

Press release  
Dornbirn, April 2010

## **Concept studies on OLED technology Zumtobel demonstrates application expertise**



B01 OLED Modules

At Light+Building 2010, Zumtobel will present exciting concept studies on luminaires fitted with organic LEDs (OLEDs). In these luminaire studies, Zumtobel has combined its high technological competence and extensive application know-how in order to present realistic solutions. Customer-oriented concepts based on OLED show that Zumtobel invests in new technologies early on in order to implement them in market-driven lighting concepts. The Future Cube, which presents a future-proof building concept developed in collaboration with Behnisch Architekten, provides an appropriate setting.

For more than 10 years, the Zumtobel Group has been active in the field of LED, the technology of the future; for several years it has also been involved in research activities on OLED technology. The organic light emitting diode (OLED) is the first area light source ever. An OLED consists of a system of thin layers of organic semiconductor material (approx. 100 -

200 nanometres), which is situated between two electrodes (anode and cathode). This area light source, which is applied onto a glass substrate, is thinner than 2 millimetres altogether. When a voltage is applied, light is produced within the layer system and emitted via one of the electrodes. In contrast to conventional light sources, OLED lighting modules provide extensive light of high colour quality that is very pleasant to the human eye. Another benefit: areal light emitted by OLEDs does not produce any glare. This means that OLEDs will be among the most efficient light sources in future. By now, the first OLED modules are produced in series, enabling Zumtobel to implement design concepts. In the Future Cube at Light+Building, three concept studies on OLED luminaires will be presented, demonstrating the full range of development options available. Zumtobel will present both a realistic concept study by the Continuum design studio, and visions of the future by the Sanaa and Behnisch Architekten architects' studios.

### Realistic concepts by Continuum

In collaboration with Zumtobel, the Milan-based Continuum design studio has designed a complete luminaire range based on OLED and LED/OLED hybrid technology for sophisticated office applications. The concept displays today's scope of OLED technology regarding design and performance. Today the luminous flux of OLEDs (approx. 20lm/W at 1500cd/m<sup>2</sup>) is too low yet to use them, without additional light sources, for the lighting of task areas. Therefore the concepts presented are supplemented by LED modules without compromising their design advantages.

Klaus Vamberszky, Executive Vice President (EVP) Technology Zumtobel Group, on the concept: „The luminaire concept we have developed jointly with Continuum shows what is possible today using OLED technology. The current OLEDs' luminous flux of 20lm/W is too low yet to use them for task area lighting without any additional light sources. At Light+Building 2010, therefore, Zumtobel will present – as the first luminaire manufacturer – a range of LED/OLED hybrid luminaires. LEDs for efficient illuminance levels in the task area, OLEDs for pleasant luminance levels in the user's field of vision

- Zumtobel's new LED/OLED hybrid luminaires combine the best of two worlds. Owing to their extremely flat design (< 3 mm) and exceptionally uniform illumination, OLEDs offer manifold design options today already.“

The product range includes

- OLED / LED hybrid pendant luminaire
- OLED / LED hybrid table luminaire
- OLED / LED hybrid wall-mounted luminaire
- Purely OLED wall-mounted luminaire

