Thu, 3 April 2025
Weekly Newsletter

DVN Interior

NEWSLETTER #255

Editorial

Köln Workshop Next Week—Record Exhibitor Roster!

AMS OSRAM SUPPLIER PITCH AT 2024 DVN-I WORKSHOP (DVN IMAGE)

The 2025 DVN Interior Workshop is taking place next week. We expect 200 participants, we will have 41 lectures, a design roundtable, and a record-high 22 exhibitors. This week's in-depth piece introduces all the companies who will be showcasing their innovations, products, and services. It's a great way to prepare yourself for productive and informative discussion during the ample break-and-lunch times when you visit the exhibition hall.

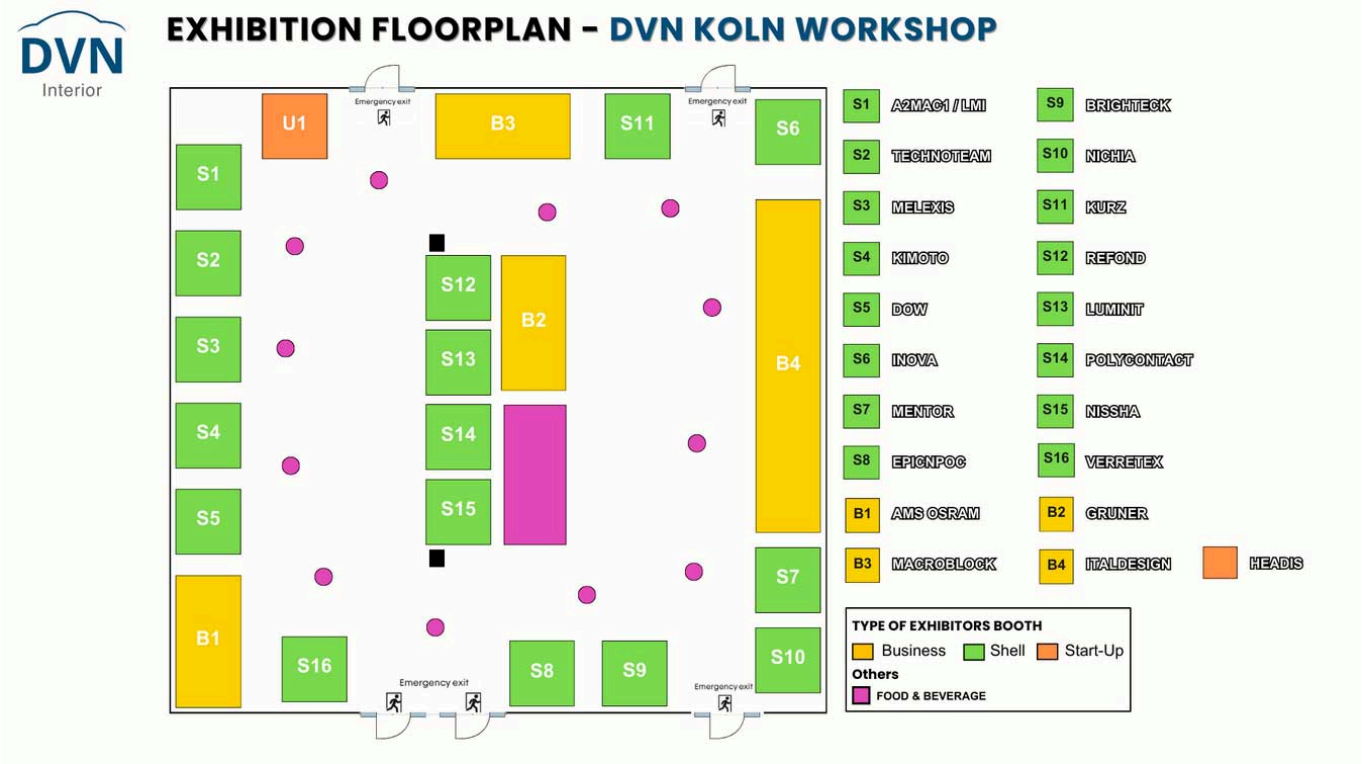
The presentations will concentrate on interior innovations for seating, cockpit, interior lighting, materials, and driver monitoring. The design roundtable will cap off the workshop, addressing the major interior design trends, and the transition and working interfaces between design and engineering along the whole development process.

Don't miss this great opportunity! There are still a few seats left—register **here**! Looking forward to seeing you next week in Köln.

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

Top-Notch Exhibitor Roster All Set for Köln Workshop



This week's in-depth report introduces the exhibitors supporting the DVN Interior Workshop with an expo booth. They have a diverse array of exciting, timely innovations, products, and services driving sustainable and efficient technologies to push the boundaries of vehicle design, manufacturing, and performance.

Throughout this exhibition, you will have the opportunity to explore a wide variety of ideas, products, and services—cockpit and HMI, surface solutions, seating with comfort and haptics, smart and sustainable materials…the list goes on!

We invite you to peruse these technologies that are transforming the automotive interior world, meet the companies leading this transformation, and discover the solutions that will define tomorrow's user experience. All exhibitors will pitch on stage on 8 April startig at 3:30pm. Be there!

ITALDESIGN

Italdesign

Italdesign Giugiaro is a design and engineering company and brand based in Moncalieri, Italy, that traces its roots to the 1968 foundation of Studi Italiani Realizzazione Prototipi by Giorgetto Giugiaro and Aldo Mantovani. Best known for their automobile design work, Italdesign also offers product design, project management, styling, packaging, engineering, modeling, prototyping, and testing services to manufacturers worldwide. In 2010, Lamborghini (Volkswagen Group) acquired 90.1% of the shares of Italdesign Giugiaro, including the brand name rights and patents. The remaining shares were sold to Audi (Volkswagen Group) in 2015.

