

PixCell LED

Ultimate precision in perfect alignment

100+ individual cells with just 25 µm spacing, perfectly matrixed onto a single LED chip for intelligent headlamps



Editorial

DVN Triple Workshop In USA: A Great Success Expected

The [28th DVN Workshop](#) will take place, live and in-person, at the San Francisco Airport Marriott Waterfront Hotel on 29-30 August. The rubric for the event is **Lighting the Future: Safety, Communication and Emotions**. The Workshop will highlight how new technologies will contribute to increased safety, communication, and emotion in our world. The event will bring together 300 participants from all over the world—experts; managers, and decisionmakers involved in lighting and vision.

Presentation lectures are confirmed from

- Automakers: **Lucid Motors, Rivian, Zoox, Lotus**
- Lighting suppliers: **Forvia Hella, Magna, Marelli AL, Mobis, Plastic Omnium, Valeo**
- Light source suppliers **Lumileds, Seoul Semiconductor, Everlight, ams OSRAM, Nichia, Kyocera SLD Laser, Appotronics**
- Tier-2 suppliers involved in optics; electronics; materials; testing, and measurement
- Universities and research institutes.

Panellists from the main worldwide suppliers will discuss on their vision in lighting.

After the success of the DVN workshops in France and Japan this year, at DVN we're busily working to carry on our proud tradition of making each and every DVN Workshop even better than the one before.

See you there!

Sincerely yours


DVN CEO

In Depth Lighting Technology



US Workshop Docket: It's Going to Be a Great One!



2022 DVN US Workshop

The program of the DVN US Workshop on 29-30 August is now confirmed. We will start with two keynotes. The first is to be from Naomi Miller and Lia Irvin, scientists from the U.S. Pacific Northwest Research Laboratory, who will talk about temporal light modulation—a phenomenon increasingly ubiquitous in the world around us, and especially in and on automobiles, but under-studied and not yet well understood. Then John Bullough, program director at the Mt. Sinai Icahn School of Medicine, will talk about headlight performance as it relates to safety.

Here we present the sessions, the speakers and presentations they will comprise. As you can see, it's a diverse range of speakers and a constellation of highly relevant topics. A question-and-answer period will follow each session.



2022 DVN US Workshop

Session 1: Automaker Innovations for New Lighting Functions (Chair: Wolfgang Huhn)

- **Lucid Motors · Hans-Christoph Eckstein, Electronics and Optical Engineering Director**
"Full Digital Headlamp Constraints and Opportunities"
- **Rivian · Shammika Wickramasinghe, Body Lighting Senior Engineering Director**
"Safety, Emotion and Communication through good lighting"
- **Zoox · Lingxuan Zhu, Lighting & Exteriors Manager**
"The Crucial Role of Lighting Performance in Sensing, Perception, and Communication for Autonomous Vehicles"
- **Lotus · Rouven Haberkorn, Senior Lighting Engineer**
"The Evolution of Lotus Lighting for Safety, Communication, and Emotions in EVs"

Session 2: Vehicle Interior (Chair: Olimpia Migliore)

- **Valeo · Federico Pardo-Saguier, Innovation & Business Development Director**
"Interior Lighting Experience for Automated People Transportation"
- **Forvia · Maggie Kasper, Advanced Sales Manager; Carlos Altamirano Martinez, Interior Lighting VP** "Inspiring Mobility and User Experience Through Integrated Interior Lighting"
- **Yanfeng · Trevor Couture, Lighting Business Development & Engineering Director**
"Yanfeng Experience In Motion: How Interior Lighting Can Enhance User Experience"
- **Lumissil Microsystems · Aaron Reynoso, LED Driver Technical Marketing Director**
"Driving Towards Innovation: Illuminating the Automotive Market with Dynamic LED Lighting"

Session 3: Lidar (Chair: Eric Amiot)

- **Covestro · Mark Torgerson, Technical Marketing**
"Enabling high performance Lidar through Polycarbonate"
- **FKA · Among Sapkal, Senior AD & Machine Perception Engineer**
"An Overview of Lidar Performance Testing Framework at FKA"
- **Cepton · Motch Hourtienne, Business Development Senior VP**
"Optimising Lidar Design for Seamless Vehicle Integration:"
- **OpenLight Photonics · Steven Alleston, Senior Business Development Director**
"High Performance Lidar Enabled by Heterogeneously Integrated Silicon Photonics"
- **Cocktail Hour**
- **Dinner**

Wednesday 30 August

Keynote · Wolfgang Huhn

"The Next Tasks of Car Lighting"

Session 4: Tier-1 Supplier Perspective (Chair: Paul-Henri Matha)

- **Forvia Hella · Michael Kleinkes, Boardmember, Lighting**
"Lighting Architecture of the Future: Safe, Customised and Sustainable"
- **Mobis · Taewon Lee, Senior Product Planning Manager**
"Trend of the Automotive Lighting Industry and the Direction of Mobis:"
- **Magna · Edward Bailey, LED Technology Manager**
"High Brightness Advanced Lighting Mini-LED Displays"
- **Marelli AL · Gustavo Menezes, R&D Manager**
"Lighting Communication and Assistance by Projectors and Displays"
- **Plastic Omnium · Courtney Hewitt, Head of Innovation Americas [tbc]**
"Highlight Value of Lighting Integration - Projection Lighting Portfolio" [tbc]
- **Valeo · Brant Potter, Senior Optics Expert**
"Line Lens and HD for U.S. ADB"

Panel Discussion (Chair: Paul-Henri Matha)

"What is the evolution of ADB and electrical architecture?"

