a human body
Research output: Research - peer-review › Journal article – Annual report year: 2015

Human body micro-environment: The benefits of controlling airflow interaction
Melikov, A. K. 2015 In : Building and Environment. 91, p. 70-77
Research output: Research - peer-review › Journal article – Annual report year: 2015

Human convection flow in spaces with and without ventilation: personal exposure to floor-released particles and cough-released droplets
Research output: Research - peer-review › Journal article – Annual report year: 2015
Human convective boundary layer and its impact on personal exposure

Human convective boundary layer and its interaction with room ventilation flow
Research output: Research - peer-review › Journal article – Annual report year: 2014

Performance assessment of a ventilated mattress for pollution control of the bed microenvironment in healthcare facilities
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Thermal environment and air quality in office with personalized ventilation combined with chilled ceiling
Research output: Research - peer-review › Journal article – Annual report year: 2015

Transport of gaseous pollutants by convective boundary layer around a human body
Research output: Research - peer-review › Journal article – Annual report year: 2015

Wearable Personal Exhaust Ventilation, WPEV: Improved Indoor Air Quality and Reduced Exposure to Air Exhaled from a Sick Doctor
Research output: Research - peer-review › Journal article – Annual report year: 2015

Air cleaning efficiency of deodorant materials under dynamic conditions: effect of air flow rate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Comparison of radiant and convective cooling of office room: effect of workstation layout
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Control of exposure to exhaled air from sick occupant with wearable personal exhaust unit
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Convective Heat Transfer Coefficients of the Human Body under Forced Convection from Ceiling
Kurazumi, Y., Rezgals, L. & Melikov, A. K. 2014 In : Journal of Ergonomics. 4, 1, 1000126
Research output: Research - peer-review › Journal article – Annual report year: 2014

Cooling clothing utilizing water evaporation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014
Local cooling of the human body using ventilated matress in hospitals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Novel approach for evaluation of air change rate in naturally ventilated occupied spaces based on metabolic CO2 time variation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Novel bed integrated ventilation method for hospital patient rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Occupant body movement and seat occupancy rate for design of desk micro-environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Performance of ductless personalized ventilation in conjunction with displacement ventilation: Physical environment and human response
Research output: Research - peer-review › Journal article – Annual report year: 2014

Performance of personalized ventilation combined with chilled ceiling in an office room: inhaled air quality and contaminant distribution
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Performance of radiant cooling ceiling combined with personalized ventilation in an office room: identification of thermal conditions
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Personal exposure to cough released droplets in quiescent environment and ventilated spaces
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

The effects of radiant cooling versus convective cooling on human eye tear film stability and blinking rate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Transport of gaseous pollutants around a human body in quiescent indoor environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Advanced air distribution for minimizing airborne cross-infection in aircraft cabins
Research output: Research - peer-review › Journal article – Annual report year: 2014
Comparison of the Performance of Chilled Beam with Swirl Jet and Diffuse Ceiling Air Supply: Impact of Heat Load Distribution
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Energy Analysis of the Ductless Personalized Ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Experimental investigation on reduced exposure to pollutants indoors by applying wearable personalized ventilation
Bolashikov, Z., Melikov, A. & Spiliak, M. 2013 In : HVAC & R Research. 19, 4, p. 385-399
Research output: Research - peer-review › Journal article – Annual report year: 2013

Exposure Control Indoors with Wearable Personal Exhaust Unit
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Exposure to Exhaled Air from a Sick Occupant in a Two-Bed Hospital Room with Mixing Ventilation: Effect of Posture of Doctor and Air Change Rate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human Response to Ductless Personalised Ventilation: Impact of Air Movement, Temperature and Cleanness on Eye Symptoms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human Response to Ductless Personalized Ventilation with Local Air Cleaning: Air Quality and Prevalence of SBS Symptoms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human response to local convective and radiant cooling in a warm environment.
Research output: Research - peer-review › Journal article – Annual report year: 2013