They presented a new concept car at CES last January, (see DVN Interior) called the Quintessenza, an Italian Style GT with pickup versatility. Interview in DVN Interior

Dow MobilityScience (Interview in DVN Interior)
Dow is a global provider of materials science solutions from plastics and industrial intermediates to coatings and silicones with the ambition to become the most innovative, customer centric, inclusive, and sustainable materials science company in the world. Dow builds on over a hundred years of transport experience and expertise in application development.

MobilityScience was created to provide automakers and suppliers with a seamless and collaborative global partner for materials innovation through access to world-class technical capabilities and a broad portfolio of materials science solutions for the industry.

AMS Osram has been present at every DVN Interior workshop. They are a global leader in optical and light solutions, specializing in sensors, light sources, and light management systems. For interior lighting, AMS Osram offers innovations like smart tunable white lights, human-centric lighting, and energy-efficient LED solutions. See interview in DVN Interior .

At last year's workshop, AMS Osram and Dominant Opto Technologies announced a partnership to integrate Osram's open system protocol (OSP) into Dominant's forthcoming intelligent RGB LEDs for automotive ambient lighting.

A2MAC1 enables automakers and suppliers to build competitive advantage with industry-leading data and insights, LMI is a unique market intelligence solution for parts of the automotive industry as well as anyone who requires deep, reliable, up-to-date data and understanding of products and strategies. Together, A2MAC1 and LMI have partnered to offer a new product: Advanced Seating, with the objective to channel seating benchmarking data into industry insights. Their booth will introduce a demonstrator reflecting the high value of their seating insight tool.

Nichia is a leading Japanese chemical and technology company, renowned for innovations in the fields of LEDs, phosphors, and fine chemicals. Founded in 1956, they have made significant contributions to the development of cutting-edge lighting and display technologies. Nichia is particularly recognized for its advancements in LED lighting, producing high-performance, energy-efficient products. Notable innovations include the invention of the blue LED in 1993, which led to the development of white LED lighting and revolutionized the lighting industry. Additionally, Nichia has pioneered high-brightness LEDs, used in applications from automotive lighting to display backlighting.

POLY IC

a KURZ company

Kurz automotive specializes in innovative surface decoration and functional integration for the automotive industry, offering sustainable and technologically advanced solutions.

Last year Poly IC, part of Kurz, presented future mobility solutions like curved and seamless surfaces, large and ‘hidden-til-lit’ panels, surface decoration with light and function, and combinations of different functions for displays and switches.

Poly TC masters touch sensors, use cases in capacitive switches in automotive HMI applications, complete HMI systems (molding, decoration and sensor integration) in one production step, in-mold electronics and functional foil bonding, new concepts with infotainment, décor and lighting, touchpad with integrated force detection, plastic based touchscreen panels, haptic feedback and innovative decoration and functional solutions for interior and exterior.

KIMOTO

Kimoto is a leading Japanese manufacturer of coated functional films, with over 30 years' experience developing unique technologies for various industries, including automotive. Their products support the next generation of mobility and are designed to meet the latest quality standards. Kimoto's functional films are used in automotive interiors, contributing to the advancement of human-machine interfaces and other innovative applications

As the advanced information society progresses, the demand for LCD display panels installed in automobiles is rapidly increasing. For over 30 years, Kimoto has been developing, manufacturing, and selling films for LCD displays using their unique technology.

Their light-diffusion and light-reflecting films, for example, for liquid crystal display backlight units are highly reliable automotive films that meet the quality control standards of the automotive industry.

inova Semiconductors

Inova Semiconductors is a German-based leader in the development of advanced semiconductor solutions, specializing in high-performance components for automotive, industrial, and communication sectors. The company focuses on providing cutting-edge products that enable innovative solutions in areas like automotive lighting and data transmission.

They developed ISELED next-generation viable in-car lighting, for in-car ambient lighting with 10 to 30 LEDs mounted on a flexible light strip. Each group consists of one RGB LED forming a 'pixel', which is then intelligently controlled by the ISELED smart RGB LED driver. This solution can effectively replace the present cumbersome, costly use of multiple MCUs and a slow LIN bus.

Until now, ISELED smart LED drivers have only been available for purchase already integrated into the LED module. The INLC10AQ is the first standalone driver available that enables manufacturers to custom design their own choice of external LED strips. Several LED-related solutions for the automotive market are continuously being developed under the umbrella of the open ISELED Alliance.

Macroblock is a leading Taiwanese company specializing in the development and manufacturing of power management ICs (integrated circuits) for a variety of industries, including automotive, consumer electronics, and LED lighting. The company focuses on high-performance solutions for power efficiency, brightness control, and system integration.

Important innovations in the automotive industry by Macroblock include automotive LED drivers. Macroblock provides advanced LED driver solutions that enable superior control of automotive lighting systems, improving energy efficiency and longevity of LED-based automotive lighting.

TechnoTeam, founded in 1991 and based in Ilmenau, Germany, specializes in high-precision imaging photometry and colorimetry solutions for industries like automotive and lighting.

Two significant automotive innovations by TechnoTeam include:

LMK Position System: A photometric robotic system that combines high-precision imaging with flexible movements, enabling effective measurement of automotive displays during research and development as well as small-series production testing.

