DrivingVisionNews.com
Automotive lighting and driver assistance technologies

Tue, 4 August 2020 Weekly Newsletter NEWSLETTER #658

Editorial

Movin' On Up With Online Conferences

The pandemic has exerted its force over just about every aspect of just about everyone's life, personally and professionally. Many of the changes have been uncomfortable or worse, but some of the new norms are actually promising. The shutdowns and stay-home orders have given a big boost to virtual conferencing of all kinds. That's brought its own set of pitfalls and obstacles to navigate—a new need to be extra careful about what's behind us as we broadcast our image far and wide and to make sure nothing embarassing pops up while we're sharing our screen, a new set of technical and logistical challenges and security lapses with Zoom and other such platforms, and an increased need to contend with time zones, for example.

But it's also forcibly expanding our idea of what's possible to do online. Certainly, it'll be good to get back to in-person gatherings again one day when it's safe, but it surely looks like there will be fewer of them. Think about CES, for example—is it really necessary for everyone to fly, truck, and tromp to Las Vegas to see exhibits of what's possible to do with modern technology? How about using the modern technology itself to do the showing?

Of course, a large-scale radical shift like this is wrenching to the show and tourism industries; that can't be ignored, and something will have to be done about it. But in the meantime, at smaller scale, there's a whole lot of good being done. Just look at what was accomplished in the DVN-EPIC online innovation conference held two weeks ago. You can watch any or all of it at your leisure. If you miss something that goes by too quickly, you can click to hear it again, as many times as you want. That's progress!

It's pretty amazing, and at DVN we're working to build a terrific first-of-its-kind online DVN-I Workshop on 24 September—in last newsletter week edition you were able to read about how it's shaping up.

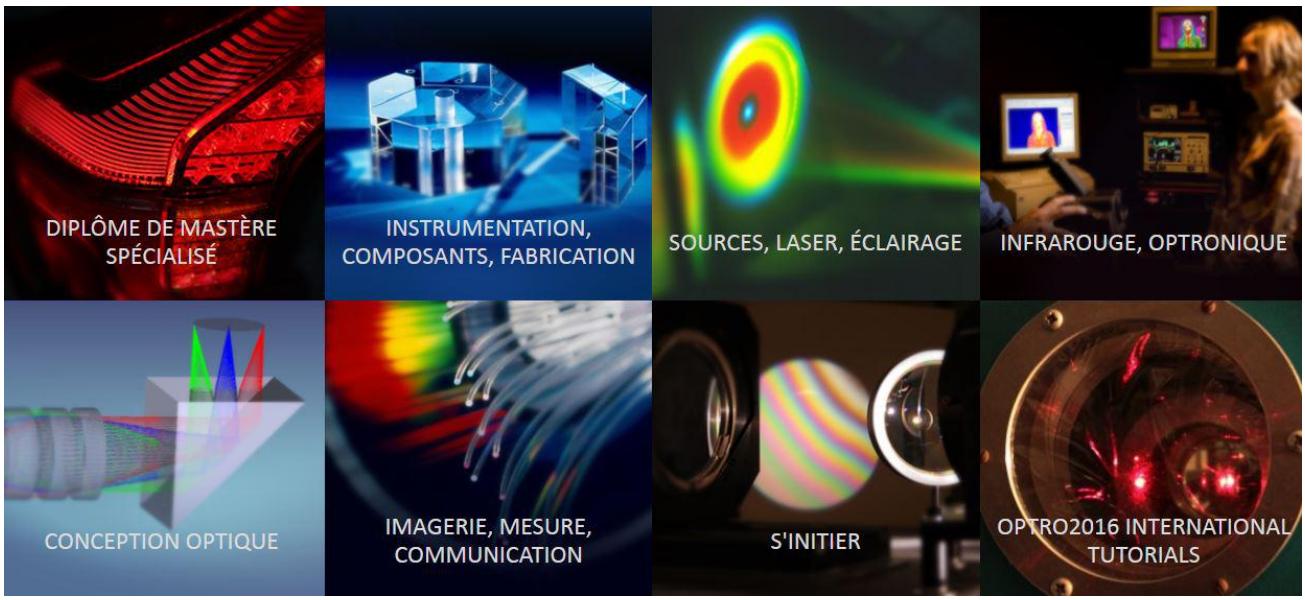
The dreadful aspects and effects of this pandemic are many. It's deadly to people and jobs and economies, and we are deeply worried for our loved ones, friends, and colleagues stuck where the coronavirus response is not thoughtful, scientific, realistic, or effective. It's frustrating and sad that we can't do anything about that. But it's worth noticing the glimmers of colour, light, and hope amidst the gloom, and it's worth hoping for a better short- and long-term future, and it's worth working toward exactly that.