Session 5: Light Source Innovations (Chair: Michael Kleinkes)

- **Lumileds · Lars Dabringhausen, Technical Marketing Director**
"Benefits of Direct Imaging Solutions for NAFTA ADB LED Matrix Solutions"
 - **Seoul Semiconductor · Mahad Abbasi, Senior Technical Sales Manager**
"Advancements in Automotive Lighting and Safety with Next Generation WICOP Technologies"
 - **Everlight · Max Ma, Chief Automotive Product Marketing Manager**
"Visionary Transformation of Smart LED"
 - **ams OSRAM · Markus Hofmann, Senior Principal Engineer**
"Illuminating the Future: Enhancing Safety and Sustainability With LEDs for Forward Lighting"
 - **Nichia · Ted Schriefer, Assistant General Manager**
"Future Light Sources for Increased Safety, Communication, and Emotion"
 - **Kyocera SLD Laser · Josip Kovacevic, Sales and Support**
"LaserLight Changes the Paradigms for Safety, Communication and Styling"
 - **Appotronics · Dr. Yu Xin, Vice President**
"The Intellectual Application of Lasers in the Field of Lighting"
- Panel Discussion (Chair: Wolfgang Huhn)**
Styling design

Session 6: Skills to Help Development of New Functions (Chair: Daniel Stern)

- **Suss MicroOptics · Reinhard Völkel, CEO**
"Unleashing the Power of Microoptics in Automotive Lighting"
- **Synopsys · Tobias Schmid - Senior Technical Product Manager**
"Synopsys Optical Solutions for the Comprehensive Design and Analysis of Pixel Light Headlamps"
- **DBM Reflex · Mirco Goetz, R&D Vice President**
"Texilit: An Engineered Refractive Light Diffuser Designed for Injection Molding"

• **W.L. Gore · Ronald Szewczyk, Application Engineer**

"BEV Headlamps: Unique Challenges and Proven Solutions"

• **Covestro · Jim Lorenzo, Application Development Engineer**

"Efficient LED Low Beam Modules Through In-Mold Optical Alignment and Heat Management"

• **TechnoTeam & LMT · Jason Adams and Stephen Dahle, respectively**"Latest Advances in Measurement Technology for Automotive Lighting"

• **Inova Semiconductors · Gerhard Nill, Senior Technical Sales Manager**

"Architecture for Software Defined Light & Sensor Networks in Vehicles"

Lighting News

Hella to Build New Headquarters at Lippstadt

LIGHTING NEWS



Hella will construct an attractive, sustainable, and representative new building complex on the western area of the current headquarters on Rixbecker Straße. In the future, all development and administrative functions of the Lippstadt location will work there in one place.

Hella CEO Michel Favre says, "Our historic company headquarters undoubtedly has tradition. Nevertheless, its infrastructure, buildings and premises no longer reflect what we stand for as an automotive supplier: technological strength and leadership in innovation. We therefore plan to build new headquarters that shows Lippstadt's strong role in the global Forvia network, that creates an ideal and attractive working environment for our employees as well as a new urban landmark for the city of Lippstadt".

Renowned Düsseldorf architectural firm RKW Architektur + are planning the new facility. Along with a large number of prestigious buildings throughout Germany, RKW also have realised the Hamm-Lippstadt University of Applied Sciences (Hochschule Hamm-Lippstadt, HSHL), in the direct vicinity of Hella's Lippstadt headquarters. The design for the new facility picks up on a historic route that once crossed the city; the starting point for the concept was an analysis of Lippstadt's townscape in the early 19th century.

At the Lippstadt site, Hella currently employ around 3,100 permanent employees in research & development as well as in administration, and a further 1,100 in production. The construction project has an expected gross floor area of around 70,000 m². And the architectural concept provides for an expansion of the space to over 110,000 m². Groundbreaking for the first buildings is scheduled for mid-2024.

Made In USA: Lumileds Matrix Integrated Lighting Solutions

LIGHTING NEWS



Executive Officer Joe Casper and colleagues

Lumileds now are producing their Luxeon Matrix products and custom integrated LED solutions for the lighting industry, in the United States. This allows Lumileds to provide improved support for North American customers; reduce transport costs, time, and environmental impacts; eliminate tariffs, and simplify the supply chain.

The company's approach involves combining Luxeon LEDs with proprietary advanced technologies, and custom-configures them on substrates to fit manufacturers' specific requirements, resulting in solutions tailored to meet the most demanding design specifications and yield maximum supply chain value.

Customers are assured of performance consistency for flux, colour, voltage, and more without the need to address product binning and selection. As an Enabled Qualified Supplier, Lumileds' light engine modules (integrated solutions) may qualify for a royalty exemption, further simplifying manufacturers' go-to-market strategies and costs.

General News

Li Auto Zooming; Geely Entering Europe

GENERAL NEWS



In the first half of 2023, Li Auto delivered 139,000 new vehicles to customers and surpassed 30,000 units for the first time in June. Looking ahead to the second half of this year, they aim for a monthly delivery target of 40,000 units in the fourth quarter, relying on their L-series products. The maker aims to be the top-selling luxury brand in the Chinese market, with a target of 1.6 million vehicles by 2025.



And starting June 28, the Geely Zeekr 001 coupé and X SUV officially opened for pre-orders in Europe.

Stefan Sielaff created the car design in the Geely Studios in Göteborg. Stefan was former head of design in Audi and Bentley and he also worked for Mercedes

In the European market, the 001 starts at €60,000, while the X starts at €45,000.

The new vehicles have gone on sale in Sweden and the Netherlands first.