Camera-Based Goniophotometry: A patented technology developed in collaboration with LMT Berlin, this system combines the speed of digital imaging cameras with the accuracy of traditional goniometers, allowing for precise and rapid measurement of luminous intensity distributions.

Brightek Optoelectronics is a Taiwanese company specializing in the design and manufacture of LED components and optoelectronic solutions for various applications, including automotive, consumer electronics, and industrial sectors.

Two notable innovations by Brightek include:

High-Performance Automotive LEDs: Brightek has developed advanced LED components tailored for automotive lighting, offering enhanced brightness, energy efficiency, and longevity to meet the rigorous demands of the automotive industry.

Miniature Surface-Mount LEDs: The company offers compact, surface-mount LED solutions suitable for space-constrained applications in consumer electronics, providing high luminous efficacy and reliability in small form factors.

Mentor is a German global leader in providing advanced simulation and modeling software, with a focus on helping companies design and optimize their electronic and electrical systems. They offer solutions across a range of industries, from automotive to aerospace. In interior lighting, innovations include smart lighting systems, tunable white LEDs for human-centric design, and energy-efficient solutions like OLEDs and integrated sensors. These advancements create comfortable, customizable, and sustainable lighting environments for homes, offices, and public spaces. By using alternative textile designs and lighting scenarios, they've developed textile lighting

Melexis is a global leader in semiconductor solutions, specializing in sensors, microcontrollers, and integrated circuits for automotive, industrial, and consumer applications. The company focuses on advanced technologies for smart systems, providing products that enhance performance and efficiency. In interior lighting, Melexis contributes innovations such as adaptive lighting systems that adjust according to ambient light, energy-efficient LED drivers, and tunable white lights for improved mood and productivity. These solutions support energy savings, comfort, and advanced control in modern interiors.

Polycontact is a Swiss-based supplier of advanced automotive interior solutions, such as seat belt detectors. With a strong commitment to innovation, Polycontact offers a range of products designed to elevate the driving experience. Two notable innovations include their smart touch-sensitive panels, enabling seamless interaction with in-car systems, and their advanced acoustic materials that reduce noise for a quieter, more comfortable cabin. These cutting-edge solutions reflect Polycontact's dedication to pushing the boundaries of automotive interior technology, creating a more intuitive, comfortable, and immersive environment for drivers and passengers alike. Interview in DVN Interior

Gruner is an innovator for the automotive industry, specializing in advanced components that enhance the functionality and design of vehicle interiors. Known for their commitment to quality and sustainability, Gruner delivers cutting-edge technologies that improve user experience and vehicle performance. Among their notable innovations are their customizable ambient lighting systems, which allow drivers to personalize their in-car environment, and their innovative air filtration solutions that promote healthier cabin air quality. These advancements highlight Gruner's focus on creating smarter, more comfortable, and sustainable automotive interiors for the modern consumer.

Nissha's expertise is in advanced automotive interior solutions; they're renowned for cutting-edge technologies and high-quality components. With a strong emphasis on innovation and design, Nissha specializes in creating user-centric, functional, and visually appealing automotive products. Among their notable innovations are their flexible touch interfaces, which enable intuitive control of in-car systems with minimal space, and their unique decorative films that offer both aesthetic appeal and functional durability. These innovations reflect Nissha's commitment to enhancing the in-vehicle experience by blending advanced technology with sophisticated design, creating interiors that are both practical and luxurious.

Luminit specializes in light management solutions, particularly LED light diffusers and films that enhance optical control and eliminate hot spots. Their technologies are used in various applications, including architectural lighting, automotive, and biomedical devices. Luminit's products are designed to shape, control, and distribute light efficiently, meeting industry standards for quality and performance

Light Shaping Diffusers for Automotive Lighting: Luminit's Light Shaping Diffusers are used to enhance LED fixtures for automotive taillights, auxiliary lighting, and dashboard panel illumination. These diffusers provide uniform light distribution, eliminate hot spots, and improve the overall aesthetic and functional quality of automotive lighting systems.

Windshield Head-Up Display (HUD) Technology: Luminit has developed advanced HUD technology that integrates transparent films into windshields, enhancing driver safety and convenience. This technology provides clear visibility and a wider field of view, making it a valuable addition to modern vehicle displays

Refond is an LED technology innovator, specializing in smart LED light strips and miniLED solutions. They focus on technological innovation and product differentiation, offering high-quality LED products for various applications, including automotive lighting.

Recently, Refond was invited to attend the 33rd DVN Workshop in Shanghai, where they delivered an outstanding presentation. The company shared in-depth insights into the application and innovation of miniLED technology in the automotive sector, showcasing cutting-edge achievements and professional expertise in the miniLED field.

Epicnpoc specializes in prototyping services for the automotive industry, focusing on smart cockpit experiences. They provide no-code software and modular kits to assist in creating and testing user interfaces for vehicles, enhancing the automotive experience by integrating digital technologies while preserving traditional physical aspects.

Two recent innovations include:

Phygital Automotive: Epicnpoc leads the 'phygital' automotive revolution, integrating physical and digital elements to enhance vehicle design, safety, and user experience through real-time data analysis and advanced sensors.

BOWL Automotive: Launched at CES 2021, BOWL Automotive is a starter kit that accelerates the creation of smart products and user experiences, combining software, hardware, and tools for rapid in-vehicle experience development and testing.

Verretex is a Switzerland-based technology company specializing in advanced glass and optical solutions for various industries, including automotive. They focus on developing cutting-edge materials and processes that enhance vehicle safety, comfort, and performance through innovative glass products and optical technologies.

