

Windsor Conference 2012

The changing context of comfort in an unpredictable world

CONFERENCE TIMETABLE

Thursday 12th April 2012

1800 Signing in and reception

1915 Dinner

After-dinner invited lecture

2030	W1303	Thermal Comfort and Productivity in Offices under Mandatory Electricity Savings after Great East Japan Earthquake	Shin Ichi Tanabe	Waseda University, Japan
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Friday 13th April 2012

Session 1 Understanding the complexity of comfort (Chair Andreas Wagner)

0900	W1280	Civilising Comfort: 1914-1945	Daniel Ryan	University of Sydney, Australia	
0920	W1215	How does occupant perception on specific IEQ factors affect overall satisfaction?	Jungsoo Kim	University of Sydney, Australia	Richard deDear
0940	W1230	A Case Study about Comfort Level in Residential Space	Hatsuki Takahashi	Japan Minka Revival Association, Japan	Keiko Takahashi
1000	W1225	Simplified calculation model for predicting overheating in early design phases. A trade-off between simplicity and accuracy	Lieve Weytjens	PHL University College, Belgium	Griet Verbeeck
1020	W1222	Thermal history and its influence on occupants' thermal acceptability and cooling preferences in warm-humid climates: a new desire for comfort?	Renata De Vecchi	Federal University of Santa Catarina, Brazil	Christhina Cândido and Roberto Lamberts
1040	W1224	Facility Management Role in Thermal Adaptability Enhancement in Thai Universities	Darunee Mongkolsawat	University College London, UK	Alexi Marmot, Marcella Ucci
1100		COFFEE			

Session 2 Schools and non-domestic buildings (Chair Michael Adebamowo)

1130	W1264	Field study on thermal comfort in a UK primary school	Despoina Teli	Southampton University, UK	Mark F. Jentsch, Patrick A.B. James, AbuBakr S. Bahaj
1150	W1254b	Links between occupant complaint handling and building performance	John Goins	University of California, Berkeley, USA	Mithra Moezzi
1210	W1304	Simple, timely and actionable feedback improves commercial office building performance	Craig Roussac	Investa Property Group, Sydney, Australia	Richard deDear
1230	W1296	Investigations of occupants' behavioural adaptation for improving thermal comfort in workplaces	Jing Liu,	University of Reading, UK	Runming Yao, Rachel McCloy
1250	W1244a	"From Agent of Change to Global Citizen?" Dialogue, drawings, narratives and performances of secondary school children engaged with the design a sustainable school.	Andrea Wheeler	Loughborough University, UK	

1310	W1290	Light Penetration Factor – A new approach towards designing for comfort with direct sunlight	Peter Holzer	Danube-University Krems, Austria	Renate Hammer
1330		LUNCH			

Workshop 1 Standards for indoor environmental quality (Barne Olesen)

1430	W1305	Revision of EN15251 standard related to criteria for the indoor environment	Bjarne Olesen	Danish Technical University	
	W1267	Developing a Revised Rule on Workplace Temperature Requirements	Runa T. Hellwig	Augsburg University of Applied Sciences, Germany	Kersten Bux
	W1298	The Chinese Evaluation Standard for the Indoor Thermal Environment in Free-running Buildings	Prof Baizhan Li	Chongqing University, China	
		ISO standards for ergonomics of the physical environment	Prof Ken Parsons	Loughborough University, UK	

Workshop 2 Designing comfortable buildings (Sue Roaf and Fionn Stevenson)

1430	W1216	An Adaptive Thermal Comfort Policy for a Geographically Dispersed Property Portfolio; Deciding When and Where to Air-Condition in a Warm Climate Zone	Christhina Candido	University of Sydney, Australia	Richard deDear
	W1221	Designing for comfort – usability barriers in low carbon housing	Fionn Stevenson	University of Sheffield, UK	Isabel Carmona-Andreu, Mary Hancock
	W1213	Significance of air movement for thermal comfort in warm climates: A discussion in Indian context	Madhavi Indraganti	University of Tokyo, Japan	Ryozo Ooka, Hom Rijal
	W1308	Adapting REALL building design for comfort in a changing climate	Sue Roaf	Heriot Watt University, UK	Gary Clark
1600		TEA			

Session 3 Short papers with poster (Joint Chairs Peter Holzer and Luisa Brotas)

