Arsen Krikor Melikov - DTU Orbit (07/02/2019)

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Department of Civil Engineering - Professor

Indoor Environment

Research outputs:

**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
Research output: Research - peer-review › Book – Annual report year: 2017

Effect of airflow interaction in the breathing zone on exposure to bio-effluents
Research output: Research - peer-review › Journal article – Annual report year: 2017

Exposure to human body bio-effluents: impact of airflow interaction at the breathing zone
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Measurement of exposure to gaseous contaminants
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Thermal environment in a simulated double office room with convective and radiant cooling systems
Research output: Research - peer-review › Journal article – Annual report year: 2017

Airflow characteristics and pollution distribution around a thermal manikin - Impact of specific personal and indoor environmental factors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Bed-integrated local exhaust ventilation system combined with local air cleaning for improved IAQ in hospital patient rooms
Research output: Research - peer-review › Journal article – Annual report year: 2016

Energy Saving by Novel Bed-Integrated Local Exhaust Ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Exposure Reduction to Human Bio-effluents Using Seat-integrated Localized Ventilation In Quiescent Indoor Environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

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
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Individually controlled localized chilled beam in conjunction with chilled ceiling: Part 2 – Human response
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

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

Efficiency of deodorant materials for ammonia reduction in indoor air
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Experimental investigation of the human convective boundary layer in a quiescent indoor environment
Research output: Research - peer-review › Journal article – Annual report year: 2014

Experimental study on human exposure to occupant generated pollutants in rooms with ductless personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Hospital bed ventilation: impact of operation mode on exposure
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human perception of indoor environment generated by chilled ceiling combined with mixing ventilation or localised chilled beam under cooling mode
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human response to individually controlled micro environment generated with localized chilled beam
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Human Response to Personalized Ventilation Combined with Chilled Ceiling
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Impact of personalized ventilation combined with chilled ceiling on eye irritation symptoms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Improved inhaled air quality at reduced ventilation rate by control of airflow interaction at the breathing zone with lobed jets
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Improvement of thermal comfort by cooling clothing in warm climate
Interaction of convective flow generated by human body with room ventilation flow: impact on transport of pollution to the breathing zone
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Local cooling of the human body using ventilated mattress 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. & Spilak, 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 Cleanliness 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
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

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

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

Advanced air distribution
Research output: Research - peer-review › Journal article – Annual report year: 2012

Airflow Characteristics at the Breathing Zone of a Seated Person: Passive Control over the Interaction of the Free Convection Flow and Locally Applied Airflow from Front for Personalized Ventilation Application
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Airflow Characteristics at the Breathing Zone of a Seated Person: Active Control over the Interaction of the Free Convection Flow and Locally Applied Airflow from Front for Personalized Ventilation Application
Research output: Research › Article in proceedings – Annual report year: 2011

Airflow Characteristics At The Breathing Zone of a Seated Person: Interaction of the Free Convection Flow and an Assisting Locally Supplied Flow From Below for Personalized Ventilation Application
Research output: Research › Article in proceedings – Annual report year: 2011

Device and method for reducing spread of microorganisms and airborne health hazardous matter and/or for protection from microorganisms and airborne health hazardous matter
Research output: Research › Patent – Annual report year: 2012

Exposure to exhaled air from a sick occupant in a two-bed hospital room with mixing ventilation: effect of distance from sick occupant and air change rate
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Impact of air temperature, relative humidity, air movement and pollution on eye blinking
Research output: Research › Article in proceedings – Annual report year: 2011

Impact of breathing on the thermal plume above a human body
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Impact of facially applied air movement on the development of the thermal plume above a sitting occupant
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Indoor Climate Quality Assessment -: Evaluation of indoor thermal and indoor air quality
Novel ventilation strategy for reducing the risk of airborne cross infection in hospital rooms
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Performance criteria for a personalized indoor environment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

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 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, HVA&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
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Impact of intake positioning height on performance of "ductless" personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Introduction of a Cooling-Fan Efficiency Index
Research output: Research - peer-review › Journal article – Annual report year: 2009

Methods for air cleaning and protection of building occupants from airborne pathogens
Research output: Research - peer-review › Journal article – Annual report year: 2009

Modeling the Fate of Expiratory Aerosols and the Associated Infection Risk in an Aircraft Cabin Environment
Research output: Research - peer-review › Journal article – Annual report year: 2009

Occupant movement analysis of ceiling mounted personalized ventilation system
Research output: Research › Article in proceedings – Annual report year: 2009