Impact of Air Movement on Eye Symptoms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Mixing Ventilation. Guide on mixing air distribution design
Research output: Research - peer-review › Book – Annual report year: 2014

Performance of Chilled Beam with Radial Swirl Jet and Diffuse Ceiling Air Supply in Heating Mode
Performance of Ductless Personalized Ventilation in Open-Plan Office - Field Survey
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Thermal Comfort in Simulated Office Environment with Four Convective and Radiant Cooling Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Thermal Conditions in a Simulated Office Environment with Convective and Radiant Cooling Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Use of personalized ventilation for improving health, comfort, and performance at high room temperature and humidity
Research output: Research - peer-review › Journal article – Annual report year: 2014

Advanced air distribution for minimizing airborne cross infection in aircraft cabin
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Airflow characteristics in the breathing zone of a seated person using desk incorporated pair of confluent jets as personalized ventilation - effect of supply velocities
Research output: Research - peer-review › Paper – Annual report year: 2012

Air movement and perceived air quality
Research output: Research - peer-review › Journal article – Annual report year: 2012

Bed Microenvironment in Hospital Patient Rooms with Natural or Mechanical Ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Ductless personalized ventilation with local air cleaning
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Exposure of health care workers and occupants to coughed airborne pathogens in a double-bed hospital patient room with overhead mixing ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2012

Exposure of health care workers and occupants to coughed air in a hospital room with displacement air distribution: impact of ventilation rate and distance from coughing patient
Research output: Research - peer-review › Paper – Annual report year: 2012
Human response to ductless personalized ventilation coupled with displacement ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

HVAC systems in a field laboratory for indoor climate study
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Impact of geometry of a sedentary occupant simulator on the generated thermal plume: Experimental investigation
Research output: Research - peer-review › Journal article – Annual report year: 2012

Impact of personal factors and furniture arrangement on the thermal plume above a sitting occupant
Research output: Research - peer-review › Journal article – Annual report year: 2012

Inhaled air quality with desk incorporated personalized ventilation (PV): parametric study
Research output: Research - peer-review › Paper – Annual report year: 2012

Radiant Ceiling Panels Combined with Localized Methods for Improved Thermal Comfort of Both Patient and Medical Staff in Patient Room
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Reduced exposure to coughed air by a novel ventilation method for hospital patient rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Seat headrest-incorporated personalized ventilation: Thermal comfort and inhaled air quality
Research output: Research - peer-review › Journal article – Annual report year: 2011

Subjective study of thermal acceptability of novel enhanced displacement ventilation system and implication of occupants' personal control
Sun, W., Cheong, K. W. D. & Melikov, A. K. 2012 In : Building and Environment. 57, p. 49-57
Research output: Research - peer-review › Journal article – Annual report year: 2012

The response rate in postal epidemiological studies in the context of national cultural behaviour
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Use of local convective and radiant cooling at warm environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Use of local convective and radiant cooling at warm environment: effect on thermal comfort and perceived air quality
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012
Potential energy savings with personalized ventilation coupled with passive chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Thermal comfort and indoor air quality in rooms with integrated personalized ventilation and under-floor air distribution systems
Research output: Research - peer-review › Journal article – Annual report year: 2011

Protection of Occupants from Airborne Transmission of Infectious Agents by Advanced Air Distribution Systems
Research output: Research › Ph.D. thesis – Annual report year: 2010

Ceiling mounted personalized ventilation system in hot and humid climate-An energy analysis
Research output: Research - peer-review › Journal article – Annual report year: 2010

Ceiling-mounted personalized ventilation system integrated with a secondary air distribution system - a human response study in hot and humid climate
Research output: Research - peer-review › Journal article – Annual report year: 2010

Control of the Free Convective Flow around the Human Body for Enhanced Inhaled Air Quality: Application to a Seat-Incorporated Personalized Ventilation Unit
Research output: Research - peer-review › Journal article – Annual report year: 2010