Keep well and stay safe,

Daniel Stern
DVN Editor-in-Chief

In Depth Lighting Technology

ELS Chair: Achievements and Opportunities



The ELS (Embedded Lighting Systems) academic program was founded in 2014, from the collaboration and the joint efforts of the two major car makers in France—PSA and Renault—as well as major lighting suppliers Valeo and Automotive Lighting, with the help of three major engineering schools ESTACA, Institut d'Optique Graduate School, and Strate Ecole de Design.
The target was to develop a research and teaching structure to prepare new engineers skilled in this crucial and complex field of engineering. The action field of the ELS is now also evolving towards research and technological support, as a federating entity extending to the industrial network and establishing important links to equivalent research structures long established in Germany and other countries.

ELS benefits from academic and industrial expertise in transverse fields related to vehicle lighting: optics, electronics, photonics, embedded systems, design, software, and automotive regulations. It offers an education program in the field of lighting systems, based on both an international Advanced Master's Degree and on-demand continuing education. The training program has been engineered and is delivered by academic and industrial faculty members selected for their knowledge and expertise in various fields related to vehicle lighting.

Since 2017, ELS has also provided a research program based on industry-oriented topics. Beyond R&D investments of industries in new technologies, ELS aims to answer questions arising from future applications dedicated to digital lighting, light communication (V2V, V2X…), ADAS, and other suchlike. In close collaboration with international research institutes, ELS research is dedicated to providing further knowledge on such advanced lighting features to increase traffic safety, comfort, convenience, and acceptance, and to devise recommendations and lighting requirements, with the goal of a simplified and harmonised regulation.

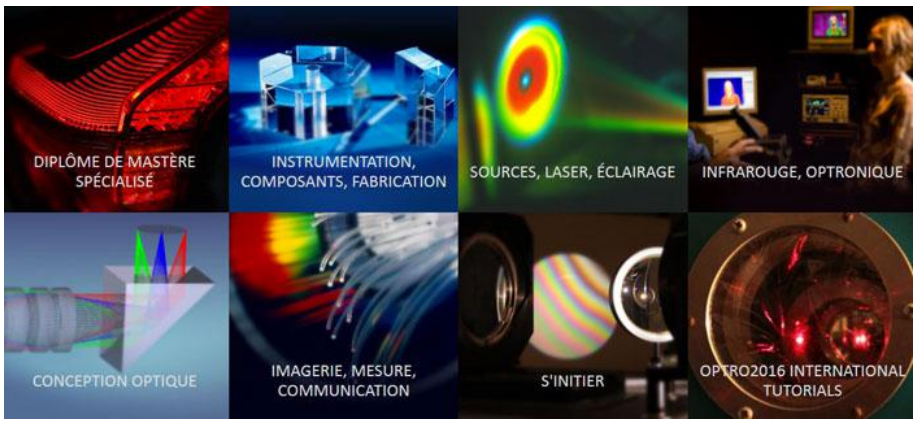
PARKING AND DEPARKING SIGNALS – DEMONSTRATION TO LIGHTING EXPERTS

As an example, ELS has successfully achieved a study commissioned by the GTB, in collaboration with KIT (Karlsruhe Institute of Technology) , to address the question of the relevance and safety impact of an advanced function based on road projection. Through two theses funded and supervised by both academic and industrial partners, ELS has also provided a framework allowing to address research needs about lighting and signalling for autonomous cars, using expertise and knowledge of all partners involved.

Furthermore, ELS provides an innovation program aiming to think about the new trends and use-cases in automotive lighting (autonomous vehicles, urban mobility, shared mobility, smart cities…), based on joint programs with ESTACA'Lab and with Institut d'Optique Graduate School Technology Venture Program, which has proved its performance for years.

After just five years, ELS has exceeded most of the objectives set by its founding members, by providing a favourable and facilitating environment for tailor-made training to suit industry needs and expectations and by promoting attractiveness of the automotive industry. This is done by showcasing the various fields, trends, and challenges in vehicle lighting to students and, hence, to potential future recruits.

ELS has also allowed to build for the automotive industry a new capacity for neutral research and innovation in the favorable environment of Paris-Saclay, a research-intensive and innovation cluster, where most French innovative companies have their R&D centres.



The one-year programme as a whole, as well as each of its 12 academic sessions are made available either as an Advanced Master's Degree or in separate sessions:

1. Fundamentals of optics for lighting
Learning outcomes: Description and analysis of optical lighting systems using ray optics, physical optics, and basic notions of light sources.

2. Fundamentals of photometry for lighting
Learning outcomes: Photometry of optical lighting systems, photometric measurement equipment.

3. Systems Engineering: models and functional security
Learning outcomes: systems in the automotive context, including modelling and functional reliability according to the ISO 2626-2 standards.