Verretex's most recent innovations in the automotive industry include:

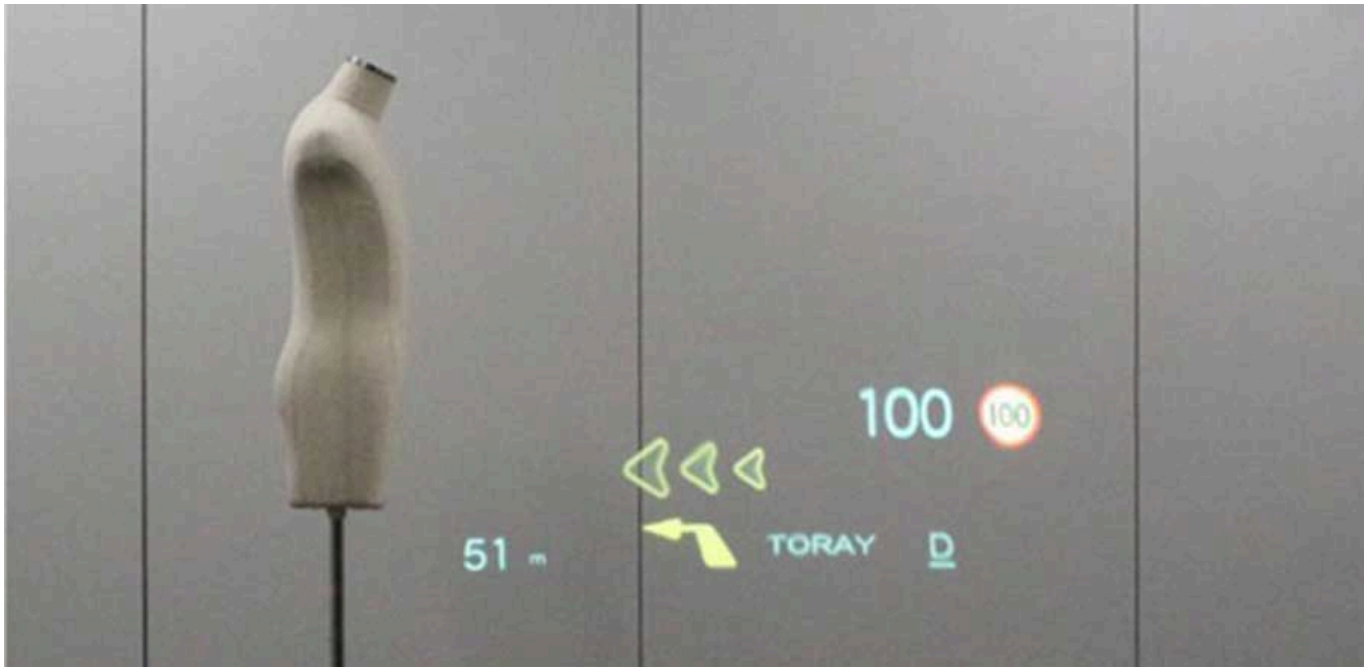
Smart Glass for Vehicles: Verretex has developed dynamic, electrochromic glass technology that can be used in car windows and sunroofs to adjust tint and improve interior comfort while reducing energy consumption.

High-Performance Windshield Glass: The company has introduced a new type of windshield glass that reduces glare and improves visibility, enhancing driver safety, particularly in challenging weather.

Interior News

Toray Launches Picasus VT Film for HUD Clarity

INTERIOR NEWS



TORAY IMAGE

A new wide nano-multilayer film that reflects light only from oblique angles has been developed by Toray Industries, from Japan, expert in Fibers and Textiles, Performance Chemicals, and Carbon Fiber Composite Materials, among others.

When used in HUD technology, the Picasus VT film provides high-definition projections free of image-doubling, across the entire windshield. According to the company, the display stays clear even when viewed through polarized sunglasses.

Current HUD technology projects S-polarized images onto the windshield because glass reflects this type of light more easily. However, standard windshields reflect images from both the front and rear surfaces, creating double images. While specially designed windshields can reduce this effect, they only provide clear displays in certain areas. Another issue is that polarized sunglasses absorb S-polarized light, making HUD images invisible to those wearing them.

Toray has worked to expand the use of Picasus VT for HUDs by leveraging their proprietary nano-multilayer technology and advanced optical design capabilities. Picasus VT offers glasslike transparency when viewed head-on while selectively controlling reflectivity at oblique angles. When paired with a light source that emits P-polarized images—which glass surfaces do not reflect—it can solve these visibility challenges.

Picasus VT is said to offer several key features for HUD projection. It reflects images only on the film surface, enabling high-definition information display across the entire screen. It also maintains excellent visibility, even when viewed through polarized sunglasses, and it supports augmented reality displays with depth perception, enabling projections to appear at varying distances, from near to far.