### Sanaa presents visions of tomorrow

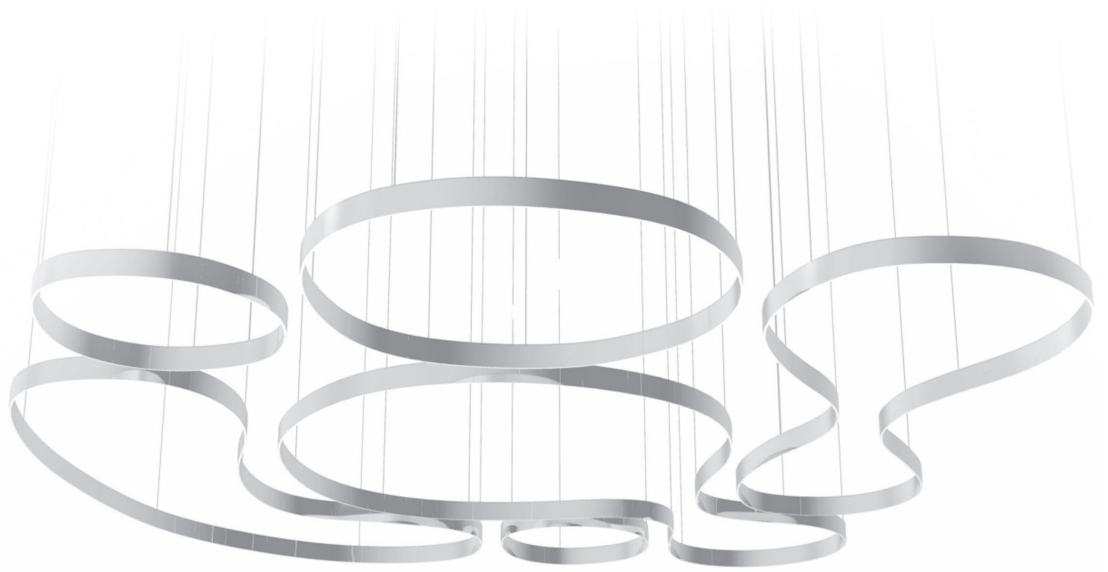
On a video screen, the Japanese architects' studio of Kazuyo Sejima + Ryue Nishizawa / SANAA presents a visionary interpretation of OLED technology. Recent winners of the Pritzker Prize, the architects at Sanaa have used the areal characteristic and lightness of the light source to implement an impressive concept study. In the form of design sketches, both concepts for pendant and table luminaires as well as light curtains and „Light Clouds“ for various office areas, such as workstations, conference rooms, lounges and reception areas, are presented.



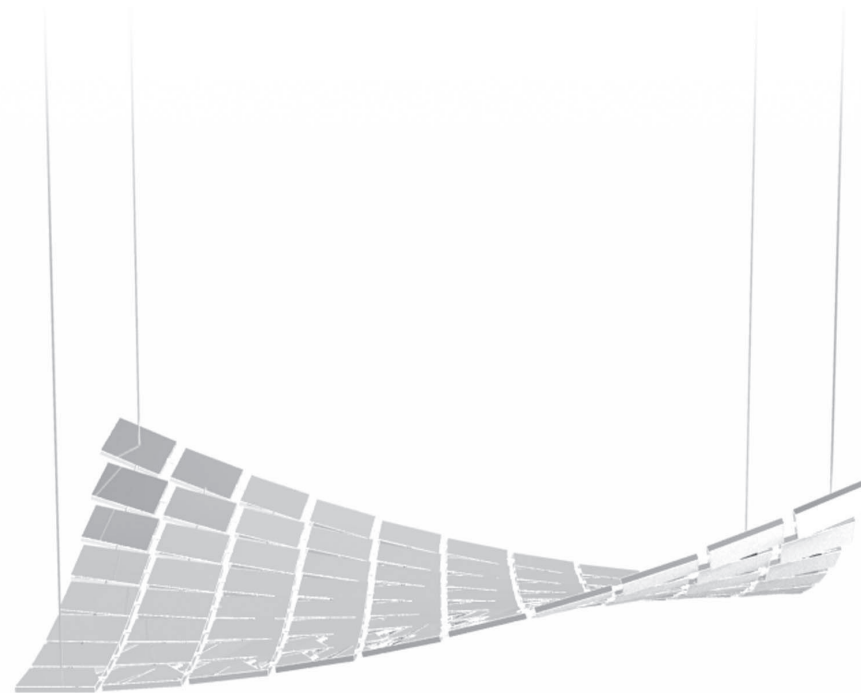
B1 | Realistic concept study by the Italian Continuum design studio, including ceiling-mounted, wall-mounted and table luminaires.



B2 I The innovative LED/OLED hybrid solution combines design and efficiency.



B3 | The visions of the future provided by the Japanese architects' studio Sanaa show various design options based on OLED technology



B4 | The concept study by the recent Pritzker Prize winners at the Sanaa studio focuses on the lightness of OLEDs.

Further information



Zumtobel GmbH  
Kerstin Schitthelm, Dipl.-Ing.  
PR Manager  
Schweizer Straße 30  
A - 6850 Dornbirn

Tel. +43 (0)5572 390 - 1484  
Fax +43 (0)5572 390 - 91484  
Mobil +43 (0)676 8920 3258  
kerstin.schitthelm@zumtobel.com  
www.zumtobel.com