Performance evaluation of ceiling mounted personalized ventilation system
Research output: Research - peer-review › Journal article – Annual report year: 2009

Performance of “ductless” personalized ventilation in conjunction with displacement ventilation: impact of walking occupant
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

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

Subjective assessments of air movement for ceiling mounted personalized ventilation system

Subjective assessments of indoor environmental quality for ceiling mounted personalized ventilation system

Subjective assessments of thermal sensation for ceiling mounted personalized ventilation system

A comparison between occupants' and inspectors' reports on home dampness and their association with the health of children: The ALLHOME study

An Experimental Study on the Fate of Expiratory Droplets in Aircraft Cabin

Avoiding draught discomfort with personalized ventilation used at the low range of comfortable room air temperature

Carbon dioxide concentration measured in homes in Bulgaria included in the ALLHOME-2 study

Cooling effect of ceiling mounted personalized ventilation system
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
New method for calculation of integral characteristics of thermal plumes

Numerical investigation of dispersion and deposition characteristics of expiratory droplets in aircraft cabin

Optimal dynamic control of water feed temperature for heated/cooled seats in summer conditions

Subjective Assessment of Thermal Environment in a Room Ventilated by a Novel Enhanced Displacement Ventilation System

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

Human perception of local air movement in the Tropics
Gong, N. & Melikov, A. K. Sep 2007

Accuracy limitations for low velocity measurements and draft assessment in rooms

Air distribution in rooms
Melikov, A. K. 2007

Air distribution in rooms with active chilled beams

An index for evaluation of air quality improvement in rooms with personalized ventilation based on occupied density and normalized concentration
Assessment of uncertainty in measurements with low velocity thermal anemometers
Popiolek, Z., Jørgensen, 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
Research output: Research - peer-review » Report – Annual report year: 2007

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
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 plumes 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
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
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
Özcan, O., Meyer, K. E. & Melikov, A. K. 2005 In : Journal of Visualization. 8, 1, p. 23-31
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

Individuelt 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 personalized ventilation
Research output: Research - peer-review › 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
Improving comfort and health with personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

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

Personalized ventilation
Research output: Research - peer-review › Journal article – 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
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

Osobni 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
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Human preference for air movement
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Impact of equivalent frequency on the sensation of draught
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Impact of personalized ventilation on human response: comparison between constant and fluctuating airflows under warm condition
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Individual control and people's preferences in experiments with personalized ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Integrating CFD and building simulation
Research output: Research - peer-review › Journal article – Annual report year: 2002

Local comfort and air quality quantification via integrated building simulation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Measurements and prediction of inhaled air quality with personalized ventilation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Perceived air quality and thermal sensation with personalised ventilation system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Performance of displacement ventilation in practice
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

Personalized ventilation: evaluation of different air terminal devices
Research output: Research - peer-review › Journal article – Annual report year: 2002

PIV measurements at the breathing zone with personalized
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002
Response of low velocity thermal anemometers to step-up and step-down changes of velocity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2002

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
Melikov, A. K. 2000 Proceedings of Japan-Denmark Workshop on Indoor Air Chemical Pollution and Indoor Environment. Tokyo, Japan, p. 31-36
Research output: Research - peer-review › Article in proceedings – Annual report year: 2000

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
Melikov, A. 1998 Proceedings of Roomvent '98. p. 577-584
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

I. Care: Requirements and guidelines for low velocity measurements
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
Research output: Research › Journal article – Annual report year: 1998

Individuelt indeklima med lokal opvarming
Rasmussen, L. W., Langkilde, G. & Melikov, A. 1998 In : DANVAK. 6, p. 17-20
Research output: Research › Journal article – Annual report year: 1998
New method for testing dynamic characteristics of low velocity thermal anemometers
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

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

Airflow characteristics of a wind tunnel for testing low velocity thermal anemometers
Research output: Research › Article in proceedings – Annual report year: 1996

Air movement at the neck of the human body
Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

Badania właściwości dynamicznych termoanemometrów do pomiaru bardzo małych predkości powietrza w pomieszczeniach
Research output: Research › Article in proceedings – Annual report year: 1996
Calibration and requirements for accuracy of thermal anemometers for indoor velocity measurements: progress report, Phase 2
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 luftstrømnings 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

VOC generation system for indoor air quality studies
Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

Cooling with air jets - Airflow around the human body
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

Airflow characteristics in the occupied zone of rooms with displacement ventilation
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
Research output: Research - peer-review › Journal article – Annual report year: 1988