Design of an individually controlled system for an optimal thermal microenvironment
Research output: Research - peer-review › Journal article – Annual report year: 2010

Determination of the integral characteristics of an asymmetrical thermal plume from air speed/velocity and temperature measurements
Research output: Research - peer-review › Journal article – Annual report year: 2010

Does increased ventilation help reduce cross-infection in isolation hospital wards?
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Effect of warm air supplied facially on occupants’ comfort
Research output: Research - peer-review › Journal article – Annual report year: 2010

Energy analysis of the personalized ventilation system in hot and humid climates
Research output: Research - peer-review › Journal article – Annual report year: 2010

Experimental investigation of performance of a novel ventilation method for hospital patient rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010
Exposure of health care workers to coughed airborne pathogens in a hospital room with overhead mixing ventilation: impact of the ventilation rate and the distance downstream from the coughing patient
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Exposure to coughed airborne pathogens in a double bed hospital patient room with overhead mixing ventilation: impact of posture of coughing patient and location of doctor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Impact of boundary conditions on the development of the thermal plume above a sitting human body
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Impact of individually controlled facially applied air movement on perceived air quality at high humidity
Research output: Research - peer-review › Journal article – Annual report year: 2010

Performance of “ductless” personalized ventilation in conjunction with displacement ventilation: Impact of disturbances due to walking person(s)
Research output: Research - peer-review › Journal article – Annual report year: 2010

Performance of “ductless” personalized ventilation in conjunction with displacement ventilation: Impact of intake height
Research output: Research - peer-review › Journal article – Annual report year: 2010

Performance of Ductless Personalized Ventilation in Conjunction with Displacement Ventilation: Impact of Workstations Layout and Partitions
Halvonova, B. & Melikov, A. K. 2010 In : HVAC & R Research. 16, 1, p. 75-94
Research output: Research - peer-review › Journal article – Annual report year: 2010

Personalized Ventilation integrated with under-floor air distribution system - Protection of occupants from indoor airborne agents
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Thermal comfort and IAQ assessment of under-floor air distribution system integrated with personalized ventilation in hot and humid climate
Research output: Research - peer-review › Journal article – Annual report year: 2010

Thermal comfort and Indoor Air Quality In Rooms with Integrated Personalized Ventilation and Under-Floor Air Distribution System, HVAC&R Research
Research output: Research - peer-review › Journal article – Annual report year: 2010

Use of Heat-pipe for Energy Efficiency Improvement of Personalized Ventilation System Combined with Under-floor Air Distribution System in a Hot and Humid Climate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010
Air movement preference and acceptability with personalized ventilation in conjunction with under-floor air supply
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Assessment of Thermal comfort with the novel Enhanced Displacement Ventilation System in the tropics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Control of the free convection around a seated occupant for better air quality performance of personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Control of the free convection around occupant body by optimised furniture design
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Control of the free convection flow around human body by radiant cooling
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Control of the Free Convection Flow within the Breathing Zone by Confluent Jets for Improved Performance of Personalized Ventilation: Part 1 – Thermal influence
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Control of the Free Convection Flow within the Breathing Zone by Confluent Jets for Improved Performance of Personalized Ventilation: Part 2 – Inhaled Air Quality
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Cooling effect of ceiling mounted personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Energy-saving strategies with personalized ventilation in cold climates
Research output: Research - peer-review › Journal article – Annual report year: 2009

Evaluation of the Cooling Fan Efficiency index for a desk fan and a computer fan
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Experimental Study of Dispersion and Deposition of Expiratory Aerosols in Aircraft Cabins and Impact on Infectious Disease Transmission
Research output: Research - peer-review › Journal article – Annual report year: 2009

Human perception relation between thermal sensation and air movement for ceiling mounted personalized ventilation system
Human response to the thermal environment served by personalized ventilation combined with under-floor air distribution system

