



INTERNATIONAL COUNCIL FOR RESEARCH AND INNOVATION IN BUILDING AND CONSTRUCTION

INFORMATION

May 2005

Around the Task Groups and Working Commissions

W109 – Ecospace

Introducing the New Joint Coordinators:



Philo Bluysen and Olaf Adan

During its meeting in March 2005 in Madrid, Spain, the CIB Program Committee appointed Philo Bluysen and Olaf Adan, both TNO, the Netherlands as the Joint Coordinators of the new commission W109 on Ecospace. A News article announcing the W109 is available from [here](#).

Below follows short CV of both Coordinators as well as their joint statement on the future activities of W109.

Short CV Dr. Bluysen

Dr. ir. Philomena Bluysen received her building engineering degree in 1986 from the Technical University in Eindhoven, the Netherlands. From 1987 to 1990 she performed her PhD at the Technical University of Denmark on the topic Air Quality under supervision of Prof. Fanger. And in 1998 she received her MBA degree at the University of Rotterdam. From 1991 she has worked with TNO Building and Construction Research in The Netherlands, mainly as initiator and coordinator of European sponsored projects in the area of Indoor Environment. The following positions she had/has:

Jan 91 -1995 Researcher

- 1992 - 1995: Coordinator of the first European project in the area of indoor air quality: "European audit project to optimize indoor air quality and energy consumption in office buildings"
- 1996 -2001 Business unit manager "Healthy Buildings"
- 1998 - 2000: Coordinator of AIRLESS "Design, operation and maintenance criteria for air handling systems and components for better indoor air quality and lower energy consumption, pre-normative research"
- 1999 – 2004 Joint coordinator of CIB TG28 Dissemination of Indoor Air Sciences, first joint group of ISIAQ and CIB
- 2000 - 2003: network advisor (theme Comfort) in the thematic network ENERBUILD.
- 2000 – 2004: president of the Dutch chapter of the International Society of Indoor Air Quality and Climate
- 2001 - 2003 Knowledge transfer manager of the Centre of Building and Systems, a cooperation agreement between the Technical University of Eindhoven and TNO



- 2001 – 2005: Leader of domain Building Physics in the thematic Network PeBBu
- 2002 -2003 Business developer for the Department Healthy Buildings and Systems and deputy department leader
- 2002 - 2004 Coordinator of the knowledge theme "Health, comfort and energy" of the institute TNO Building and Construction research
- 2005 - Coordinator of the knowledge theme "Health, comfort and energy" of the core area TNO Built Environment and Geosciences

Besides those positions she is member of ASHRAE, ISIAQ and CIB, she is co-founder of Ecospace® (together with Olaf Adan) in 2003 and she has written more than 120 publications on national and international conferences and journals. Of which the following two describe her work best:

- Sensory evaluation of indoor air pollution sources, in: Handbook for Environmental Chemistry (editor P. Pluschke), vol.4, Part F, 2004, pp.179-217, ISBN 3-540-21098-9.
- A clean and energy-efficient heating, ventilating and air-conditioning system, Recommendations and Advice, February 2004, ISBN 90-5986-009-8, TNO Building and Construction Research, Delft, The Netherlands

Short CV Dr. Adan

Prof. Dr. Ir. Olaf Adan received his building engineering degree in 1983 from the in Eindhoven University of Technology, the Netherlands. In 1994 he received his PhD at the same university on the thesis entitled 'On the fungal defacement of interior finishes'. The following positions he had/has:

- 1984 - 1985 Cauberg-Huygen Consultancy Rotterdam, consultant
- 1985 - 1988 (0.8 part-time) Ministry of Housing Physical Planning and Environment, Rijksgebouwendienst Centrale Directie, Senior scientist in Building Physics
- 1986 - 1988 (0.2 part-time) Eindhoven University of Technology, Dutch coordinator of the International Energy Agency Annex XIV research program 'Condensation and Energy'
- Since 1988 TNO Building and Construction Research (TNO BCR)
- 1988 - 1994 (0.8 part-time), Section of Building Physics and Chemistry, scientist/project manager
- 1994 - 2003 Dept. Materials Science /Dept. Building Systems, Senior Project Manager, Deputy head. 2
- 2003- present Co-founder of the ECOSPACE platform, an international industrial consortium;

- setting-up of EU 6th Framework Integrated Project entitled ECOSPACE®; both together with dr. P.M. Bluysen.
- 2002 – 2004 Coordinator of the Technology Area 'Health and Comfort' within TNO, together with dr P.M. Bluysen.
- 2005-present Professor (0.2 part-time) at Eindhoven University of Technology, Faculty of Applied Physics, Chair (Bio)physical processes in porous materials

Prof Dr ir O.C.G Adan carried out various international consultancy contracts and is and was involved in several international research projects, amongst which:

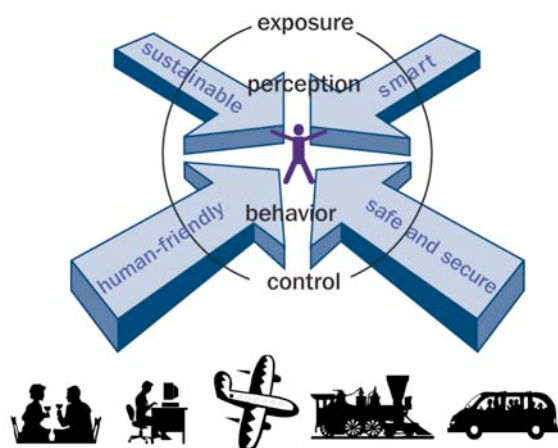
The International Energy Agency research programme Annex XIV 'Condensation and Energy', as Dutch co-ordinator on request of the Ministry of Economic Affairs (1986-1988) and as co-ordinator of the EU HAMSTAD project 'Determination of liquid water transfer properties of porous building materials and development of numerical assessment methods', that prepared European Standardisation with respect to these issues (2001-2004)

He is member of several national and international Committees, such as full member of CIB W40 "Heat and moisture transfer in buildings", Member of the International Committee on Fungi in the Indoor Environment of the International Union of Microbiological Societies, Building Physics NVBV and Senior membership of RILEM. He has written more than 50 reviewed scientific publications and 9 books, and more than 45 other publications.

The following describes his work best:

- O.C.G. Adan, L. Pel, A.A.J. Ketelaars and A.A. van Well (1993) Determination of moisture diffusivity in porous media using scanning neutron radiography, Int. J. Heat Mass Transfer, 36: 1261-1267.
- O.C.G. Adan (1994) On the fungal defacement of interior finishes, Doctoral thesis, Eindhoven University of Technology, pp. 224
- R.A. Samson, B. Flannigan, M. Flannigan, A.P. Verhoeff, O.C.G. Adan and E.S. Hoekstra (1994) Health implications of fungi in indoor environments, Air Quality Monographs, Vol. 2, Elsevier, Amsterdam, pp. 602

Coordinators' statement



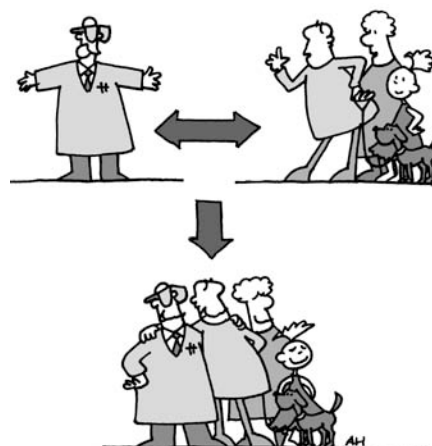
People spend more than 90% of their time in an enclosed space, such as houses, offices and transport. Generally speaking, people suffer from health and comfort problems in more than 40% of those spaces. In this context an enclosed space is defined as a space in which a person stays for a short or longer period of time and which has a physical enclosure. Such as a room in a dwelling, an apartment, an office, a car, a train or an aircraft.

Improving health, comfort and safety of the European population in those spaces has consequently a huge potential for economic and societal benefits obtained by increased productivity, reduced sick leave and medical costs and reduction of number of casualties in accidents, but also by the prevention of liabilities. However, the ambition of healthy, comfortable and safe indoor spaces on the one hand and the target of smart and sustainable spaces on the other appear to be conflicting and contra productive, and may have serious implications for innovations in the building industry. Compared to other industrial sectors, R&D in the construction sector is already at a substantial lower level, hampering the needed transition to a demand-driven production including the shift from product to service.

Integration of different sectors, disciplines, stakeholders and organisations, focused on communication and understanding between the different stakeholders, is therefore a must.

Ecospace® is a first step towards human-friendly, safe and efficient spaces. Ecospace is a concept for an enclosed space, which is experienced by the occupants or visitors as being healthy, comfortable and safe, and that is constructed smart and sustainable. More than

that Ecospace is an innovation platform for a group of entities from different markets and sectors (construction, aircraft, space, train and auto industry). Ecospace starts from the view that interaction between different sectors, and full integration of all stages, disciplines and stakeholders is crucial to achieve real breakthroughs.



The main objectives of W109 are therefore:

- to exchange ongoing research focused on healthy, comfortable and safe spaces
- to promote interaction between different sectors, disciplines, stakeholders and organisations, focused on communication and understanding between the different stakeholders
- to develop visions and roadmaps for realisation of healthy, comfortable and safe spaces

The Coordinators have indicated a strong preference for members with a firm commitment to get actively involved in the work of W109.

Additional Information

If you are interested in joining (or making contribution to) W109, please contact:

Dr. Philo Bluysen at p.bluysen@bouw.tno.nl

or Prof. Olaf Adan at o.adan@bouw.tno.nl

You can find more information on the activities of CIB W109 at www.cibworld.nl

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