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

Projects:

Localized chilled beam combined with chilled ceiling in single office
Melikov, A. K. & Bolashikov, Z. D.
01/07/2014 → 31/12/2019
Project: Research

Healthy and sleep stimulating bed micro-environment
02/01/2017 → 31/12/2018
Project: Research

Improved methodology for CO2 based design of building ventilation
Melikov, A. K. & Bivolarova, M. P.
01/01/2018 → 31/12/2019
Project: Research

Quilts for generating healthy and sleep stimulating bed micro-environment: Part I – Testing methodology and characteristics of quilts
Melikov, A. K. & Bivolarova, M. P.
02/01/2017 → 30/06/2019
Project: Research

Healthy and sleep stimulating bed micro-environment
Project: Research
Human Exposure to Aerosol Contaminants in Modern Microenvironments
Melikov, A. K., Bolashikov, Z. D. & Bivolarova, M. P.
01/01/2013 → 01/01/2014
Project: Research

Use of deodorant material and advanced air distribution for reduction of exposure to indoor pollution
Melikov, A. K., Bolashikov, Z. D., Bivolarova, M. P. & Mizutani, C.
01/01/2013 → 03/07/2017
Project: Research

Impact of human convective boundary layer on inhaled air quality and its protective role under different ventilation strategies
Joint degree
01/09/2013 → 30/09/2015
Project: PhD

Control of Indoor Airflows for Reduction of Human Exposure to Aerosol Contaminants
Bivolarova, M. P., Melikov, A. K., Bolashikov, Z. D., Wargocki, P., Cao, G., Kosonen, R., Cao, G. & Kosonen, R.
Marie Curie (EU-stipendium)
01/07/2013 → 26/09/2017
Project: PhD

Luftkvalitet og luftskifte for sunde boliger
Strøm-Tejsen, P., Wargocki, P., Olesen, B. W., Spengler, J. D., Holm, A. & Melikov, A. K.
Eksternt finansieret virksomhed
01/02/2004 → 14/11/2007
Project: PhD

Methods for Measurements of Ventilation in Homes, and Ventilation Requirements for Healthy Indoor Home Environments
Forskningsrådsfinansiering
01/02/2004 → 15/08/2007
Project: PhD

Computational and Experimental Prediction of Indoor Environmental Quality
Voigt, L. P. K., Sørensen, J. N., Melikov, A. K., Nielsen, P. V., Clausen, G., Davidson, L. & Olesen, B. W.
Forskningsrådsstipendium
01/04/1997 → 15/03/2002
Project: PhD

Active Indoor air cleaning and heat recovery technology for energy saving of building ventilation
Nie, J., Fang, L., Olesen, B. W., Melikov, A. K., Afshari, A. & Zhang, X.
Institut, samfinansiering
15/12/2011 → 24/08/2015
Project: PhD

Personalized ventilation
Kaczmarczyk, J., Melikov, A. K., Fanger, P. O., Holmér, I. & Toftum, J.
DTU-lønnet stipendie
01/08/2000 → 21/10/2003
Project: PhD

Airflow Interactions in Rooms - Convective Plumes Generated by Occupants
Zukowska-Tejsen, D., Melikov, A. K., Popiolek, Z., Olesen, B. W., Kosonen, R. & da Silva, M. C. G.
DTU-lønnet stipendie
Enhancement of stress based cantilever assays through chemical functionalization
Bolashikov, Z. D., Melikov, A. K., Jakobsen, M. H., Kyhle, A., Olesen, B. W., Kosonen, R. & Nielsen, P. V.
DTU-lønnet stipendie
01/09/2006 → 30/06/2010
Project: PhD

Design Strategies for Personalized Ventilation Systems
Cermak, R., Melikov, A. K., Nielsen, P. V., Kato, S. & Olesen, B. W.
DTU-lønnet stipendie
01/08/2001 → 20/10/2004
Project: PhD

Building Thermal Energy Storage
Pavlov, G. K., Olesen, B. W., Svendsen, S., Melikov, A. K., Hensen, J. & Müller, D.
Institut stipendie (DTU) Samf.
01/06/2010 → 26/08/2014
Project: PhD

Human response to cooling with air jets
Melikov, A. K.
01/01/1991 → 31/12/1993
Project: Research

Dynamic Response of SWEMAAIR 300 Thermal Anemometer with SWA-01 Velocity Transducer
Melikov, A. K.
01/02/1996 → 30/11/2006
Project: Research