Impact of intake positioning height on performance of "ductless" personalized ventilation

Improved Performance of Personalized Ventilation by Control of the Convection Flow around Occupant Body

Introduction of a Cooling-Fan Efficiency Index

Methods for air cleaning and protection of building occupants from airborne pathogens

Modeling the Fate of Expiratory Aerosols and the Associated Infection Risk in an Aircraft Cabin Environment

Occupant movement analysis of ceiling mounted personalized ventilation system

Performance evaluation of ceiling mounted personalized ventilation system

Performance of "ductless" personalized ventilation in conjunction with displacement ventilation: impact of walking occupant

Prediction of the volume flux of the thermal plume above a sitting person

Preferred velocities with individually controlled facially applied air movement at high humidity

Reduced exposure to coughed air by advanced air distribution
Subjective assessment of thermal comfort in rooms served by the novel enhanced displacement ventilation system with different airflow discharge angles
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Subjective assessments of air movement for ceiling mounted personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Subjective assessments of indoor environmental quality for ceiling mounted personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Subjective assessments of thermal sensation for ceiling mounted personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

A comparison between occupants' and inspectors' reports on home dampness and their association with the health of children: The ALLHOME study
Research output: Research - peer-review › Journal article – Annual report year: 2008

An Experimental Study on the Fate of Expiratory Droplets in Aircraft Cabin
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Avoiding draught discomfort with personalized ventilation used at the low range of comfortable room air temperature
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Carbon dioxide concentration measured in homes in Bulgaria included in the ALLHOME-2 study
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Cooling effect of ceiling mounted personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Displacement ventilation in conjunction with personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Distribution of contaminants in the occupied zone of a room served by a novel enhanced displacement ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008
Energy analysis of a personalized ventilation system in a cold climate: influence of the supplied air temperature
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Energy saving and improved comfort by increasing air movement
Research output: Research - peer-review › Journal article – Annual report year: 2008

Examination of performance of headset incorporated personalized ventilation unit using CFD method
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Impact of air movement on perceived air quality at different level of air pollution and temperature
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Impact of air movement on perceived air quality at different level of relative humidity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Impact of Different Types of Fans in a Novel Enhanced Displacement Ventilation System on Vertical Temperature Profile and Air Distribution in a Field Environment Chamber
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Impact of Thermal Plumes Generated by Occupant Simulators with Different Complexity of Body Geometry on Airflow Pattern in Rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Improvement of CFD predictions of air speed turbulence intensity and draught discomfort
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Indoor environmental factors and health effects among children in Bulgaria and Denmark
Research output: Research - peer-review › Journal article – Annual report year: 2008

Local Climate and Heat Loss from Human Body with a Novel Enhanced Displacement Ventilation System
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

New method for calculation of integral characteristics of thermal plumes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008
Numerical investigation of dispersion and deposition characteristics of expiratory droplets in aircraft cabin
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Optimal dynamic control of water feed temperature for heated/cooled seats in summer conditions
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Potential cooling energy savings of increasing air movement to setoff the increase of operative temperature in office rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Subjective Assessment of Thermal Environment In a Room Ventilated by a Novel Enhanced Displacement Ventilation System
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

The association of pet keeping at home with symptoms in airways, nose and skin among Bulgarian children
Naydenov, K. G., Popov, T., Mustakov, T., Melikov, A. K., Bornehag, C-G. & Sundell, J. 2008 In : Pediatric Allergy and Immunology. 19, 8, p. 702-708
Research output: Research - peer-review › Journal article – Annual report year: 2008

Human perception of local air movement in the Tropics
Gong, N. & Melikov, A. K. Sep 2007
Research output: Research › Ph.D. thesis – Annual report year: 2007