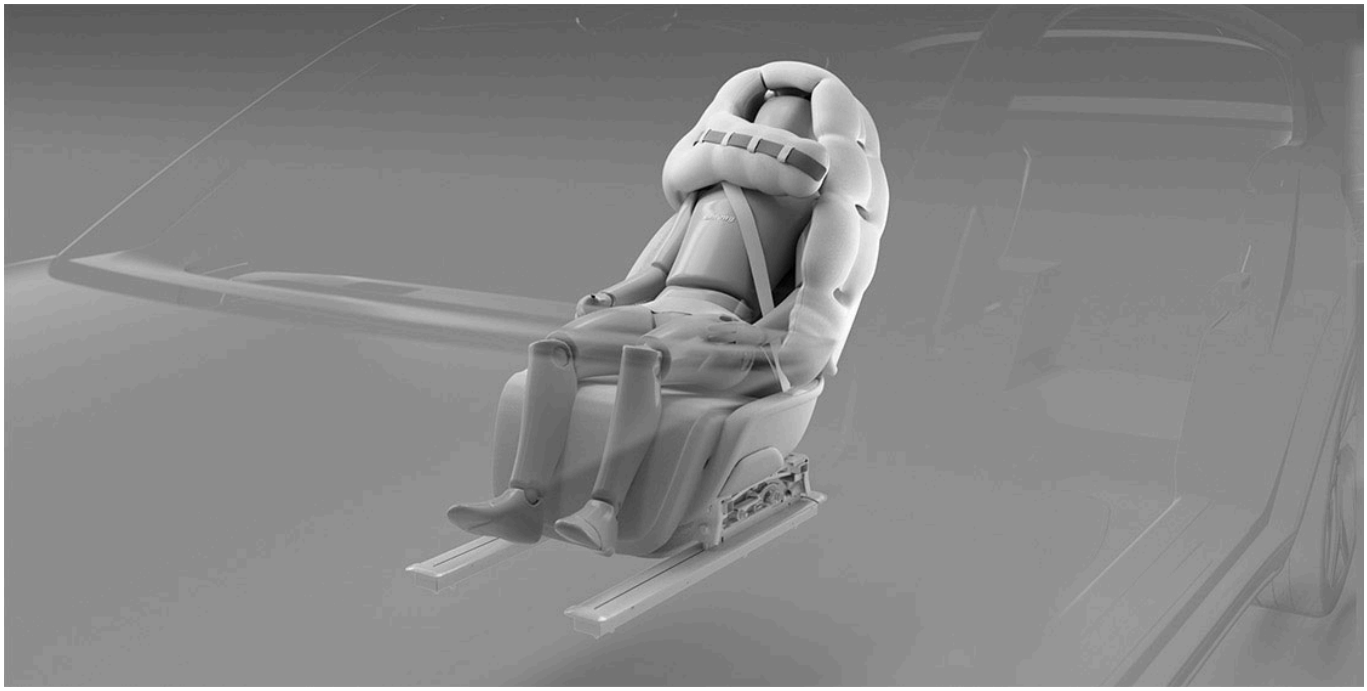
Toray has improved the material design, production equipment and manufacturing processes for this film, enabling the production of 1,600-mm-wide rolls that fit most windshields. Comprehensive customer evaluations are currently in progress.

Toray's technology enables drivers to access driving assistance information with minimal eye movement. It also ensures clear visibility in bright sunlight, enhancing driving safety.

It also solves display quality issues in panoramic HUDs, which can help create more spacious and refined vehicle interiors. Toray will continue working toward full-screen windshield displays and augmented reality HUD systems.

Yanfeng: Seat Safety System for Reclined & Upright Occupants

INTERIOR NEWS



YANFENG IMAGE

The Yanfeng SafeUnit is an advanced seat-integrated safety system designed to protect occupants in both upright and reclined positions during frontal, near-side and far-side crashes. Developed by the Yanfeng International Technical Center, the system is built for both current and future vehicles. It consists of several key components, including the seat itself, an optional pre-crash function that activates before impact, an all-belts-to-seat system, a follow-up seat mechanism, a buttock airbag and a hoodie airbag.

SafeUnit has undergone extensive testing at both the component and system levels, using virtual simulations and physical crash tests. The system has been validated both digitally and physically with Humanetics's THOR-AV-50M dummy, a tool for studying injury mechanisms, developing new safety solutions and verifying their effectiveness.

Liu Chongqing, lead engineer, safety tech committee, Yanfeng International Technical Center, said, "In the automotive safety industry, SafeUnit is groundbreaking not only as a crash protection solution but also in testing innovation. Developing safety systems for reclined occupants presents unique challenges – for example, how do you test an occupant in a reclined seating position? How should a reclined ATD be positioned during a crash test? Which ATD should be used as a research and verification tool?

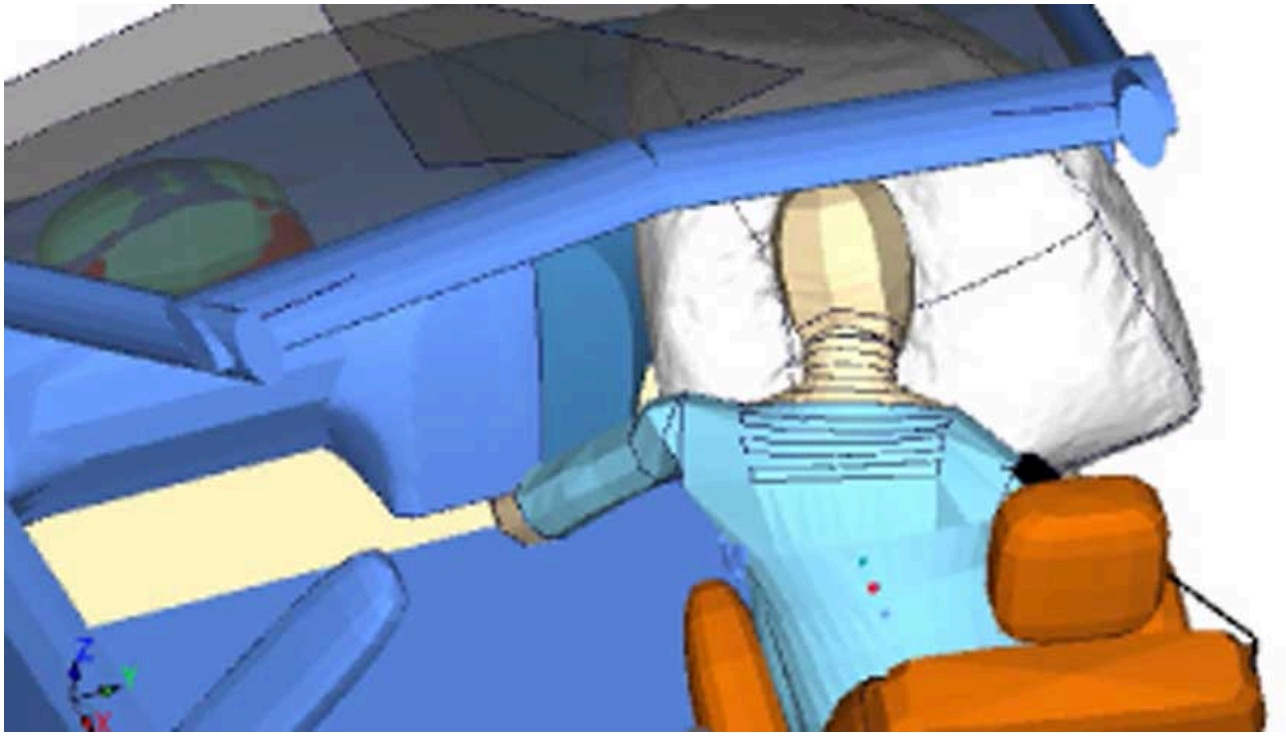
"These questions must be studied and addressed because protecting reclined occupants is a new area in automotive safety. Currently, there are no established regulations or test protocols for this type of protection, making research and innovation essential.