Accuracy of Draught Measurement
Melikov, A. K.
01/02/1998 → 31/01/2000
Project: Research

Integrated Design Optimisation of Building Energy Performance and Indoor Environment
Melikov, A. K.
01/11/1998 → 31/10/2001
Project: Research

Evaluation of energy efficient personalized air units for enhanced ventilation in the tropics
Melikov, A. K.
01/11/2003 → 31/10/2005
Project: Research

Optimal Seat Control Algorithm
Melikov, A. K.
01/05/2003 → 30/11/2005
Project: Research

Human response to Personalized Ventilation
Melikov, A. K.
01/09/2002 → 30/11/2005
Project: Research
Development of Air terminal Device with High Efficiency
Melikov, A. K.
01/09/2002 → 31/12/2004
Project: Research

Development of Highly Efficient Personalized Ventilation for Crowded Spaces
Melikov, A. K.
01/09/2005 → 30/11/2005
Project: Research

ALLHOME – A study on the Relation between Allergy/Asthma and Indoor Air Quality in Homes in Bulgaria
Melikov, A. K.
Project: Research

Ventilation measurement in homes based on metabolic CO2 produced by people
Melikov, A. K.
01/09/2004 → 31/10/2006
Project: Research

Assessment of Thermal Environment in Aircraft Cabin
Melikov, A. K.
01/03/2004 → 30/11/2004
Project: Research

Human convective boundary layer and its impact on human exposure
Melikov, A. K.
01/02/2012 → 31/01/2015
Project: Research

Evaluation of Performance of newly developed enhanced displacement ventilation in office environment in the tropics
Melikov, A. K.
01/10/2006 → 30/09/2010
Project: Research

Evaluation of performance characteristics of newly developed ceiling mounted personalized and mixing ventilation system
Melikov, A. K.
01/11/2006 → 31/10/2009
Project: Research

Convective plumes generated by occupants
Melikov, A. K.
01/06/2007 → 31/05/2011
Project: Research

Personalised ventilation – demonstration projec
Melikov, A. K.
01/09/2006 → 01/09/2008
Project: Research

Human response to non-uniform environment generated by "nested" chilled beams
Melikov, A. K. & Bolashikov, Z. D.
01/06/2013 → 31/12/2015
Project: Research
Human response to radiant and convective non-uniform cooling
Melikov, A. K. & Bolashikov, Z. D.
01/05/2013 → 31/07/2015
Project: Research

Evaluation of performance of newly developed enhanced displacement ventilation in office environment in the tropics
Sun, W. & Melikov, A. K.
01/10/2006 → 30/09/2010
Project: Research

Evaluation of performance characteristics of newly developed ceiling mounted personalized and mixing ventilation system
Bin, Y. & Melikov, A. K.
01/04/2006 → 31/03/2009
Project: Research

Human perception of air movement: Impact of airflow frequency and direction on the sensation of draught
Zhou, G. & Melikov, A. K.
01/04/1996 → 31/03/1999
Project: Research

Chilled beams – control of air distribution and its impact on human response
Melikov, A. K.
01/01/2006 → 31/12/2011
Project: Research

Efficient air distribution methods
Melikov, A. K., Bolashikov, Z. D. & Zukowska-Tejsen, D.
01/04/2007 → 31/03/2012
Project: Research

PERFECTION: Performance Indicators for Health, Comfort and Safety of the Indoor Environment
Melikov, A. K.
01/04/2009 → 31/03/2011
Project: Research

ACCURACY OF DRAUGHT MEASUREMENT
Melikov, A. K.
01/02/1998 → 31/01/2000
Project: Research

Ductless personalized ventilation* – a novel method of air distribution in spaces (human response and energy performance)
Melikov, A. K. & Dalewski, M.
01/08/2010 → 31/07/2014
Project: Research

Human response to exposed chilled beams with incorporated radiant panel
Melikov, A. K. & Bolashikov, Z. D.
01/06/2011 → 31/07/2015
Project: Research

Use of deodorant material and advanced air distribution for reduction of exposure to indoor pollution
Melikov, A. K., Bolashikov, Z. D., Bivolarova, M. P. & Mizutani, C.
01/03/2013 → 31/12/2014
Project: Research
Human Exposure to Aerosol Contaminants in Modern Microenvironments
Melikov, A. K., Bolashikov, Z. D. & Bivolarova, M. P.
01/01/2013 → 31/12/2016
Project: Research