Accuracy limitations for low velocity measurements and draft assessment in rooms
Melikov, A. K., Popiolek, Z. J., Silva, M. G., Care, I. & Sefker, T. 2007 In : International Journal of Ventilation. 6, 3, p. 113-128
Research output: Research - peer-review › Journal article – Annual report year: 2007

Air distribution in rooms
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Air distribution in rooms with active chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

An index for evaluation of air quality improvement in rooms with personalized ventilation based on occupied density and normalized concentration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Assessment of uncertainty in measurements with low velocity thermal anemometers
Popiolek, Z., Jergensen, F. E., Melikov, A. K., Silva, M. C. G. & Kierat, W. 2007 In : International Journal of Ventilation. 6, 3, p. 113-128
Research output: Research - peer-review › Journal article – Annual report year: 2007

A study on distribution of carbon dioxide produced by people in three residential buildings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007
Comfortable and Healthy Indoor Environment
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Human response to an individually controlled microenvironment
Research output: Research - peer-review › Journal article – Annual report year: 2007

Human response to thermal environment in rooms with chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Identification of Occupants’ Activities in Practice
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Impact of personal factors and furniture arrangement on the thermal plume above a human body
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Impact of the airflow interaction on occupants’ thermal comfort in rooms with active chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Individual control of office microenvironment
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Influence of different office arrangements on efficiency of displacement ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Influence of geometry of thermal manikins on concentration distribution and personal exposure
Melikov, A. K. & Kaczmarczyk, J. 2007 In: Indoor Air. 17, 1, p. 50-59
Research output: Research - peer-review › Journal article – Annual report year: 2007

Local air distribution effects in rooms with chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Measurement and prediction of indoor air quality using a breathing thermal manikin
Melikov, A. K. & Kaczmarczyk, J. 2007 In: Indoor Air. 17, 1, p. 50–59
Research output: Research - peer-review › Journal article – Annual report year: 2007

Methods for indoor air disinfection and purification from airborne pathogens for application in HVAC systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007
New solutions for thermal comfort and ventilation, Development of residence and office buildings in Denmark till 2013
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Novel idea of enhancement displacement ventilation system in small offices in the tropics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Personal exposure between people in a room ventilated by textile terminals - with and without personalized ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2007

Personalised ventilation: State of the art
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Personal Ventilation: from research to practical use
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Personal Ventilation: impact of airflow direction at the breathing zone on inhaled air quality
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Protection of occupants from exhaled infectious agents and floor material emissions in rooms with personalized and underfloor ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2007

Reducing cross-infection in aircraft cabins

Seat incorporated personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Seat incorporated personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Targets for thermal comfort: definition of comfort zone, measurement arrangement and analyses of results
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

The impact of thermal loads on indoor airflows
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

The influence of heated or cooled seats on the acceptable ambient temperature range
Zhang, Y. F., Wyon, D. P., Fang, L. & Melikov, A. K. 2007 In : Ergonomics. 50, 4, p. 586-600
Research output: Research - peer-review › Journal article – Annual report year: 2007
Thermal plume above a simulated sitting person with different complexity of body geometry
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

The strength of thermal plume: the interaction of thermal plums and air jets, Workshop 1 – Thermal plums: modelling the plums and analyzing, the effect on the air distribution
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Why ventilation?
Melikov, A. K. 2007
Research output: Education › Compendium/lecture notes – Annual report year: 2007

Airflow distribution in rooms with chilled beams
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Air quality and thermal comfort in an office with underfloor, mixing and displacement ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2006

ALLHOME study, 2006: Clinical signs of allergy and sensitization of pediatric population in two big cities in Bulgaria
Research output: Research › Article in proceedings – Annual report year: 2006

Composition and diversity of biological indoor allergens in mattress dust: ALLHOME study, phase 2
Research output: Research › Article in proceedings – Annual report year: 2006

Environmental tobacco smoke and health symptoms among children in the ALLHOME study
Research output: Research › Article in proceedings – Annual report year: 2006

Human response to five designs of personalized ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2006