1630	W1247b	The use of sheds to promote the natural ventilation: the work of Brazilian architect João Filgueiras Lima, Lelé	Marieli Azoia Lukiantchuki	University of São Paulo, Brazil	
1636	W1266	Behavioral adjustment of Cool Chairs in Warm Offices	Kazuhiro Washinosu	Kogakuin University, Japan	Ikuno Suzuki, Tatsuo Nobe
1642	W1244b	The comfort dimension when evaluating the discrepancy between predicted and actual energy performance in new school buildings	Andrea Wheeler	Loughborough University, UK	Dino Bouchlaghem, Masoud Malekzadeh
1648	W1239	The Missing Link – Next Generation IEQ LAB with Ultimate Flexibility	Ashak Nathwani	University of Sydney, Australia	Richard De Dear and Christhina Cândido
1654	W1255	Energy efficiency versus overheating in a temperate climate for residential buildings.	E.E. (Noortje) Alders	Delft University of Technology, Holland	Stanley Kurvers, Eric van den Ham
1700	W1270	The concept of thermal comfort in the built environment given the current global economic crisis – a case study of lagos, nigeria	Adetokunbo (Toks) Sangowawa	KOA Consultants Ltd Nigeria	Mike Adebamowo
1706	W1269	Investigation of the comfort temperature and adaptive model in Japanese houses in summer	Katsuno Jiro	Tokyo City University, Japan	Hom Bahadur Rijal

1712	W1258	Assessing the ability of PMV model in predicting thermal sensation in naturally ventilated buildings in UK	Arash Beizaee	Loughborough University, UK	Steven K. Firth, Keyur Vadodaria, Dennis Loveday
1718	W1259	Adaptive Effect to Thermal Comfort of Cool Chair in ZEB Office	Ikuno Suzuki	Kogakuin University, Japan	Kazuhiro Washinosu, Tatsuo Nobe
1724	W1306a	Planning barriers to the Government agreements for reducing carbon emissions in existing houses	Renata Barreto	London Metropolitan University	Luisa Brotas
1730	W1226	Energy efficient living - INTEWON: From measuring to modelling to managing (Joint presentation)	Christel Jacquot	Maastricht University Medical Center, Holland	A van der Aa, EM Steg, AJH Frijns, F de Haas
1736	W1226	Energy efficient living - INTEWON: From measuring to modelling to managing (Joint presentation)	Boris Kingma	Maastricht University Medical Center, Holland	A van der Aa, EM Steg, AJH Frijns, F de Haas
1742	W1226	Energy efficient living - INTEWON: From measuring to modelling to managing (Joint presentation)	Wouter van Marken Lichtenbelt	Maastricht University Medical Center, Holland	A van der Aa, EM Steg, AJH Frijns, F de Haas

1800-1900 POSTER SESSION in the Greening Room

1915 DINNER

After-dinner invited lecture by Andy Ford, President CIBSE

Chair Susan Roaf

2030		A view from the Coal Face of practice on how the changing circumstances around us are affecting the ways we way we design buildings	Andy Ford	Chartered Institution of Building Services Engineers (CIBSE)	
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Saturday 14th April 2012

Session 4 Thermal comfort and domestic buildings (Chair Tri Harso Karyono)

0900	W1223	Summertime temperatures in 282 UK homes: thermal comfort and overheating risk	Kevin Lomas	Loughborough University, UK	T Kane
0920	W1241	Thermal experience in an era of low exergy domestic heating systems	Chris Tweed	Welsh School of Architecture, UK	Dylan Dixon
0940	W1252	Identifying a suitable method for studying thermal comfort in people's homes	Keyur Vadodaria	Loughborough University, UK	Vireen Limbachiya, Dennis Loveday, Victoria Haines
1000	W1293	Investigation of comfort temperature and adaptive model in Japanese houses	Honjou Miho	Tokyo City University, Japan	Hom B Rijal and Takashi Nakaya
1020	W1284	Investigation of window opening behavior in Japanese houses	Hom Bahadur Rijal	Tokyo City University, Japan	Takashi Nakaya
1040	W1228	Window opening behaviour: simulations of occupant behaviour in residential buildings using models based on a field survey	Valentina Fabia	Technical University of Denmark	Rune Korsholm Andersen, Stefano Paolo Corgnatia
1100		COFFEE			

Session 5 Domestic Bldngs (contd), overheating and climate change (Chair Kevin Lomas)