Cooling ceiling combined with personalized ventilation – occupant response and energy consumption
Melikov, A. K. & Lipczynska, A.
01/11/2013 → 31/12/2015
Project: Research

Room velocities and person perception for room conditions with chilled beam systems
Melikov, A. K. & Bolashikov, Z. D.
01/06/2011 → 31/12/2015
Project: Research

Novel ventilation for hospital beds to reduce airborne cross-contamination with bacteria and other microorganisms in old and new hospitals
Melikov, A. K. & Bolashikov, Z. D.
01/04/2014 → 30/12/2014
Project: Research

Human response to air movements - preference and draft discomfort
Toftum, J., Fanger, P. O. & Melikov, A. K.
01/04/1998 → 31/03/1999
Project: Research

Calibration and requirements for accuracy of thermal anemometers for indoor velocity measurements
Melikov, A. K.
01/01/1994 → 31/12/1996
Project: Research

Development of standardised test methods for the evaluation of thermal climate in vehicles
Melikov, A. K.
Ukendt
01/01/1996 → 31/12/1998
Project: Research

Activities:

Building and Environment (Journal)
Melikov, A. K. (Editor)
2019 → …
Activity: Research › Peer review of manuscripts

Design of Indoor Environment by Creating Shared Values
Melikov, A. K. (Keynote speaker)
2018 → …
Activity: Talks and presentations › Conference presentations

Future Trends in Design and Control of Space Ventilation and Environment
Melikov, A. K. (Keynote speaker)
2018 → …
Activity: Talks and presentations › Conference presentations

International Association of Underground Space Environments (IA-USE) (External organisation)
Melikov, A. K. (Vice-chairman)
Human Body Micro-Environment: The Benefits of its Control
Melikov, A. K. (Invited speaker)
2017
Activity: Talks and presentations › Conference presentations

Ventilation of Buildings - Future Development
Melikov, A. K. (Guest lecturer)
2017 → ...
Activity: Talks and presentations › Conference presentations

Advanced ventilation: improved indoor environment and energy saving
Melikov, A. K. (Invited speaker)
2016
Activity: Talks and presentations › Conference presentations

Air distribution in rooms and vehicle compartments
Melikov, A. K. (Invited speaker)
2016 → ...
Activity: Talks and presentations › Conference presentations

Human Body Micro-Environment: The Benefits of its Measurement & Control
Melikov, A. K. (Guest lecturer)
2016
Activity: Talks and presentations › Conference presentations

Ventilation and Air Distribution: Present State and Future Challenges
Melikov, A. K. (Invited speaker)
2016
Activity: Talks and presentations › Conference presentations

R&D on thermal comfort, indoor air quality and energy saving in buildings- focus on aging people
Melikov, A. K. (Invited speaker)
2015
Activity: Talks and presentations › Conference presentations

Ventilation and Air Distribution for Improved Health, Comfort, Performance and Energy Saving in Buildings- Future Challenges
Melikov, A. K. (Invited speaker)
2015
Activity: Talks and presentations › Conference presentations

Ventilation and Air Distribution - Future Challenges
Melikov, A. K. (Guest lecturer)
2015
Activity: Talks and presentations › Conference presentations

ASHRAE (External organisation)
Melikov, A. K. (Member)
1 Jul 2014 → 30 Jun 2018
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Advanced Air Distribution
Melikov, A. K. (Keynote speaker)
2014
Activity: Talks and presentations › Conference presentations

Building Research and Information (Journal)
Melikov, A. K. (Reviewer)
2014 → …
Activity: Research › Peer review of manuscripts

Journal of Building Performance Simulation (Journal)
Melikov, A. K. (Reviewer)
2014
Activity: Research › Peer review of manuscripts

Risk Analysis (Journal)
Melikov, A. K. (Reviewer)
2013
Activity: Research › Peer review of manuscripts

Science of the Total Environment (Journal)
Melikov, A. K. (Reviewer)
2013
Activity: Research › Peer review of manuscripts

Textile Research Journal (Journal)
Melikov, A. K. (Reviewer)
2012 → …
Activity: Research › Peer review of manuscripts

Applied Thermal Engineering (Journal)
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

Building and Environment (Journal)
Melikov, A. K. (Reviewer)
2011 → …
Activity: Research › Journal editor

Building Simulation (Journal)
Melikov, A. K. (Reviewer)
2011 → …
Activity: Research › Peer review of manuscripts