New method for ventilation measurement in homes based on CO2 produced by people-laboratory study
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Performance of personalized ventilation in conjunction with mixing and displacement ventilation
Research output: Research - peer-review › Journal article – Annual report year: 2006

Physical measurements and IAQ assessment in university classrooms: the effect of windows' replacement
Research output: Research › Article in proceedings – Annual report year: 2006
Prevalence of SBS symptoms in residential buildings in Bulgaria
Healthy Buildings.
Research output: Research › Article in proceedings – Annual report year: 2006

The acceptable air velocity range for local air movement in the Tropics
Research output: Research - peer-review › Journal article – Annual report year: 2006

The preference for local air movement at the facial region during long-term exposure in the tropics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Validation of CO2 method for ventilation measurements in dwellings – Laboratory study
Research output: Research › Article in proceedings – Annual report year: 2006

Validation of self-reported health symptoms and housing characteristics in the ALLHOME project
Research output: Research › Article in proceedings – Annual report year: 2006

A bench mark database and validation method for CFD predictions of airflow in a room
Research output: Research › Article in proceedings – Annual report year: 2005

Air quality and thermal comfort in room with underfloor, displacement and mixing ventilation
Research output: Research › Article in proceedings – Annual report year: 2005

ALLHOME project group, 2006: Allergy/asthma and keeping pets in early childhood: a cross-sectional survey of 6155 children in Bulgaria
Research output: Research › Article in proceedings – Annual report year: 2006

A visual description of the convective flow field around the heat of a human
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Research output: Research › peer-review › Journal article – Annual report year: 2005

Evaluation of an Individually Controlled Environment by Means of a Breathing Thermal Manikin
Research output: Research › peer-review › Article in proceedings – Annual report year: 2005

Field study of occupants thermal comfort in rooms with displacement ventilation
Research output: Research › peer-review › Journal article – Annual report year: 2005

Findings of personalized ventilation studies in a hot and humid climate
Research output: Research › peer-review › Journal article – Annual report year: 2005
Housing characteristics in Sweden and Bulgaria: two questionnaire studies
Research output: Research › Article in proceedings – Annual report year: 2005

Human perception to local air movement and optimal air velocity range for local air movement in the Tropics
Research output: Research › peer-review › Article in proceedings – Annual report year: 2005

Human response to an individually controlled environment
Research output: Research › Article in proceedings – Annual report year: 2005

Individuel kontrolleret indeklima
Research output: Research › Journal article – Annual report year: 2005

Investigation of Turbulent Convection and Transport of Contaminants in Vehicle Compartments by a Breathing Thermal Manikin
Research output: Research › Article in proceedings – Annual report year: 2005

Metody testowania osobistej wentylacji
Research output: Research › Book chapter – Annual report year: 2005

Personal exposure between people in a room ventilated by textile terminals – with and without perosnalized ventilation
Research output: Research › peer-review › Article in proceedings – Annual report year: 2005

Personal exposure between people in a room ventilated by textile terminals - with and without personalized ventilation
Research output: Research › Article in proceedings – Annual report year: 2005

Personlig ventilation
Research output: Research › Article in proceedings – Annual report year: 2005

Prevalence of asthma, allergic rhinitis and atopic dermatitis in children at 2-8 years of age in two big cities in Bulgaria
Research output: Research › Article in proceedings – Annual report year: 2005

The home environment and allergies among Bulgarian children
Research output: Research › Article in proceedings – Annual report year: 2005
Individually Controlled Indoor Environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Personalized ventilation
Melikov, A. K. 2004
Research output: Research › Conference abstract for conference – Annual report year: 2004

Segmental equivalent temperature determined by means of a thermal manikin: A method for correcting errors due to incomplete contact of the body with a surface
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Thermal comfort of seated occupants in rooms with personalized ventilation combined with mixing or displacement ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Thermal sensation and comfort with five different air terminal devices for personalized ventilation
Research output: Research › Conference abstract for conference – Annual report year: 2004