4. Fundamentals of mechatronic modelling of lighting systems
Learning outcomes: mechatronic systems, description with industrial modelling tools. Ability to make and describe the assumptions of the model, to program it, to validate it, to give a physical interpretation of its results.

5. Creative design of optical systems for the car industry
Learning outcomes: Ability to relate the imperatives of both design and technology, to understand the point of view of the designer, to understand the origins of the constraints generated by the design and to be able to propose technical recommendations to meet the design specifications.

6. Light sources: properties and performances, integration, reliability
Learning outcomes: light source selection according to technical specifications under constraints.

7. Computer aided photometric design of illumination systems
Learning outcomes: broad knowledge of the main optical components and sub systems used in lighting and signalling. Ability to design and optimise the photometry of a lighting systems using dedicated software.

8. Integration of the physical system environment and production constraints
Learning outcomes: ability to understand the diverse technical environments, to size the system with the fabrication process constraints.

9. Mechatronic modelling and simulation of an embedded lighting systems
Learning outcomes: ability to model the mechatronic systems, to program them and to validate them with simulations or prototypes.

10. Embedded information systems
Learning outcomes: ability to program an electronic board, to describe the information path necessary for its control, to

correctly send and receive a network message.

11. Characterisation of surfaces and of their aspect, advanced photometric simulation of surfaces
Learning outcomes: ability to use advanced tools for realistic simulation of photometric and visual aspect of a lighting system. Ability to relate the characteristics of surfaces to their expected and observed visual aspect and to use the relevant characterisation tools.

12. Physically realistic and real time rendering of appearance, visual and cognitive aspects in relation with design
Learning outcomes: understanding the relationship between the physical reality and the perceived aspect. Ability to specify the needs in terms of real time rendering by virtual or augmented reality as well as by valid images through the filters of vision and cognition

Testimonials

Whilk Gonçalves, PSA – Expert on Lighting and Head of Innovation
"It is in the strategic interest of the PSA Group to continue its support to the ELS to reach a self-sustainable level and to adapt to the new challenges in the fields of lighting, keeping its target to reach excellence levels".

Hervé Fayard, Renault - Head of lighting system engineering group
"The ELS Chair allows to have access to a very high-level training for students and for our engineers. We hire three new engineers, immediately operational with a high level in optics, systems and mechatronic. We have proposed to our high potential engineers coming from all local technical centres (Brazil, India, Romania…) to participate in the complete training and participate to the skill-building improvement in the local technical centre for lighting features.

Christophe Le Ligné, CTO Valeo Visibility System
"ELS Chair is addressing a critical need for the upskilling of our technical project managers. With the tremendous increase of electronic content and system complexity, we need to have technical project managers able to develop a system vision, encompassing the constraints of embedded systems, optical rules and mechatronics environment. Thanks to the ELS program, we can upskill internally and hire externally engineers that are directly able to take the job. We are counting on the ELS master to increase the number of students according to our global footprint

Dr. Rainer Neumann, GTB Chair WG SVP
"As the chairman of the research group in GTB, where we collaborate with many research institutes and universities in order to get objective and reliable results of the upcoming new technologies in vehicle lighting we have developed very good relationship to ELS and Dr. Sheherazade Azouigui with our project: parking and deparking signals in automotive traffic.
The results were clear and have been worked out with high accuracy."

Prof. Dr. Cornelius Neumann, Optische Technologien, LKI
"The Light Technology Institute of the Karlsruhe Institute of Technology (KIT) collaborates with ELS on automotive lighting communication projects. We successfully started with three subject studies for the Groupe de Travail Bruxelles (GTB) on safety aspects of projected lighting symbols. We actually plan a joint project about Communicative Light (CoLi) and applied for a French-German founding by the Deutsche Forschungsgemeinschaft (DFG) and the Agence National de la Recherche (ANR)."

Wojciech Fujarski, Poland – Student
"When I reflect on my year in the ELS, I conclude that the experience not only made me a better engineer, but also prepared me in unpredictable ways for my career. Through projects with incredibly supportive classmates, and professors who were nothing short of champions, I was challenged to do a project on a headlamp and tail lamp with all the technical assumptions which I never did before. That project played a central role in my work, as designing is vital to thinking, to planning, to imagination, to communication, and to engagement.

Harpreet Singh, India - Student
"ELS got my attention because of its course in vehicle lighting as it was exactly what I was looking for to improve my competence. Here I was trained in three different schools from where I gained the knowledge of automotive lighting design, optics and electronics. Having been shaped in part by the collegial and creative, rigorous environment at ELS, I found myself able to communicate, innovate, and collaborate in ways that enabled me to become a successful engineer and eventually to find a rewarding career in a big enterprise. In my current role, I draw every day on the dispositions I developed during my time at ELS. It was a wonderful time in my life, and the best educational experience I have ever had."

