

DAYLIGHTING: RESEARCH AND DESIGN IN ARCHITECTURE

Torino, 21 September 2004
Politecnico di Torino
Castello del Valentino – Salone d'onore

ORGANISED BY: Dipartimento di Energetica – Politecnico di Torino

WITH THE SUPPORT OF: Associazione Italiana di Illuminazione (AIDI)
Centro di ricerca e sperimentazione illuminotecnica (CERSIL)
Dottorato di Ricerca in Innovazione Tecnologica per l'Architettura e il Disegno Industriale
Ordine degli Architetti, Pianificatori, Paesaggisti, e Conservatori della Provincia di Torino

In the field of architecture a conscious daylighting design is an important strategy to build "sustainable" buildings, where the goal of reducing energy consumption is associated to the one of achieving a high environmental quality.
Currently only a small fraction of daylighting possibilities is being captured in buildings and the use of innovative technologies often implies difficulties as far as the building integration and the users' interaction are concerned.

The Symposium will provide an opportunity to discuss the relationship: "architecture – daylighting, today" with particular attention to:

- > design requirements
- > design tools
- > contribution of research to design process

The event is being held to coincide with the semestral Meetings of:

- > IEA (International Energy Agency) Task 31 "Daylighting Buildings in the 21st Century"
- > PRIN (Italian National Research Programme) "Integration of daylighting and electric lighting systems for visual comfort and energy savings"

A discussion about Daylighting in Architecture, involving architects, industries and researchers will close the event.

DIFFERENT RESEARCH CENTRES ARE INVOLVED:

- > Helsinki University of Technology - FINLAND
- > Lund University - SWEDEN
- > Université Catholique de Louvain - BELGIUM
- > Technical University of Berlin - GERMANY
- > École Polytechnique Fédérale de Lausanne - SWITZERLAND
- > National Research Council, Indoor Environment Research Program - CANADA
- > Lawrence Berkeley National Laboratory - USA
- > Politecnico di Torino - ITALY
- > Università degli Studi IUAV di Venezia - ITALY
- > Università degli Studi della Calabria - ITALY
- > Università degli Studi di Palermo - ITALY
- > Università degli Studi di Napoli "Federico II" - ITALY
- > Università degli Studi di Roma "La Sapienza" - ITALY
- > Università Politecnica delle Marche - ITALY

FAMILY NAME

FIRST NAME

ORGANISATION

ADDRESS

TEL N°

FAX N°

Email

The admission at the Symposium is free and limited to 100 participants.



INTERNATIONAL SYMPOSIUM

DAYLIGHTING: RESEARCH AND DESIGN IN ARCHITECTURE

Torino, 21 September 2004

PRELIMINARY PROGRAM

Morning

- > Research Session

Afternoon

- > Research Session
- > Design Session

APPLICATION FORM

E_mail: cersil@polito.it

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PRELIMINARY PROGRAMME

9:00

9:30 – 13:00

Aghemo C.

Halonen L.

Cucumo M. A., De Rosa A.,
Ferraro V., Kaliakatsos D.,
Marinelli V.

Vio M., Peron F., Rossi G.

Paroncini M., Calcagni B.

Bellia L., Spada

11:15 – 11:30

Bodart M.

Aghemo C., Pellegrino A.,
Lo Verso V.

Anselmo F., Lauritano A.

Gugliermetti F., Bisegna F.

Reinhart C.

13:00 – 14:00

14:00 – 15:15

Bulow-Hube H.

Morel N.

Rosemann A.

Lee E.

15:15 – 15:30

15:30 – 17:30

Lee E.

Aghemo C., Lo Verso V.

Piancastelli A.

Rogora A.

Visconti M.

Grisolia A.

Opening address - Fracastoro G.V. (Director of Energetics' Department)

RESEARCH SESSION Chairman N. Morel

The Italian National Research Programme "Integration of daylighting and electric lighting systems for visual comfort and energy savings"

IEA ANNEX 45 "Energy efficient electric lighting for buildings"

Measurements of natural outdoor illuminance and comparisons with calculations models

Illuminance assessment at the ground and determination of the turbidity factor

Daylight availability in atrium buildings

Application of videophotometer for the evaluation of DGI in scholastic environment

Discussion

COFFEE BREAK

The Belgian new artificial sky and sun and its validation

A protocol for artificial sun and sky validation

Validation of a Radiance based computer procedure for a quicker prediction of time varying illuminance in complex spaces

A tool for the assessment of the indoor visual environment in office spaces

National Research Council Canada (NRC) Research Activities

Discussion

LUNCH

RESEARCH SESSION - Chairman C. Aghemo

New Research Laboratories at Lund University (SWEDEN)

ECCO-Build European Research project

An Adaptive Lighting System

Lawrence Berkeley Laboratory (LBL) Research Activities

Discussion

COFFEE BREAK

DESIGN SESSION - Chairman M. Filippi

IEA Task 31 Design Roadmap

AIDI (Associazione Italiana di Illuminazione) Daylighting design guide

Daylighting in architecture I

Daylighting in architecture II

Daylighting in architecture III

Shading devices control systems: trends of European market

Discussion

Notes:

The official language will be English

Graphics:

C. Micono