International Journal of Industrial Ergonomics (Journal)
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

Journal of Aerospace Engineering (Journal)
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

Journal of Healthcare Engineering (Journal)
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

**Journal of Renewable and Sustainable Energy (Journal)**
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

**Journal of the Air and Waist Management Association (Journal)**
Melikov, A. K. (Reviewer)
2011
Activity: Research › Peer review of manuscripts

**ASHRAE Journal (Journal)**
Melikov, A. K. (Reviewer)
2010
Activity: Research › Peer review of manuscripts

**Journal of Hazardous Materials (Journal)**
Melikov, A. K. (Reviewer)
2010
Activity: Research › Peer review of manuscripts

**Aerosol Science and Technology (Journal)**
Melikov, A. K. (Reviewer)
2009 → …
Activity: Research › Peer review of manuscripts

**Energy and Buildings (Journal)**
Melikov, A. K. (Reviewer)
2008 → …
Activity: Research › Peer review of manuscripts

**ASHRAE (External organisation)**
Melikov, A. K. (Participant)
2007 → 2016
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

**ASHRAE (External organisation)**
Melikov, A. K. (Participant)
2007 → 2011
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

**HVAC & R Research (Journal)**
Melikov, A. K. (Reviewer)
2007 → …
Activity: Research › Peer review of manuscripts

**Journal of the Royal Society. Interface (Journal)**
Melikov, A. K. (Reviewer)
2006
Activity: Research › Peer review of manuscripts

**Journal of Ventilation (Journal)**
Melikov, A. K. (Reviewer)
2006
Activity: Research › Peer review of manuscripts
Building Services Engineering Research & Technology (Journal)
Melikov, A. K. (Reviewer)
2005
Activity: Research › Peer review of manuscripts

ASHRAE (External organisation)
Melikov, A. K. (Participant)
2000 → 2004
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

International Journal on Architectural Science (Journal)
Melikov, A. K. (Reviewer)
2000 → …
Activity: Research › Journal editor

Building and Environment (Journal)
Melikov, A. K. (Reviewer)
1998 → …
Activity: Research › Peer review of manuscripts

Indoor Air Online (Journal)
Melikov, A. K. (Reviewer)
1995 → …
Activity: Research › Peer review of manuscripts

Prizes:

ASHRAE Fellow Award
Arsen Krikor Melikov (Recipient), 2003
Prize: Prizes, scholarships, distinctions

Best paper Award for 2016 Building and Environment Journal
Arsen Krikor Melikov (Recipient), 2016
Prize: Prizes, scholarships, distinctions

Best paper published in The International Journal of HVAC&R Research for 2013
Arsen Krikor Melikov (Recipient), 2013
Prize: Prizes, scholarships, distinctions

Best Technical/Symposium Paper Award
Arsen Krikor Melikov (Recipient), 1995
Prize: Prizes, scholarships, distinctions

Distinguished Services Award
Arsen Krikor Melikov (Recipient), 2006
Prize: Prizes, scholarships, distinctions

Gold Medal for young researchers
Arsen Krikor Melikov (Recipient), 1972
Prize: Prizes, scholarships, distinctions

Honorary Member of BULSHRAE
Arsen Krikor Melikov (Recipient), 2003
Prize: Prizes, scholarships, distinctions
International Honorary Member of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan (SHASE)
Arsen Krikor Melikov (Recipient), 2007
Prize: Prizes, scholarships, distinctions

Medal for long-standing contribution to the field of environmental engineering
Arsen Krikor Melikov (Recipient), 2006
Prize: Prizes, scholarships, distinctions

Member of the International Academy of Indoor Air Sciences
Arsen Krikor Melikov (Recipient), 2005
Prize: Prizes, scholarships, distinctions

Rydberg Gould Medal of SCANVAC
Arsen Krikor Melikov (Recipient), 2018
Prize: Prizes, scholarships, distinctions

Press clippings:

Novel ventilation reduces infections in hospitals
Arsen Krikor Melikov
12/11/2014
1 media contribution
Press/Media: Press / Media

Luften i flyet er bedre end sit rygte
Arsen Krikor Melikov
11/11/2014
1 media contribution
Press/Media: Press / Media

Luftrenser på senge stopper smitte
Arsen Krikor Melikov
04/10/2010
1 media contribution
Press/Media: Press / Media

Ny DTU-opfindelse stopper smittespredning på hospitaler
Arsen Krikor Melikov
04/10/2010
1 media contribution
Press/Media: Press / Media