1130	W1295b	Adapting UK suburban homes for a warming climate	Rajat Gupta	Oxford Brookes University, UK	Matt Gregg
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1150	W1242	Exploring Comfort in the Home: Towards an Interdisciplinary Framework for Domestic Comfort	Andrea Burris	Loughborough University, UK	Val Mitchell, Victoria Haines
1210	W1229	Using an inappropriate thermal benchmark leads to overheating in UK primary schools	Azadeh Montazani	Coventry University UK	Fergus Nicol
1230	W1279	Heatwave vulnerability classification of residential buildings	Mike G.M. van der Heijden	Eindhoven University of Technology, Holland	B. Blocken, J.L.M. Hensen
1250	W1233a	Is there a method for understanding human reactions to climatic changes? – Developing experimental designs for climate chambers and field measurements to reveal further insights to adaptive processes	Marcel Schweiker	Karlsruhe Institute of Technology (KIT), Germany	Sabine Brasche, Wolfgang Bischof and Andreas Wagner
1310	W1285	Future context for thermal comfort: Impact of a changing climate on energy demand and human thermal comfort	Ulrike Passe	Iowa State University, USA	Bryan Mann, Shannon Rabideau, Gene Takle
1330	LUNCH				

Session 6 Short papers with poster (Joint chairs Hom Rijal and Craig Roussac)

1430	W1265	Effect of Air Movement in Housing during Japanese Summers	Teruyuki Saito	Nagoya University, Japan	Satoru Kuno
1436	W1209	Accuracy of mean skin temperature calculations and measurements in thermal comfort-related assessment	Carolin Schmidt	Fraunhofer-Institut für Bauphysik, Germany	Daniel Wölki, Gunnar Grün and Christoph van Treeck
1442	W1233b	Analysis of human interactions together with human-body exergy consumption rate	Marcel Schweiker	Karlsruhe Institute of Technology (KIT), Germany	Masanori Shukuya, Andreas Wagner
1448	W1277	Calculation of Human-body Exergy Balance for Investigating Thermal Comfort under Transient Conditions	Masanori Shukuya	Tokyo City University, Japan	K. Tokunaga, M. Onoma
1454	W1294	Numerical evaluation of radiative heat exchanges between human beings and cooling radiant systems	Sara Francisco	Pólo II da Universidade de Coimbra, Portugal	António M. Raimundo, Adélio M. Gaspar, Divo A. Quintela
1500	W1263	How the sensory experience of buildings can contribute to wellbeing and productivity	Trevor Keeling	Buro Happold, UK	D Clements-Croome, R Luck, P Pointer
1506	W1254a	User perspectives on outdoor noise in buildings with operable windows	John Goins	University of California, Berkeley, USA	Chungyoon Chun, Hui Zhang
1512	W1232	Predictive thermal comfort model: Are the field studies measuring the most influential variables?	Stephanie Gauthier	University College London, UK	David Shipworth
1518	W1249	Predictive clothing insulation model based on outdoor air and indoor operative temperatures	Stefano Schiavon	University of California, USA	Kwang Ho Lee
1524	W1306b	Natural versus mechanical ventilation - towards sustainability	Luisa Brotas	London Metropolitan University	Fergus Nicol
1530	W1210a	Comparison of outdoor comfort field data against calculations of the thermal indices PMV and PET	Eduardo L. Krüger	Glasgow Caledonian University, UK	Rohinton Emmanuel, Patricia Drach, Oscar Corbella
1536	DEMO	“Passive Design Assistant” software	Jake Hacker	Arups UK	
1600	TEA				

Workshop 3 Personal Control and Occupant behaviour in office buildings

(Gail Brager, Rune Andersen)

1630	W1261	Impact of Available and Perceived Control on Comfort and Health in European Office Buildings	Atze Boerstra	BBA Binnenmilieu, Holland	Tim Beuker, Marcel Loomans & Jan Hensen
	W1250	Occupant Response to Window Control Signaling Systems	Katie Ackerly	University of California, USA	Gail Brager

Workshop 4 How to make comfortable low energy buildings that really do work?

(Paul Tuohy, Jake Hacker)

1630	W1289	Why advanced buildings don't work?	Paul Tuohy	University of Strathclyde, UK	
	W1281b	Computational analysis - Evaluation of the impact of the user expertise on the results of simulation tools	Alberto Hernandez Neto	University of São Paulo, Brazil	Anarrita Bueno Buoro and Flávio Augusto Sanzovo Fiorelli
	W1234	Robustness of a building: relationship between building characteristics and energy use and health and comfort perception	Sarah Juricic	Delft University of Technology, Holland	Eric van den Ham, Stanley Kurvers

1800-1900 POSTER SESSION in the Greening Room

1915 DINNER

Sunday 15th April 2012

Session 7 Hot climates (invited Chair Jens Pfafferott)

