





Ventilative Cooling: Using the cooling potential of ventilation to reduce energy use in buildings

17 September 2014 at 12:30pm

Venue: Council Chamber, Brunel University, Kingston Lane, Uxbridge

This Seminar is free but registration is essential; to register see <u>www.cibse.org/nvg</u>

This seminar will present current work by the IEA EBC Annex 62 which is an international collaborative project on ventilative cooling; it has a four year working phase (2014-2017) and contribution by representatives from 20 universities, research institutes and private industries from 14 different countries from Europe, Japan, China and the US.

The main aim of Annex 62 is to make ventilative cooling an attractive and energy efficient cooling solution to avoid overheating of both new and renovated buildings. Ventilation is already present in buildings through mechanical and/or natural systems and it can remove excess heat gains as well as increase air velocities and thereby also widen the thermal comfort range. The Annex will address the challenges and devise recommendations through development of design methods and compliance tools related to predicting, evaluating and eliminating the cooling need and the risk of overheating in buildings and through the development of new attractive energy efficient ventilative cooling solutions. For more details see http://venticool.eu/annex-62-home/

12:30	Registration and Lunch	Sponsored by Venticool
	Session 1: Chair Ben Jones	University of Nottingham
13:30	Greetings and Introduction	Brunel and CIBSE NVG
13:40	ECB Annex 62	Per Heiselberg, Aalborg University, Denmark
14:05	Challenges in the prediction of cooling need and overheating risk	Jan Hensen, Eindhoven University of Technology, Netherlands
14:30	Monitoring summer indoor overheating risk and ventilative cooling behaviour in London homes	Anna Mavrogianni, UCL, UK
14:55	Ventilative cooling – Application examples in non residential buildings	Flourentzos Flourentzou, ESTIA, Switzerland
15:20	Coffee/Tea Break	
	Session 2: Chair Martin Liddament	VeeTech Ltd
15:50	Venticool: The international platform for Ventilative Cooling	Karsten Duer, VELUX, Denmark
16:10	Analytical and experimental modelling of energy storage in phase change materials for natural cooling of buildings	Zsolt Bako Biro, Monodraught Ltd, UK
16:35	Designing natural ventilation for thermal comfort in buildings	Shaun Fitzgerald, BreathingBuildings, UK
17:00	Discussion	
17:30	Close and Departure	

Programme