

## Russian LED industry gathers in Moscow (update)

21 Nov 2011

*The fifth annual LED Forum in Moscow brought together various representatives from the Russian LED and lighting manufacturers, government and other organizations.*

The fifth LED Forum Moscow was held on November 9-10, 2011, as part of the Interlight Moscow tradeshow. The tradeshow itself was similar to Light+Building in scope, although on a much smaller scale. Several halls were devoted to decorative lighting, while in the technical/professional lighting halls LEDs and LED-based lighting products were in evidence, but not dominant by any means.

The tradeshow floor featured many familiar names, including Arrow, Cree, Nichia, Osram, Philips, and Vossloh-Schwabe. There was a small pavilion of German manufacturers, and a much larger hall filled with companies from China and Taiwan.

Among the Russian lighting companies and distributors were a number - perhaps 15-20 - specializing in LED lighting products such as lamps and outdoor luminaires. Several of these companies, including Focus, Lighting Technologies, Optogan and Svetlana Optoelectronics, are also members of the LED manufacturers' trade association, which is officially entitled the "LEDs and LED-based Systems Russian Manufacturers' Nonprofit Partnership" ([www.nprpss.ru](http://www.nprpss.ru)).

The organization is headed by Evgeny Dolin, who is also president of the organizing committee for the LED Forum, and was a speaker at Strategies in Light Europe 2011. The Forum featured several speakers from outside Russia, notably Martina Paul, secretary-general of the CIE. Also, there were a number of speakers from Russian LED and lighting manufacturers, as well as representatives of the Russian government and other organizations.



[Optogan unveils X10](#)

### Technology platforms

Alexander Morozov, director of Rusnano's Department for Market Promotion spoke in the LED Forum about the implementation of technology platforms. Rusnano is a government-owned company that aims to develop the Russian nanotechnology industry through co-investment in nanotechnology projects.

Morozov described the technology platforms as public-private partnerships that bring together producers, research centers and government. He said that the approach would copy the European Union experience of applied research. These are open platforms, he said, and any domestic organization can propose projects. The approach is necessary because state investment in R&D is inefficient.

Among the 27 technology platforms approved in April 2011 by the Government Commission on High Technology were four that are coordinated by Rusnano. One is entitled "Russian Light-Emitting Diode Technology," and another is "Application of Innovative Technologies to Improve Construction, Content, and Safety of Auto and Rail Roads." Road and rail companies, notably Russian Railways, are making significant investments in LEDs, in areas such as signaling and also platform lighting at stations. The goal is to reduce the energy consumption of transport links - this is vitally important in such a vast country as Russia.



[Ecolight at Interlight Moscow](#)

### LED suppliers



[Focus at Interlight Moscow](#)

There are very few LED manufacturers in Russia: the best-known are St. Petersburg-based Svetel, which is a sister company of long-established LED company Svetlana Optoelectronics, and Optogan, which has an LED fab in Germany and a packaging and assembly plant in St. Petersburg. Due to the vertical integration within these organizations, many Russian LED-lighting manufacturers use LEDs from established overseas suppliers, notably Nichia, Cree and others.

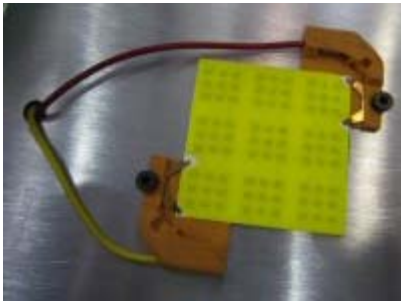
Focus, a well-established manufacturer of outdoor LED lighting products, has made extensive use of LEDs from Nichia. At the tradeshow, the two companies announced an [agreement for Nichia to supply Focus](#) with LEDs with a primary lens, which enable a type-III distribution for road lighting.

### Optogan launches COB module

During the LED Forum, Vladislav Bougro, one of Optogan's founders, took the opportunity to launch the company's X10 modular chip-on-board concept (see photo).

Each X10 segment measures 1x1 cm, and contains 9 chips. The segments are manufactured in 5x10 blocks, but can be snapped into rectangular strips or square blocks. Once the segments are separated, the phosphor layer needs to be removed at certain points to allow the contacts to be made (this can also be done with a laser in the factory before shipping).

A single 1x1-cm module typically consumes 6.5W when driven at 9.3V and 0.7A, and the efficacy exceeds 100 lm/W, according to Leonid Moiseev, Senior Marketing Manger. The color



[COB module with connectors](#)

temperature is 5000K but there are plans for a warmer-white version, said Moiseev, adding that the LEDs are chosen from a 2.5-nm bin to ensure uniformity.

The modularity allows Optogan to manufacture the same 5x10-cm square and divide it into the appropriate-sized units for different customers, thus maximizing yield. Optogan also showed a connector system that has been developed in cooperation with TE Connectivity.

### **LED production facility to be built in Mordovia**

Away from Interlight Moscow, a Russian-South Korean joint venture is to build an LED production facility in the Russian republic of [Mordovia](#), according to an article on the [RIA Novosti](#) website.

A facility with an initial monthly production capacity of 300,000 LEDs will be built in Mordovia, following an agreement signed by Nikolai Merkushkin, Head of the Republic of Mordovia, and Byung Koo Lee, CEO of South Korea's [NEPES Corporation](#), an established LED manufacturer.

Production of LEDs is likely to commence in the spring of 2012. NEPES Corporation, which has been operating for over 20 years, has six plants in South Korea and two plants elsewhere.

### **About the Author**

[Tim Whitaker](#) is the Editor of *LEDs Magazine*.