Thermal sensation and comfort with five different air terminal devices for personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Total uncertainty of low velocity thermal anemometers for measurement of indoor air movements
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Transmission of exhaled air between occupants in rooms with personalized and underfloor ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Breathing thermal manikin for indoor environment assessment: Important characteristics and requirements
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Energy efficiency potential of personalized ventilation system in the tropics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003
Human Response to Air Movement - Evaluation of ASHRAE’s Draft Criteria
Research output: Research - peer-review › Journal article – Annual report year: 2003

Human response to personalised ventilation
Research output: Research › Ph.D. thesis – Annual report year: 2003

Impact of airflow interaction on inhaled air quality and transport of contaminants in rooms with personalized and total volume ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

New air terminal devices with high efficiency for personalized ventilation application
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Osobní Větrání (Personalized ventilation)
Cermak, R. & Melikov, A. K. 2003
Research output: Communication › Report – Annual report year: 2003

Performance of personalized ventilation in a room with an underfloor air distribution system: transport of contaminants between occupants
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Personalized ventilation: air terminal devices with high efficiency
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Preliminary findings of a pilot study of personalized ventilation in a hot and humid climate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

The impact of a personalized ventilation system on indoor air quality at different levels of room air temperature
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Turbulent and stationary convective flow field around the head of a human
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Equivalent frequency - a new parameter for description of frequency characteristics of airflow fluctuations
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Field survey of occupants thermal comfort in rooms with displacement ventilation
Human preference for air movement

Impact of equivalent frequency on the sensation of draught

Impact of personalized ventilation on human response: comparison between constant and fluctuating airflows under warm condition

Individual control and people's preferences in experiments with personalized ventilation system

Integrating CFD and building simulation

Local comfort and air quality quantification via integrated building simulation

Measurements and prediction of inhaled air quality with personalized ventilation

Perceived air quality and thermal sensation with personalised ventilation system

Performance of displacement ventilation in practice

Personalized ventilation: evaluation of different air terminal devices

PIV measurements at the breathing zone with personalized

Response of low velocity thermal anemometers to step-up and step-down changes of velocity
Roomvent 2002. Proceedings of the 8th International Conference on Air Distribution in rooms
Research output: Research - peer-review › Book – Annual report year: 2002

The effect of a personalized ventilation system on perceived air quality and SBS symptoms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Indoor air quality assessment by a breathing thermal manikin
Tokyo, Japan, p. 31-36
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Design of a localised ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 1999

Menneskers oplevelse af træk
Research output: Research › Journal article – Annual report year: 1999

Accuracy requirements and limitations for low velocity measurements
Research output: Research - peer-review › Article in proceedings – Annual report year: 1998

Human response to local heating for use in connection with low enthalpy ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 1998

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Research output: Research - peer-review › Article in proceedings – Annual report year: 1998

Impact of natural convection on accuracy of low velocity measurements by thermal anemometers with omnidirectional sensor
Research output: Research › Journal article – Annual report year: 1998

Impact of velocity and temperature fluctuations on the accuracy of low velocity measurements indoors by thermal anemometers
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Research output: Research - peer-review › Article in proceedings – Annual report year: 1998
Requirements and guidelines for low velocity measurements
Research output: Research - peer-review › Journal article – Annual report year: 1998

Test methods for describing directional sensitivity of anemometers for low velocity measurements indoors
Research output: Research - peer-review › Journal article – Annual report year: 1998

Thermal environment: design and assessment
Melikov, A. 1998 In : REHVA Journal. 3rd quarter, p. 5-9
Research output: Research › Journal article – Annual report year: 1998

Airflow direction and discomfort due to draught
Research output: Research - peer-review › Book chapter – Annual report year: 1997

Air temperature fluctuations in rooms
Research output: Research › Journal article – Annual report year: 1997