0900	W1204b	Temperature performance and thermal comfort study in vernacular houses in East Nusa Tenggara, Indonesia	Tri Harso Karyono	Tarumanagara University, Indonesia	Suwantara, Nugrahaeni R, and Suprijanto I
0920	W1208a	Extreme adaptation to extreme environments: case study of hot dry, hot sub-humid, and hot humid climates in Mexico	Gabriel Gomez- Azpeitia	University of Colima, Mexico	G. Bojórquez- Morales, R.P. Ruiz, E. González, A. Tejeda
0940	W1212	A field survey in Calcutta. Architectural issues, thermal comfort and adaptive mechanisms in hot humid climates.	Margot Pellegrino	Polytechnic of Turin, Italy	M. Simonetti, L. Fournier
1000	W1237	Comfort Temperatures for the Low-Income Group in a Hot-Humid Climate	Yayi Arsandrie	Delft University of Technology, Holland	Stanley R. Kurvers, Regina M.J. Bokel
1020	W1273	Energy Savings in Housing Through Enlightened Occupant Behaviour and By Breaking Barriers to Comfort:- A Case Study of A Hostel Design in Nigeria.	Michael Adebamowo	University of Lagos, Nigeria	Olumide Olusanya
1040	W1211	The Effect of Different Transitional Spaces on Thermal Comfort and Energy Consumption of Residential Buildings	Mohammad Taleghani	Delft University of Technology, Holland	Martin Tenpierik, Andy van den Dobbelsteen
1100	COFFEE				

Session 8 Comfort models and outdoor comfort (Chair Michael Humphreys)

1130	Keynote	The Indoor climate: towards comfort and health - Building and occupant energetics	Wouter van Marken Lichtenbelt	Maastricht University Medical Center, Holland	
1200	W1210b	Predicting outdoor thermal sensation from two field studies in Curitiba, Brazil and Glasgow, UK using the universal thermal climate index (UTCi)	Eduardo L. Krüger	Glasgow Caledonian University, UK	P. Bröde, R. Emmanuel, D. Fiala

1220	W1220	Perception of Transient Thermal Environments: Pleasure and Alliesthesia	Tom Parkinson	The University of Sydney, Australia	Richard deDear, Christhina Candido
1240	W1235	Validating Fanger's PMV model in a 'real' field study	Mohammad Kotbi	University of New South Wales, Australia	Steve King and Deo Prasad
1300	W1251a	Effects of different cooling principles on thermal sensation and physiological responses	Lisje Schellen	Eindhoven University of Technology, Holland	M.G.L.C. Loomans, M.H. de Wit, W.D. van Marken Lichtenbelt
1320	LUNCH				

Sess 1430-1530 Report back from workshops and charting the way ahead (Chair Richard deDear)

Croquet anyone?

UNABLE TO PRESENT

For different reasons some authors are unable to travel to Windsor to present their papers.

	W1205	Façades and office buildings in São Paulo (Brazil): aiming for thermal comfort and natural ventilation	Mônica Marcondes	University of Sao Paolo, Brazil	Marcia Alucci; Joana Gonçalves
	W1203	Neutral temperature in outdoors for warm and cold periods for extreme warm dry climate	Gonzalo Bojorquez-morales	Autonomic University of Baja California, Mexico	Gómez-Azpeitia, G, García-Cueto R, García-Gómez C, Luna-León A, and Romero-Moreno R
	W1240	Influences of wind and humidity on thermal comfort of urban canyons in bandar abbas, iran	Masoud Dalman	University Putra Malaysia	Elias Salleh
	W1260	Outdoor Thermal Condition Evaluation by Microclimate Observation - Case Study of Kuala Lumpur	Mansoureh Tahbaz	Shahid Beheshti University, Iran	
	W1218	The response of Critical regionalism to contextual changes over time in South-east Asian Tropical residential architecture – A case study of Singapore	Anupama Udaykumar	Architecture & Planning Professional, India	
	W1206a	Urban residential comfort in relation to indoor and outdoor air temperatures in ibadan Nigeria	Adewale Adunola	Obafemi Awolowo University, Nigeria	
	W1206b	Thermal comfort considerations and space use within residential buildings in Ibadan, Nigeria.	Adewale Adunola	Obafemi Awolowo University, Nigeria	Kolawole Ajibola
	W1299	Computer simulation of pedestrian's transient thermal comfort in a complex urban context: a bottom-up modeling approach	Liang CHEN	Chinese University of Hong Kong	Edward NG
	W1297	Faults and claims about thermal environments in relation to building equipment and energy conservation measures in smaller office buildings	Noriko UMEMIYA	Osaka City University, Japan	