Amada Vieira-Fernandes, Brazil – Student
"For me, the ELS Master was an opportunity to learn more about the field I was going to start working with after the end of the master. A great part of my decision to join the ELS was being able to sink in knowledge I may even already had from my previous studies as well as to acquire experience on such a specific application field as embedded lighting can be. Learning methods are intense but still based on the best way of learning, which is by practising: from the benchmarking study to the applied transversal project, all design, mechanical and electrical bases were covered by all team members"

Cameron Betz, Spain - Student
"I think the ELS Master helped me to have a broad, transversal scope of our worldwide automotive industry and vehicle lighting design. I understand better the challenges faced by my colleagues from the mechanics and optics departments, as well as the ability to anticipate the wants and needs from our customers. The ELS Master has certainly benefited my career in the automotive lighting industry. Following the ELS Master, I have been promoted from System engineer to Electronic Design Leader (EDL) and now to EDL team leader."

Lighting News

Rear-Facing, Front-Mounted LED Bar Cuts Deer Crashes

LIGHTING NEWS

Researchers with the USDA (U.S. Department of Agriculture)'s Wildlife Service program have put in for a patent on a new vehicle-based lighting system to prevent collisions with deer after dark.

Through a series of experiments with free-roaming white-tailed deer, researchers at the WS program's NWRC (National Wildlife Research Center) devised a rear-facing LED light bar to illuminate the vehicle's front surface—and with it installed and activated (lower photos), the likelihood of dangerous deer/vehicle interactions dropped to 10%, compared to 35% with just the headlamps (upper photos).

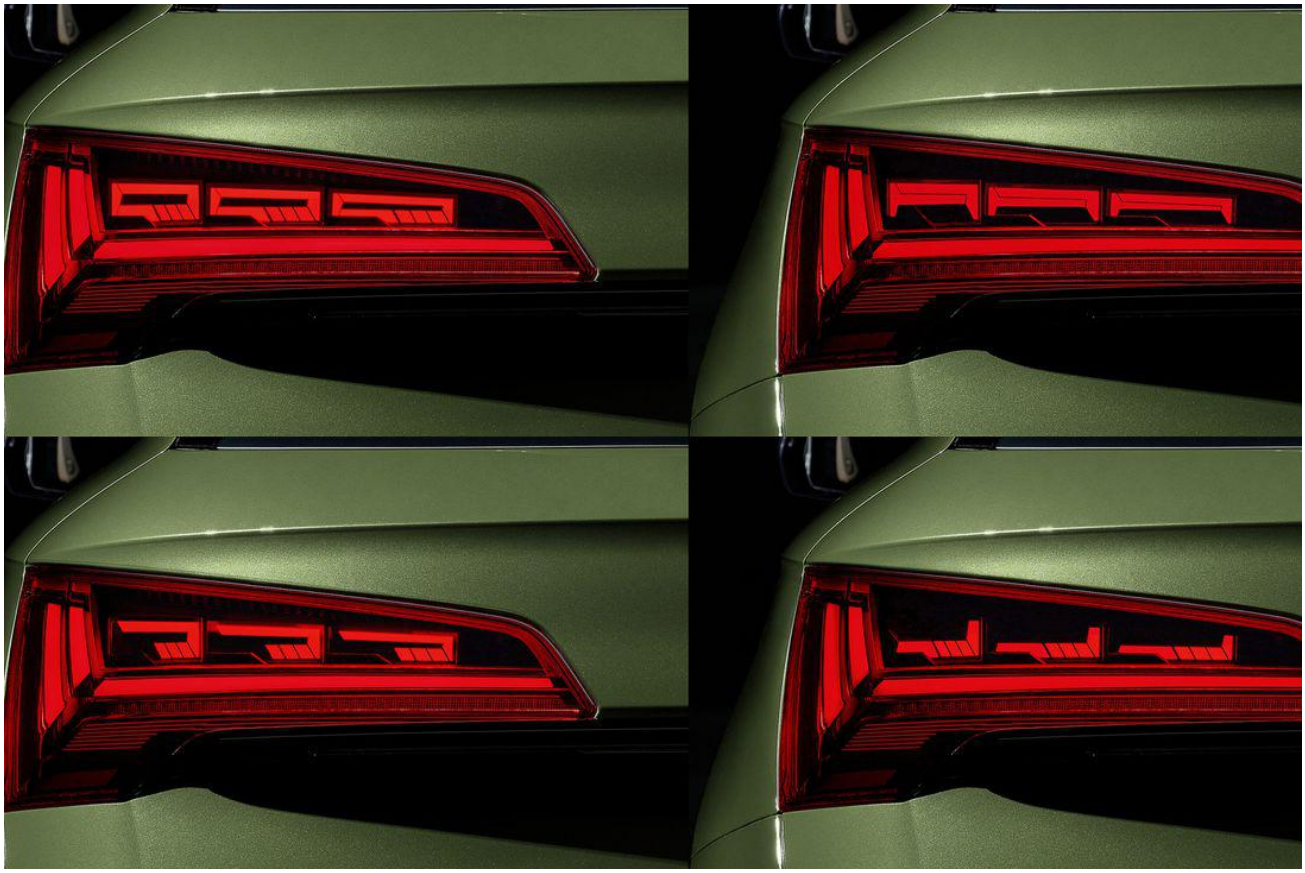
DVN has **previously reported** on how vehicle headlamps tend to transfix deer so they freeze in place rather than running away from the path of an oncoming vehicle at night—and we've **looked** at countermeasures aimed at making animals more visible. But these researchers think their light bar actually reduces this freezing behaviour in deer. The study, entitled "Frontal Vehicle Illumination Via Rear-Facing Lighting Reduces Potential For Collisions With White-Tailed Deer", is **published** in the July 2020 issue of the journal Ecosphere.