Badania własności dynamicznych termoanemometrów do pomiaru bardzo małych prędkości powietrza w pomieszczeniach
Research output: Research › Article in proceedings – Annual report year: 1997

Design and assessment of indoor environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

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Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

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Research output: Research - peer-review › Report – Annual report year: 1996
Dynamic response of SwemaAir 300 thermal anemometer with SWA-01 velocity transducer
Research output: Research - peer-review › Report – Annual report year: 1996

Dynamic response of thermal anemometers for low velocity measurements indoors
Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

Effekt af luftestrømnings retning på menneskers opfattelse af træk
Research output: Research - peer-review › Report – Annual report year: 1996

Laser Doppler measurements of airflow characteristics in rooms with mechanical ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

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Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

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Research output: Research - peer-review › Article in proceedings – Annual report year: 1994

Spot Cooling - Part 1: Human response to cooling with air jet
Research output: Research - peer-review › Journal article – Annual report year: 1994

Spot Cooling - Part 2: Recommendations for design of spot cooling systems
Research output: Research - peer-review › Journal article – Annual report year: 1994

Air velocity measurements indoors using thermal anemometers with a hot-sphere type sensor
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

Creating comfortable thermal environment – How to do it?
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

Human thermal sensation: frequency response to sinusoidal stimuli at the surface of the skin
Research output: Research - peer-review › Journal article – Annual report year: 1993

Is it necessary to measure air turbulence when assessing draught risk?
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

Low velocity measurements: Comparative study of different anemometers
Research output: Research - peer-review › Article in proceedings – Annual report year: 1992
An experimental study on convection heat transfer coefficient distribution on a thermal manikin exposed to airflow with various velocities and turbulence intensities
Research output: Research - peer-review › Journal article – Annual report year: 1991

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Research output: Research - peer-review › Journal article – Annual report year: 1990

Displacement ventilation - Airflow in the near zone
Research output: Research - peer-review › Article in proceedings – Annual report year: 1990

Draught risk in practice
Research output: Research - peer-review › Article in proceedings – Annual report year: 1989

Local thermal discomfort due to draft and vertical temperature difference in rooms with displacement ventilation
Research output: Research - peer-review › Journal article – Annual report year: 1989

Turbulence and draft
Research output: Research - peer-review › Journal article – Annual report year: 1989

Airflow characteristics in the occupied zone of heated spaces without mechanical ventilation
Research output: Research - peer-review › Journal article – Annual report year: 1988

Air Turbulence and sensation of draught
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Airflow characteristics in the occupied zone of ventilated spaces
Research output: Research - peer-review › Journal article – Annual report year: 1987

Draught and turbulence
Research output: Research - peer-review › Article in proceedings – Annual report year: 1987

Mean velocity and turbulence intensity in ventilated and unventilated spaces
Research output: Research - peer-review › Article in proceedings – Annual report year: 1987

The impact of turbulence on draught
Research output: Research - peer-review › Article in proceedings – Annual report year: 1987

Field measurements of characteristics of turbulent air flow in the occupied zone of ventilated spaces
Research output: Research - peer-review › Article in proceedings – Annual report year: 1985
An investigation of flow characteristics at propeller open water tests and in behind conditions using thermoanemometric probe
Research output: Research - peer-review › Article in proceedings – Annual report year: 1984

A relation between the averaged time velocity and the longitudinal turbulent velocity pulsation along the centre line of a free jet
Research output: Research - peer-review › Journal article – Annual report year: 1980

On the structure of a submerged axis-symmetric jet in its initial region
Research output: Research - peer-review › Journal article – Annual report year: 1980

Non-homogeneous mass exchange in round nozzle dryers
Research output: Research - peer-review › Journal article – Annual report year: 1979

Frequency spectra of turbulent pulsation in an axis-symmetric free jet behind a turbulating grid
Research output: Research - peer-review › Journal article – Annual report year: 1978