"Through our pioneering research, we have addressed these questions and developed related testing innovations, which could play a key role in shaping future safety testing regulations. In fact, regulatory authorities in China and Europe have already begun studying this area."

Chongqing hopes the SafeUnit is sparking meaningful conversations and inspiring testing engineers to think critically about the future of vehicle safety systems and testing technologies.

In-Seat Safety Injury Prediction

INTERIOR NEWS



COVENTRY UNIVERSITY IMAGE

“Coventry University’s Centre for Future Transport and Cities has developed an advanced computational framework to assess occupant passive safety and predict injuries across various rotated seat configurations in future autonomous vehicles. The research is led by Dr. Christophe Bastien, Associate Professor and Head of the Transport Safety and Simulations Research Group. His team focuses on enhancing the safety and comfort of emerging automotive systems, conducting accident forensic analysis, and pioneering innovative methods for predicting human blunt trauma injuries in transport applications.

The research team first analysed occupant movement during the braking phase and calibrated a human-computer model that incorporated muscle stiffening and reflex responses to accurately replicate real-life motion behaviours. Finally, accident scenarios were developed, simulating occupants wearing a three-point seatbelt in rotated and reclined seating positions, subjected to both frontal braking and crash impacts.

Using machine learning algorithms, the Coventry University team has identified rotated and reclined seating positions that pose the highest risks compared to conventional forward-facing crash tests. This innovative framework enables rapid computations, analyzing hazardous seating positions and occupant kinematics within seconds. It provides vehicle designers and safety teams with a powerful tool to identify potentially dangerous seating configurations anticipated in the cabins of future autonomous vehicles”

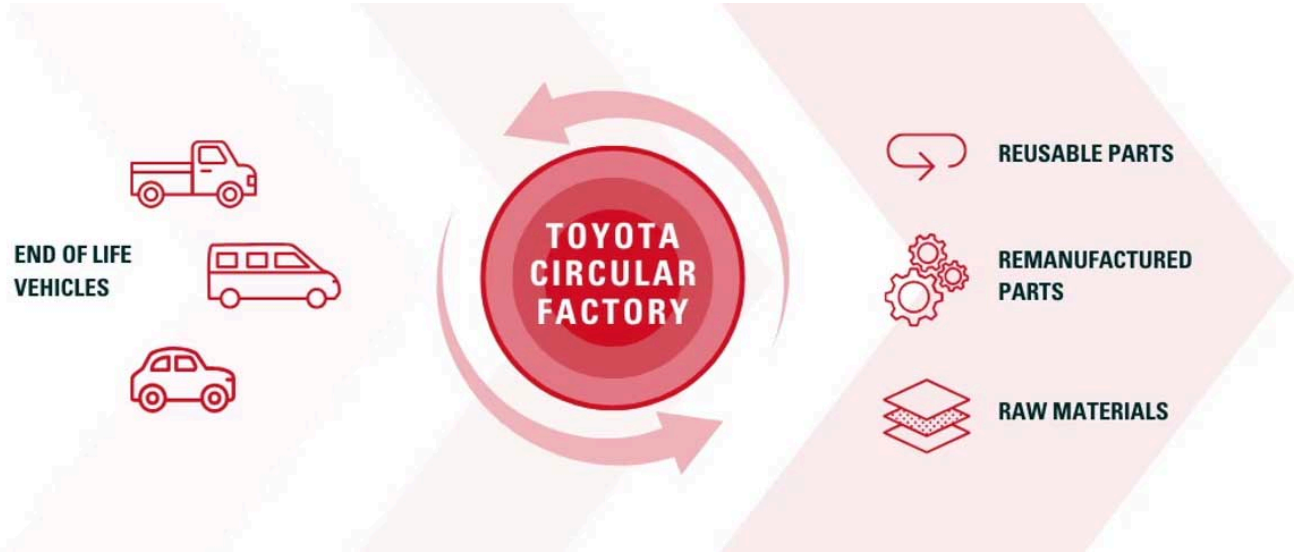
For more information, contact Dr Christophe Bastien (christophe.bastien@coventry.ac.uk; +44 (0)7974 984055)