Lead author and former NWRC researcher Dr. Travis DeVault says "This new lighting system takes advantage of a deer's predator avoidance behavior, also known as flight behaviour. We predicted that light reflected from the front surface of the vehicle would provide a more reliable looming image to deer, thus encouraging the deer to move out of the path of the approaching vehicle". When an object "looms" it becomes increasingly larger to the perceiving animal, helping the animal realise that the object is an approaching object versus one that is stationary.

In the United States and Canada, deer cause the majority of animal-related injurious and deadly road collisions. Many of the mitigation measures designed to reduce vehicle collisions with deer and other wildlife are road-based rather than vehicle-based. Road-based mitigation measures include devices and methods intended to influence animal behavior (e.g. roadside reflectors and mirrors, repellents, hazing) and driver behavior (e.g., warning signs, speed limits, animal detection systems), as well as vegetation management and highway lighting designed to increase visibility of wildlife to drivers, and wildlife population management. A vehicle-based system, such as the rear-facing LED light bar, advances efforts to reduce wildlife deaths and increase driver safety on roads.

The Audi Q5's Digital OLED Technology

LIGHTING NEWS



Audi have launched their new Q5 with digital OLED technology promising to improve road safety while allowing personalisation of the taillight signature.

The benefits of OLEDs are about the extremely homogeneity of the light, its infinite dimmability with a very high contrast, and the possibility to be split into individually-controllable segments with diverse levels of brightness, with minimal gaps between the segments. The lighting unit does not require any reflectors, optical fibres, or similar optics. This makes OLED units very efficient, lightweight and flat, which considerably increases design freedom.

The high precision and great variability offer light designers a wealth of opportunities, using just one type of hardware. Q5 customers opting for digital OLED technology have a choice of three signatures in the taillights when purchasing their car. In the "dynamic" Audi drive select mode, the lamps additionally switch to another signature. Moreover, effects such as welcome/farewell animations can be implemented, plus the dynamic turn signal has been integrated in the new lamp units as well.
The taillights turn into a kind of display on the outer shell, which provides opportunities and prospects in terms of design, personalisation, communication, and safety performance; what has previously been solely a medium for signal functions is now additionally becoming a medium for displaying diverse types of content.

CES Goes All Digital

LIGHTING NEWS

The Consumer Technology Association have decided to modernise; CES 2021 will be an all-digital experience.

With the growing global health concerns about the spread of COVID-19, it is not possible to safely convene tens of thousands of people in Las Vegas in early January 2021 to meet and do business in person. So, an all-digital CES will allow the entire tech community to safely share ideas and introduce the products that will shape the future. Participation will be possible from anywhere in the world where adequate connectivity can be had.

CTA organisers say the 2021 show will offer a highly personalised experience with keynotes and conferences, product showcases, meetings, and networking.

Designers Shuffler at Renault, Peugeot

LIGHTING NEWS

Veteran PSA designer Gilles Vidal has left Peugeot to join Renault, where he will report to **Laurens van den Acker**, corporate design EVP and member of Groupe Renault's Executive Committee. Up to now, Vidal had spent his entire career with the PSA Group. He started in 1996 at Citroën, successively in exterior and interior design, then as manager of the Citroën C4 and C4 Picasso. He was then entrusted with the production of Citroën concept cars and responsibility for advanced design, before joining the Peugeot brand in 2009.

Jean-Philippe Imparato, Peugeot brand CEO said: «As our Director of Design for the last 10 years, you have overseen the conception of some of the most beautiful and iconic Peugeit vehicles ever. Many thanks Gilles Vidal for your passion and inspiration.»

