Christian Anker Hviid - DTU Orbit (25/02/2018)

Hviid, Christian Anker
cah@byg.dtu.dk

Department of Civil Engineering - Associate Professor
Department of Applied Mathematics and Computer Science
Section for Building Energy

Publications:

Thermo-active building systems and sound absorbers: Thermal comfort under real operation conditions
Köhler, B., Rage, N., Chigot, P. & Hviid, C. A. 2018 In : Building and Environment. 128, p. 143-152
Publication: Research - peer-review › Journal article – Annual report year: 2018

Numerical analysis of the potential of using light radiant ceilings in combination with diffuse ventilation to achieve thermal comfort in NZEB buildings
Krusaa, M. R., Hviid, C. A. & Kolarik, J. 2017
Publication: Research - peer-review › Paper – Annual report year: 2017

Potentielle energibesparelser i CTS-systemer i kontorbygninger
Publication: Communication › Journal article – Annual report year: 2017

Proposing a Central AEC Ontology That Allows for Domain Specific Extensions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Recent changes in the Building Topology Ontology
Rasmussen, M. H., Pauwels, P., Lefrancois, M., Schneider, G. F., Hviid, C. A. & Karlshøj, J. 2017
Publication: Research - peer-review › Paper – Annual report year: 2017

Roof windows in low-energy buildings - Analyses of demands and possibilities for future product development
Publication: Research › Ph.D. thesis – Annual report year: 2017

The cost efficiency of improved roof windows in two well-lit nearly zero-energy houses in Copenhagen
Publication: Research - peer-review › Journal article – Annual report year: 2017

The effect of dynamic solar shading on energy, daylighting and thermal comfort in a nearly zero-energy loft room in Rome and Copenhagen
Publication: Research - peer-review › Journal article – Annual report year: 2017

Web-based topology queries on a BIM model
Rasmussen, M. H., Hviid, C. A. & Karlshøj, J. 2017
Publication: Research - peer-review › Paper – Annual report year: 2017

An Methodology for Quality Control and Draught Assessment of Room Ventilation Supply Using Laser Light Sheets
Hviid, C. A. & Petersen, S. 2016 CLIMA 2016 - proceedings of the 12th REHVA World Congress. 10 p.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Do new and renovated schools and kindergartens secure sufficiently high indoor environmental quality?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Experimental study of the heat transfers and passive cooling potential of a ventilated plenum designed for uniform air distribution
Hviid, C. A. & Lessing, J. 2016 CLIMA 2016 - proceedings of the 12th REHVA World Congress. 10 p.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Field Study of Diffuse Ceiling Ventilation Performance in a Landscape Office
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Roadmap for improving roof and façade windows in nearly zero-energy houses in Europe
Publication: Research - peer-review › Journal article – Annual report year: 2016

Evaluation of ventilation solutions for retrofitting of schools
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Impact of façade window design on energy, daylighting and thermal comfort in nearly zero-energy houses
Publication: Research - peer-review › Journal article – Annual report year: 2015

A simple tool to evaluate the effect of the urban canyon on daylight level and energy demand in the early stages of building design
Publication: Research - peer-review › Journal article – Annual report year: 2014

Experimental investigations of heat transfer in thermo active building systems in combination with suspended ceilings
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Low-energy mechanical ventilation: a case study of two new office buildings
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Numerical investigation of diffuse ceiling ventilation in an office under different operating conditions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Optimized damper control of pressure and airflow in ventilation systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Simulation of static pressure reset control in comfort ventilation
Boundary conditions for the use of personal ventilation over mixing ventilation in open plan offices
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Experimental study of perforated suspended ceilings as diffuse ventilation air inlets
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Investigation and description of European buildings that may be representative for “nearly-zero” energy single family houses in 2020
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Performance analysis of a new design of office diffuse ceiling ventilation system
Fan, J., Hviid, C. A. & Yang, H. 2013 In : Energy and Buildings. 59, p. 73-81
Publication: Research - peer-review › Journal article – Annual report year: 2013

Afspejler et Be10-beregnet energibehov det faktiske energiforbrug
Publication: Communication › Journal article – Annual report year: 2012

Designguide til etablering af ventilation i eksisterende skoler
Hviid, C. A. & Petersen, S. 2012 In : H V A C Magasinet. 48, 11, p. 44-46
Publication: Communication › Journal article – Annual report year: 2012

Experimental study of diffuse ceiling ventilation in classroom
Hviid, C. A. & Terkildsen, S. 2012
Publication: Research - peer-review › Paper – Annual report year: 2012

Implementation of ventilation in existing schools: a design criteria list towards passive schools
Hviid, C. A. & Petersen, S. 2012
Publication: Research - peer-review › Paper – Annual report year: 2012

The European Energy Performance of Buildings Directive: Comparison of calculated and actual energy use in a Danish office building
Petersen, S. & Hviid, C. A. 2012
Publication: Research - peer-review › Paper – Annual report year: 2012