Relevant Scientific Publications:

- Diederich, A., Bastien, C., & Blundell, M. (2025). A framework to Prediction occupant injuries in rotated seating arrangements. *Expert Systems with Applications*, *263*, Article 125698. https://doi.org/10.1016/j.eswa.2024.125698
- Diederich, A., Bastien, C., & Blundell, M. (2023). The Prediction of Autonomous Vehicle Occupants’ Pre-Crash Motion during Emergency Braking Scenarios. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, *237*(14), 3304-3312. https://doi.org/10.1177/09544070231153262
- Diederich, A., Bastien, C., Ekambaram, K., & Wilson, A. (2021). Occupant Pre-Crash Kinematics in Rotated Seat Arrangements. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, *235*(10-11), 2818-2842. https://doi.org/10.1177/09544070211004504

Toyota's Circular Factory to Boost ELV Recycling

INTERIOR NEWS



TOYOTA IMAGE

Toyota Motor Europe has launched the Toyota Circular Factory (TCF) to process end-of-life vehicles with a focus on recycling, repurposing, and remanufacturing. The first TCF will be located at Toyota Manufacturing UK's Burnaston plant in Derbyshire, with operations set to begin in the third quarter of this year. This TCF will serve as a "center of excellence" for future recycling processes across Europe and other global markets.

The facility will focus on extracting reusable parts, remanufacturing commodity items, and recycling raw materials. Reusable parts will be validated before being reintroduced to the market through retailers or distributors. This process ensures that functional components are utilized rather than discarded.

Commodity items such as batteries and wheels will be assessed for remanufacturing, repurposing, or recycling based on their condition and potential for reuse. Raw materials, including copper, aluminum, steel, and plastic, will be recovered and processed to replace virgin materials in new vehicle production whenever possible.

TME vice president of circular economy Leon van der Merwe said: "We initially anticipate recycling around 10,000 vehicles a year in our UK facility, which will give new life to 120,000 parts, recover 300 tons of high-purity plastic and 8,200 tons of steel, among other materials.

"As a next step, we plan to roll out similar operations across Europe. And we're not stopping at our own facilities – we are eager to collaborate with other organizations who share our passion for circularity and commitment to carbon neutrality."

This initiative is part of Toyota's broader sustainability goals, aiming to reduce emissions associated with vehicle manufacturing. Toyota is committed to achieving carbon neutrality in all its owned facilities by 2030 and across its European product line-up by 2035. The company's global and European sustainability objectives include being fully carbon neutral by 2040.

TME has unveiled the FT-Me, an electric micromobility concept for urban commuters. The compact two-seater features a premium yet affordable design, using recycled materials to reduce its carbon footprint by 90 per cent compared to current city vehicles.

Mercedes-Benz: Circular Recycling Through ‘Urban Mining’

INTERIOR NEWS

MERCEDES-BENZ IMAGE

In a memorandum of understanding with Germany's TSR Recycling, Mercedes-Benz is aiming to substantially advance their circularity strategy in relation to end-of-life vehicles.

The MoU relates to the recovery of secondary materials through 'urban mining'. With this pilot project Mercedes-Benz says they expect to gain a deeper understanding of the potential of post-consumer materials in Europe, focusing on steel, aluminum, polymers (mostly interior parts), copper and glass.

The two companies plan to analyze the demand for and source of secondary materials and conduct a commercial evaluation.

Markus Schäfer, Mercedes board member, said: “With our ‘Design for Circularity’ approach we consider circular economy right from the start. The goal is to decouple primary resource consumption from growth by keeping as many raw materials as possible in the cycle.

“We expect this to reduce our use of primary resources in our new vehicle fleet by 40 percent by 2030 compared to a conventional approach. Together with our partners, we are working to increase the share of secondary raw materials in our vehicles and further improve process efficiency. We see great potential in urban mining as a cost-effective way to conserve valuable resources through the circular economy.”

The partners intend to develop activities that will provide access to material flows that would otherwise be exported to other sectors and countries. The aim is to avoid so-called downcycling, whereby recycled materials are subject to a loss of quality. An example is a planned cooperation with TSR and another tier-1 supplier for recycled aluminum. This first-of-a-kind material has an 86-per-cent content of post-consumer recycled aluminum and reduces CO_2 emissions by 73 per cent. First press tests for prototype parts have been successful, Mercedes says.

Evaluation is ongoing and Mercedes-Benz says they want to put this new process into series production as soon as possible.

Mercedes, Tencent, Electronic Arts: Interior Personal Arcade

INTERIOR NEWS

MERCEDES-BENZ IMAGE

Mercedes-Benz announced news in the area of in-car gaming at Auto China: Together with Tencent and Electronic Arts (EA), they plan to integrate the game Need for Speed Mobile into some vehicles in China by the end of this year. According to the announcement, this is made possible by the third MBUX generation, precursor to MB.OS.

Mercedes will make the video game available via OTA update. For the full gaming experience, passengers can use their Bluetooth controller, only when the vehicle is stationary.

"Your Mercedes-Benz is more than just a car; it's your personal arcade," said Mercedes CTO Markus Schäfer.

Need for Speed Mobile is based on Need for Speed, a successful video game series. In 2024, the video game classic celebrated its 30th anniversary. More than 100 million copies of the game have been sold worldwide, and there are now more than 20 versions. Over the years, the game developers have integrated a number of internationally renowned racetracks and roads in fictional cities into the game.

