

## **Daylight Spaces**

## International Architectural and Design Competition



Department for Building and Environment / Danube University Krems

## **Contact**

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ORTE Architekturnetzwerk Niederösterreich in cooperation with



## International competition for daylight-sensitive, architectural designs

## **Daylight Spaces 2012**

Department for Building and Environment / Danube University Krems

in cooperation with

AIR artists-in-residence Lower Austria
ORTE Architecture Network Lower Austria
Velux Austria

### Introduction

The merging of different aspects of high quality architecture in sustainable building structures is the primary goal of teaching and research activities at the Department for Building and Environment at the Danube University Krems. Here daylight is a key component.

To highlight the special importance of natural light on architectural qualities, the Department for Building and Environment announces the competition "Daylight Spaces" for the third time.

By unreflected design and unconsidered use of artificial lighting, daylight is neglected increasingly indoors – but it is available as a resource of high visual quality and totally free of charge.

Daylight-sensitive building design enables the use of the various positive qualities of natural light entries indoors.

Therefore it is necessary to understand the connections between light and architecture.

The planning or discovery, observation, analysis and evaluation of daylight-planning building qualities is the topic of the competition "Daylight Spaces" and ought to contribute to the awareness of the designing with daylight. Examples with highest demands on light quality can be shown as well as daylight-sensitive everyday architecture.

### Task and Assessment Criteria

Submitted architectural projects should show a sensitive, unusual, new or unexpected use of natural light. Thereby the added value of daylight-sensitive planning strategies on the usability of spaces should be highlighted.

For example, the following aspects can be considered:

\* Planning according to and with the course of the sun:
Building position and orientation in the light space

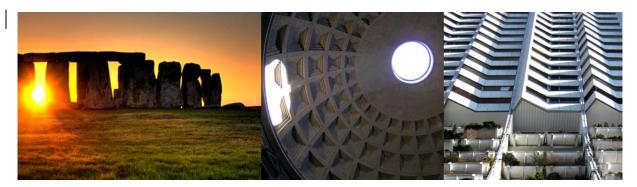


Figure 1: Stonehenge (GB) - Pantheon, Rome (I), Residential Building Alterlaa (Arch. Harry Glück, A)

Light modeling
 Balance of direct and diffuse light entry



Figure 2: Nordic Pavilion, Venice (Arch. Sverre Fehn NOR) – Depiction of direct and diffuse light

# Light guidance Surface design, opening and space geometries, ...



Figure 3: Exhibition architecture, Austrian Pavilion, Venice 2011 (Markus Schirwald, A) - Light entry in gorge

# Light penetration Optimized light entry through building geometry and space structure

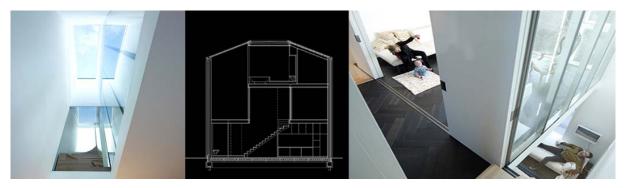


Figure 4: Light House, Amsterdam (Arch. Borduin, NL), Indoor depictions and building section

## \* Reference and linking of indoor and outdoor space Access to indoor space related open spaces





Figure 5: Hotel near Cassis (F) - palast loggias, Venice (I)

## \* Color and material Spatial design by material- and color selection



Figure 6: Room installation by Olafur Eliasson (Kopenhagen, DEN)

Sunlight as source of modern energy-concepts
 Building integrated usability of solar radiation entries



Figure 7: Velux Sunlight House, Pressbaum (Arch. Hein & Troy, A), Building integrated PV- and solar thermal technology – Functional depiction

\* Self chosen, light-relevant aspects

#### **Demands on the Submitted Works**

- + Submitted projects are self-designed by the submitters or discovered by them.
- + The submitted projects are realized.
- + A concise, illustrated analysis highlights the influence of natural light on the spatial quality of the project shown.
- The illustration of the daylight-planning added value can be done by photos, drawings, sketches, models, films, collages etc.
   Essential is to present the particularity of the light situation shown in a comprehensible way.

## **Participation**

- + "Daylight Spaces" is aimed at architects, artists and other professionals dealing with construction-related tasks, as well as advanced students from around the world.
- + Entries should be the work of individuals or project teams (Prizes will be assigned to a max. of two representatives per team).
- + The copyright of the submitted projects and concepts remains with the participants. Images of entries submitted to the competition may however be published and reproduced by the competition organizers.

## **Mode of Submission and Presentation**

- + A not anonymous poster presentation of max. 2 A1 posters (594x841mm) is to be submitted. Please, provide all materials submitted with name, address, e-mail-adress and telephone number of the submitter!
- + The handling of daylight is to be shown clearly using plans, photos, illustrations, textual explanations etc. There are no specifications about the exactness of detail or number of illustrations.
- + The poster presentation should be submitted on paper as well as digitally (pdf) on CD.
- + Participants are free to choose further forms of illustration (models, videoclips etc.) and to add them to the presentation.

### **Prizes**

Two winners will be determined from the submitted projects.

For the purposes of an international exchange of experiences in daylight planning AIR artist-in-residence study-visits for the durartion of one month in 2013 are assigned to international participants.

The organization AIR artists-in-residence and ORTE, the architecture network of Lower Austria, are providing the prizes which include:

- + Accomodation in studio apartments of AIR artist-in-residence Krems (for a max. of two representatives per each winning team) in close proximity to the town of Krems, the historic village of Stein and the Danube University Krems.
- + 1,000 € grant for each study visitor, sponsored by AIR artist-in-residence Krems.
- Travel costs from the winners' residences to Krems and back, provided by the sponsors of the competition.
- + The opportunity to use the lightlab of the Department for Building and Environment at Danube University Krems throughout the month's visit.

Prize winners from Austria will be invited to take part in the renowned, international symposium Daylight Site <a href="www.thedaylightsite.com">www.thedaylightsite.com</a> including arrival and departure as well as hotel accommodation (for a max. of two representatives per each winning team).

This allows, to get to know the latest findings and research results in the field of daylight planning.

In addition, there is the possibility of using the light lab of the Department for Building and Environment for the duration of one month.

## Jury

Arch. Erich Bernard BWM Architekten, Vienna

Arch. Henri Borduin Winner Daylight Spaces

Competition 2010, Amsterdam

Dipl.-Des. Ulrike Brandi Lightplanner, designer and

author of specialized books,

Hamburg, Munich

Arch. DI Dr.techn. Renate Hammer,

MAS Dean of the Faculty for Arts, Culture and

Building

Danube University Krems

Heinz Hackl Velux Austria

DI Dr.techn. Peter Holzer Head of the Department for

Building and Environment Danube University Krems

Mag. Heidrun Rabl ORTE Architecture Network

Lower Austria

### **Dates**

October 2011: Announcement and start of the

competition

27th of January, 2012: Deadline for free registration, compulsory!

By e-mail stating name, adress, e-mail-adress, telephone number

to:

elisabetta.meneghini@donau-uni.ac.at

3rd of February, 2012: Deadline for submission (date of receipt

stamp)

28th of February, 2012 Public jury meeting

7<sup>th</sup> of March, 2012 Presentation of the winning projects at the

Forum Building Science on the campus of

Danube University Krems

Contact and Queries DI Elisabetta Meneghini

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