Gilles Vidal is a graduate of the Art Center College of Design in Vevey, Switzerland. Gilles has done a lot of work on the evolution of Peugeot's design over the past decade, notably with the launch of the second-generation 3008 and the redesign of the 208 and 2008.
Van den Acker says "We are thrilled to welcome Gilles Vidal into our team. Gilles has an intimate knowledge of creating strong and attractive design-led brands. His widely recognized experience, his sense of innovation and passion for design will be great assets for Groupe Renault. Gilles has been an inspiration for many, and I'm looking forward to work with him to meet the challenges of tomorrow's mobility.

Vidal's replacement as Peugeot Design Director is Matthias Hossann.

MATTHIAS HOSSANN, PEUGEOT'S NEW DESIGN DIRECTOR

A graduate of the Strate Design School, Hossann joined the styling management department of the PSA group in 2002.

Hella Work to Boost Competitiveness on Lower Sales

LIGHTING NEWS

In a difficult market environment, based on preliminary figures, Hella generated lower currency and portfolio-adjusted sales in FY19-20 (June 2019 to May 2020) than in FY18-19: €5.8bn (versus €6.8bn) and the same with adjusted EBIT margin (4% vs 8.4%).

CEO Dr. Rolf Breiden bach says "We have further accelerated our already ongoing cost programmes. As of March, we have introduced additional temporary measures such as short-time work and an even stricter cost control program. This enabled us to cushion the hard market decline caused by Corona, but, as foreseeable, only partially compensates for the associated losses".For FY20-21, Hella expect currency and portfolio-adjusted sales of around €5.6bn to €6.1bn and an EBIT margin of around 4% to 6%, adjusted for restructuring measures, portfolio effects and extraordinary impairments. Breidenbach: "There is still a high degree of uncertainty as to how vehicle production will develop in the future. Due to the significantly reduced market volumes and the high investment requirements in the industry, competitive intensity and cost pressure will continue to increase".

Hella's management have decided on a long-term program to increase competitiveness. This includes further increased investments in automotive market trends, automation and software expertise. Further structural adjustments are being considered as well in Hella's worldwide location network. In this context it is planned to trim around 900 administrative and development positions at the company's headquarters in Lippstadt. The necessary personnel adjustments are to be made in the mid term up to the end of 2023 and implemented in the most socially acceptable way possible. The Lippstadt headquarters will continue to be continuously developed in its function as a global control centre and high-tech location.

Michigan Marelli Light Plant to Close Down

LIGHTING NEWS

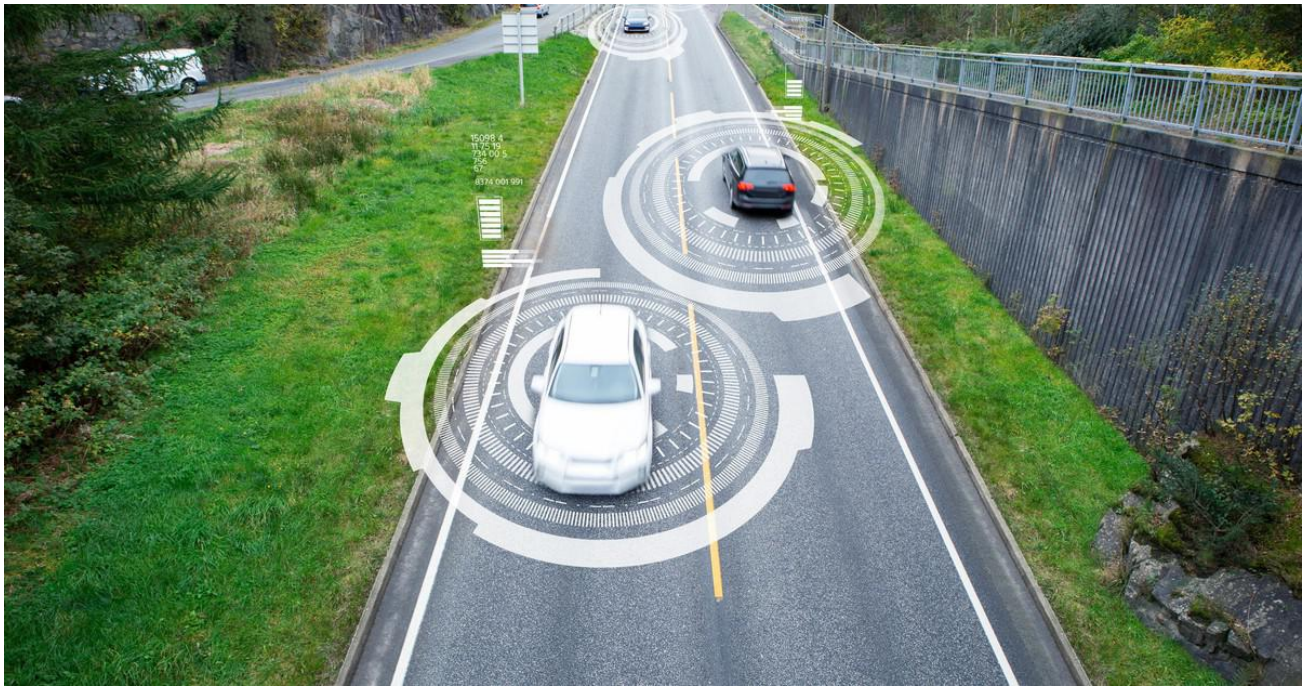
Marelli Automotive Lighting plan to close their factory in Clarkston, Michigan. Production will end in January 2021, affecting 263 employees. The closure is due to what the company call "a number of prolonged challenges" including downward-trending vehicle volumes exacerbated by COVID-19, and new technology from nontraditional suppliers.