Wind- and stack-assisted mechanical ventilation with heat recovery and night cooling
Hviid, C. A. & Svendsen, S. 2012 Technical University of Denmark, Department of Civil Engineering. 121 p.
Publication: Research - peer-review › Report – Annual report year: 2012

Analytical and experimental analysis of a low-pressure heat exchanger suitable for passive ventilation
Publication: Research - peer-review › Journal article – Annual report year: 2011

Analytical and experimental analysis of a low-pressure heat exchanger suitable for passive ventilation (vol 43, pg 275, 2011)
Hviid, C. A. & Svendsen, S. 2011 In : Energy and Buildings. 43, 6, p. 1508-1509
Publication: Research - peer-review › Journal article – Annual report year: 2011
Hvad koster et godt indeklima på folkeskoler?
Publication: Communication › Journal article – Annual report year: 2011

Integrated ventilation and night cooling in classrooms with diffuse ceiling ventilation
Publication: Research › Article in proceedings – Annual report year: 2011

Nye typer bygningsintegrerede ventilationsløsninger med flere funktioner
Publication: Research › Ph.D. thesis – Annual report year: 2010

One-mode hybrid ventilation til lavenergibygninger
Hviid, C. A. 2010 In : HVAC Magasinet. 12, p. 22-30
Publication: Communication › Journal article – Annual report year: 2010

Advanced simulations of energy demand and indoor climate of passive ventilation systems with heat recovery and night cooling
Hviid, C. A. & Svendsen, S. 2008
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Passive ventilation systems with heat recovery and night cooling
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Passive ventilation systems with heat recovery and night cooling
Hviid, C. A. & Svendsen, S. 2008
Publication: Research › Poster – Annual report year: 2008

Simple tool to evaluate the impact of daylight on building energy consumption
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Simple tool to evaluate the impact of daylight on building energy consumption
Publication: Research - peer-review › Journal article – Annual report year: 2008

A method for evaluating the problem complex of choosing the ventilation system for a new building
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

A method for evaluating the problem complex of choosing the ventilation system for a new building
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2006

Naturlig ventilation kombineret med varmegenvinding og natkøling
Hviid, C. A. 2007 In : H V A C Magasinet. 5, p. 92
Publication: Communication › Journal article – Annual report year: 2007
Projects:

Demonstration of energy savings and indoor climate with sustainable adiabatic cooling using rainwater
Hviid, C. A., Zukowska-Tejsen, D. & Nielsen, V.
01/01/2017 → 30/06/2019
Project

Self-reulating Integrated ceiling solutions for heating, cooling, ventilation and acoustics in buildings based on renewable energy sources
Krusaa, M. R., Kolarik, J., Hviid, C. A. & Søndergård, E.
15/10/2016 → 14/10/2019
Project: PhD

Digital Infrastructure and Building Information Models in the design and planning of building services
Rasmussen, M. H., Karlshøj, J., Hviid, C. A. & Vendelboe, M. V.
15/01/2016 → 14/01/2019
Project: PhD

Renew school - Sustainable school building renovation promoting timber prefabrication, indoor environment quality and active use of renewables
Hviid, C. A. & Wargocki, P.
01/03/2014 → 28/02/2017
Project

Energy-efficient ventilation with optimized damper control of flow and pressure
Hviid, C. A. & Terkildsen, S.
22/01/2013 → 31/12/2015
Project

Fremtidens ovenlysvinduer- Konceptstudier med henblik på energirigtig og helhedsmæssig produktudvikling
15/12/2012 → 26/09/2017
Project: PhD

Belysningssystemer baseret på LED og OLED til bygninger med avanceret dagslysstyring
Skaaning, C. C., Nielsen, T. R., Hviid, C. A. & Svendsen, S.
01/04/2012 → 22/02/2017
Project: PhD

Energy performance of ventilation, heating and cooling systems integrated in sandwich panel of high performance concrete
Mikeska, T., Svendsen, S., Hviid, C. A., Mathisen, H. M., Schmidt, D. & Weitzmann, P.
01/05/2011 → 24/08/2015
Project: PhD

Naturlig ventilation med bygningsintegreret varmegenvinding og nattekøling
Svendsen, S., Hviid, C. A., Hviid, C. & Jensen, D. N.
01/06/2008 → 31/12/2009
Project
**Nye typer bygningsintegrerede ventilationsløsninger med flere funktioner**
01/03/2006 → 29/09/2010
Project: PhD

**Udvikling af værktøjer til at fremme energieffektiv anvendelse af solafskærmninger.**
Svendsen, S., Laustsen, J. B., Hvid, C. A. & Johnsen, K.
01/02/2005 → 31/01/2008
Project

**Activities:**

**Grønne forretningsmodeller**
Hvid, C. A. (Participant)
29 Jun 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.