The Design Lounge

Placing Perceived Quality

THE DESIGN LOUNGE

VW IMAGE

Perceived quality is a fusion of multiple disciplines designed to ensure potential buyers resonate as intended wit designs. The field touches all manner of functions—not only fit and finish but materials, surfacing, branding, UX, haptics, and more.

Experts in this area tend to view themselves as a fusion of designers and engineers (with some indeed having worked in both roles) helping wider teams find solutions that, in very simplistic terms, make cars feel on brand, good value for money and that they are capable of the job they are intended to do.

For example, a luxury brand will very much focus on reducing unwanted rattles, textures and even smells in the interior. An off-road utility vehicle will need to purvey a sense of durability, strength and ruggedness—things will not break after a rough trail.

Refining the perceived quality of a sports car might require some blend of both worlds – adept at handling fast corners but also looking and feeling good while doing so. There are some more generic considerations that tend to span all models. For example, shutlines should be uniform across thousands of models (same with paint finishes) and components about the cabin should not rattle or buzz loudly, if at all.

Exterior designers must pay attention to how the silhouette and surfacing of their car resonate with the market, too. “Premium” can mean different things to different people, and certain colors or shapes may have unwanted connotations. More recently, the trend for premiumization has meant that virtually all models carry an expectation of quality inside and out, leaving less room for error than before.

The electric vehicle movement has also had an impact, particularly on the cabin, which is now much quieter without the noise of a combustion engine and its associated components. Passengers will be far more aware of those little annoyances that may previously have been hidden, and this is amplified further in vehicles where there is no driver at all.

Autonomous vehicles allow greater flexibility and freedom in the cabin, but with eyes no longer required on the road, that places focus on the rest of the interior. There is no hiding from poor finishes or unsightly materials, and the overall user experience and integration of digital features becomes critical. Indeed, UX is very much a consideration for today’s perceived quality specialists.

Touchscreens must be responsive, easy to use while on the move and generally built trust with the driver or passenger. Laggy systems, core functions hidden behind multiple menus and vague icons should all be avoided. Things may get even more complex if screens continue to occupy ever more real estate in the cabin.

Now, these are issues for which dedicated UX experts are already working on, but perceived quality teams are always in the loop to ensure they tie in with the bigger picture. So too on the materials front, where a new raft of sustainable alternatives are being brought to market, each looking to bring equal or better quality with improved environmental credentials.

News Mobility

Are AI Agents Revolutionizing the Customer Experience?

NEWS MOBILITY

VW IMAGE

Everyone has experienced it: you need help with a simple query, contact customer service - and end up with a chatbot that doesn't understand the question properly or keeps you trapped in an endless loop of standard answers. The experience with AI-supported customer service solutions advertisement has often been bad. Will this ever really change? It might; with the further development of 'agentic AI', a new generation of AI agents is available that not only responds to requests, but also is claimed to be able to complete tasks independently and work together in a network of several agents.

According to a forecast by Gartner, 80 per cent of common customer service queries will be resolved without human intervention by 2029, which could lead to a thirty-per-cent reduction in operating costs. For companies, this development could offer enormous potential, but also challenges that should not be underestimated. While classic chatbots or voice-based assistants have so far only been able to provide simple answers or trigger prefabricated processes, agentic AI goes one step further. These AI agents are said to act autonomously, make decisions, and carry out tasks without the need for human intervention.

VW, Valeo, Mobileye Develop Assistants up to L2+

NEWS MOBILITY

VW IMAGE

Volkswagen, Valeo, and Mobileye are jointly developing assistance systems for models on the MQB platform. Volkswagen has announced this. The cars' driver assistance systems are to achieve up to L^{2+}, advanced semi-automated driving. "By jointly procuring hardware and software, we are streamlining purchasing processes, reducing complexity and improving efficiency," says Dirk Große-Loheide. The Chief Procurement Officer for the VW Group also sees this as a way of achieving competitive costs in the further development of the technology.

The system is intended to enable hands-free driving under certain conditions on approved stretches of highway. It also includes functions such as a traffic jam assistant, hazard detection, parking assistant, driver monitoring and a 360-degree emergency assistant. Augmented reality displays are also planned.

According to Volkswagen, the new system has a 360-degree ring consisting of several cameras and radar sensors and software-controlled functions. Valeo is supplying control units, sensors and parking systems as part of the cooperation. Mobileye is providing their Surround ADAS platform, including the EyeQ 6 High Processor and mapping technologies. The companies intend to integrate the components into one system. A central control unit will then replace several individual control units.

General News

Magna Steyr to Build E-Cars for Xpeng, GAC

GENERAL NEWS

MAGNA STEYR IMAGE

Magna Steyr is about to sign contracts with Chinese car manufacturers Xpeng and GAC. The contract manufacturer is to assemble electric cars at their plant in Graz, Austria from SKD (semi-knockdown) kits supplied by the automakers; the assemblies and parts produced in China are assembled into finished cars in Graz.

This would allow the two Chinese car manufacturers to circumvent the high additional tariffs imposed by the European Union on electric vehicles manufactured in China in October. They were a reaction to the high subsidies that Chinese manufacturers receive from the government.

The contracts could be signed as early as June. Magna Steyr, the contract manufacturing division of Magna International, urgently needs new business.

In recent years, the company has lost several orders, for example due to the withdrawal of Jaguar production and the bankruptcy of Fisker, and has therefore had to cut jobs.

Xpeng and GAC will initially only have a few vehicles built in Graz because they want to test the market situation first. Large investments are not necessary for this. Chinese manufacturers have been pushing into the European market for some time, but with limited success so far.