Marelli say they will consolidate U.S. vehicle lighting manufacturing in a single, existing location in Pulaski, Tennessee: "This move will increase efficiency, enabling the company to become more cost competitive while meeting customer demand".

Driver Assistance News

Velodyne Going Public Through a SPAC

DRIVER ASSISTANCE NEWS



Graf Industrial will buy Velodyne Lidar, a company that supplies 3D mapping for self-driving car capabilities.

In late 2018, Graf Industrial initiated an IPO effort with the specific intention of being a SPAC—a Special Purpose Acquisition Company; that is, a shell company deliberately created to raise cash with an IPO, then use it to acquire a company and effectively take that company public through the merger.
Graf Industrial's deal to acquire Velodyne is the culmination of the SPAC effort. The merger paperwork values the combined company at USD $1.6bn, and Graf Industrial will be renamed Velodyne Lidar.

Velodyne are pioneers in lidar technology. Founded in 2005 by David Hall, the company have brought down the cost of lidar so it can be commercialised in the automotive industry.
Velodyne have licensed their lidar technology through long-term developmental contracts with leading manufacturers including Ford, Nikon, and Hyundai, amongst over 300 customers they've served over the years.

Last year, the company generated over $100m in revenue. With the rising interest in autonomous technology, Velodyne expect sales to rise sixfold and exceed $600m by 2024. Velodyne also have extensive non-automotive applications for their lidar technology, including mapping, robotics, and driver assistance systems.

Cepton, Luminar Scale Up Car Tech Efforts

DRIVER ASSISTANCE NEWS

Lidar sensor and technology builders Cepton and Luminar recently announced their expansion plans respectively, aiming to scale the market as well as to speed up technology development.

Cepton Technologies, who began partnership with Japan-based Koito**,** appointed industry veteran Andrew Klaus as country manager for Japan, marking their continued expansion into the Japanese and Asian markets.

Klaus' role will initially focus on building Cepton's market share in Japan, where the company have experienced growing demand for its high-performance lidar solutions across automotive, auto-adjacent, and non-automotive sectors.

Cepton also assigned Henri Haefner to lead Cepton's efforts in the autonomous mobility sector in EMEA. He will focus on ADAS programs at major automakers, AV programs, and Tier 1 partnerships. Klaus Wagner has joined Cepton as well to support Cepton's growth in auto-adjacent and non-automotive markets such as intelligent transport systems, smart spaces, mapping, and other industrial applications.

Luminar announced the expansion of their leadership as well for their next phase of growth in the automotive sector. Over the next 18 months, the company are scaling their technology into series production, starting with Volvo in 2022, and will begin shipping their Iris sensing and perception platform within the year.

Luminar appointed a new CFO, Tom Fennimore, and added Matthew Simoncini to their Board of Directors. The company also welcomed Marc Losewitz as Vice President of Automotive Business Development, and Aaron Jefferson as Vice President of Product. Also joining the automotive business team is Jason Rudd, who will be driving Luminar's growing European business presence and programs.

Lucid's New Lidar-Integrated ADAS

DRIVER ASSISTANCE NEWS

Lucid Motors' DreamDrive is a new ADAS to be revealed in full next month. It combines sensing solutions including lidar, and will equip the Lucid Air vehicle slated for first deliveries next year. The Air is expected to be the first vehicle with a driver monitoring system and a sensor suite that includes high-resolution lidar as standard equipment. The DreamDrive technology suite supports 19 key safety, driving, and parking assist features that will be available on the Air at start of production, with another eight features expected to be available later via over-the-air updates.

According to Lucid Motors, their electric vehicle will enter the market with 32 sensors including cameras, radars and ultrasonic sensors, as well as a long-range, high-resolution lidar at the front of the car. The comprehensive sensor suite also includes an in-car driver monitoring system designed to share relevant information with the driver while ensuring their necessary attention to the driving task.

The hardware systems of Lucid's DreamDrive were developed together with the company's commercial partners including Here, Continental, and Bosch. Lucid built the integration system entirely in-house for the product.

General News

Renault Ex-Chief is New JLR CEO

GENERAL NEWS

Tata Motors have named Thierry Bollore to be the next CEO of their Jaguar Land Rover operation.

Bollore, who lost his post as Renault CEO last October, will replace Ralf Speth as JLR boss starting 10 September. Speth is scheduled to retire in September and will become non-executive vice-chairman of JLR. Bollore says "It will be my privilege to lead this fantastic company through what continues to be the most testing time of our generation".

JLR were hit this year first by disrupted sales in China, the world's biggest car market, and then by lockdowns in key markets across Europe and North America. In 2019, JLR cut costs to address tumbling diesel sales which helped them return to profit… before being hit by the pandemic, which contributed to a pretax loss of £422m (USD $530m) for the financial year ended 31 March.

Dieter Zetsche's Second Daimler Chairmanship

GENERAL NEWS

Former Daimler CEO Dieter Zetsche (photo, left) is the best candidate to be the company's next chairman, says current Chairman Manfred Bischoff (photo, right).

Zetsche was succeeded as CEO in May 2019 by the automaker's research and development boss, Ola Kallenius. When the succession plans were announced, Zetsche was nominated to succeed Bischoff after the company's annual meeting in 2021 following a two-year cooling off period recommended by German corporate practice.

Zetsche is expected to be installed as chairman during the new board's first meeting at the end of next year's annual meeting, the date for which has not yet been announced.
Bischoff, whose term will end just before the annual meeting, will have stepped down by that time.

Renault CEO Confident in Nissan-Mitsubishi Alliance

GENERAL NEWS

New Renault CEO Luca de Meo says he is confident his company's troubled alliance with Japanese partners Nissan and Mitsubishi will demonstrate its value for all three companies.

De Meo, speaking in a week when both Renault and Nissan announced record net losses, said: "With these results, the first priority is for both companies to focus and fix their miseries internally". He added that contacts between the French and Japanese parts of the alliance had taken on a new tone in the past few months.
"I think we are finding a good setup and we are trying to focus on four or five key projects where we can really prove to each that by working together it's going to bring a benefit," he said on a conference call with analysts.
"We will see in the next months and years the result of that very operational and pragmatic work. I am confident we can give a lot to one another."

European Sales, Model By Model

GENERAL NEWS

Bentley, Porsche, Volvo, and MG increased sales in June in a market that was down 25% for the month. The overall market's decline, however, was a vast improvement on the 57% drop in May and the 74% collapse in April.

Bentley's June sales rose 11%, Porsche was up 9% and Volvo gained 3%, but the big winner was Chinese-owned MG, which grew 146%, according to figures from market researcher JATO Dynamics.

The other brands that beat the market, but were not in positive territory for the month, included Lexus at -2%, Rolls-Royce at -6%, Mercedes-Benz at -12%.

1. Volkswagen Golf	118,937
2. Renault Clio	116,678
3. Peugeot 208	84,793
4. Volkswagen Tiguan	82,936
5. Ford Focus	81,940
6. Opel/Vauxhall Corsa	79,403
7. Toyota Yaris	74,708
8. Volkswagen Polo	74,078
9. Skoda Octavia	73,838
10. Ford Fiesta	69,722

SALES 1ST SEMESTER 2020 – JATO DYNAMICS

The Renault Clio was Europe's № 1 seller for the second consecutive month in June with a volume of 36,000, achieving its third monthly victory this year over the Volkswagen Golf, which is at risk of losing its overall lead to the French car.
The Clio and the Peugeot 208 were the only models in Europe's top 10 to increase sales in June. The 208 was the best performer in the top 10 with an increase of 11% compared with June 2019.

Osram's Happy Surprise

GENERAL NEWS

Osram's financial results for fiscal 3Q20 are better than expected: revenue on a comparable basis fell by 29% YoY to €606m due to the impact of the Coronavirus crisis. EBITDA before special items was well above expectations at negative €27m.

Osram's automotive business unit was impacted the most with on-year sales dropped by 35% to €282m, as foreseen by the company. The decline in the Opto Semiconductors business unit was less severe, dropping by 19% to €297m. Revenues of the digital units also decreased by 31% to €159m. The company touted the effectiveness of their COVID-19 measures and are seeing recovery signs in the market; they believe they are on track to meet their annual forecast as adjusted this past June.

The acquisition of Osram by AMS finally closed last month, after the approval of the European Commission. AMS increased their Osram shares from 69% to 71% on July 29, and now aim to further accelerate the integration, having joined Osram's supervisory board, with independent management consultant Hans-Peter Metzler, AMS board member Thomas Stockmeier and AMS works council member Johann Christian Eitner replacing Roland Busch, Frank H. Lakerveld and Arunjai Mittal.