Thu, 27 March 2025
Weekly Newsletter

DVN Interior

NEWSLETTER #254

Editorial

The Future Of Car Interiors Awaits At Köln Workshop

MERCEDES IMAGE

As the automotive interior world rushes toward cutting-edge technology and sustainable design, the importance of a vehicle's interior has never been more crucial. More than just a cabin, the car interior is transforming into an intelligent, comfortable, personalized and sustainable living space on wheels.

This year's DVN Interior Workshop brings together designers, engineers, and innovators from automakers, tier-1 and -2 suppliers, and all other relevant sectors to explore the latest trends, innovations, and challenges in car interior design. From materials science to the integration of AI and human-centric ergonomics, from seats to cockpits, from materials to interior lighting, this workshop is sure to bring you up to speed, up to date, and in close proximity with a wide array of experts and innovators in interior engineering, designing, UX, and technology.

This week's in-depth piece previews the cockpit HMI session, in which nine lectures will describe innovative solutions to improve user experience, safety, and convenience.

Join us on 8-9 April in Köln for an immersive journey into the future of automotive interiors. Attendees will get to engage with industry leaders, see groundbreaking product showcases, and participate in thought-provoking panels and roundtables.

Don't miss it. Secure your spot now by registering **here**, and take a seat in the car interior of the future.

Sincerely yours,

Philippe Aumont
DVN-Interior General Editor

In Depth Interior Technology

Cockpit HMI Session @ DVN Interior Köln Workshop

BMW IMAGE

The status and prospects of automotive cockpit HMI (human-machine interface) technologies are constantly evolving. Companies speaking at the workshop, including Yanfeng Renault, Ceres Holographics, Elektrobit, Kurz, Antolin, Epicnpoc, Reichle, and TactoTek, are all developing innovative solutions to improve user experience, safety, and convenience. Let's look at the lay of the land, specifically focusing on these companies.

Yanfeng

YANFENG IMAGE

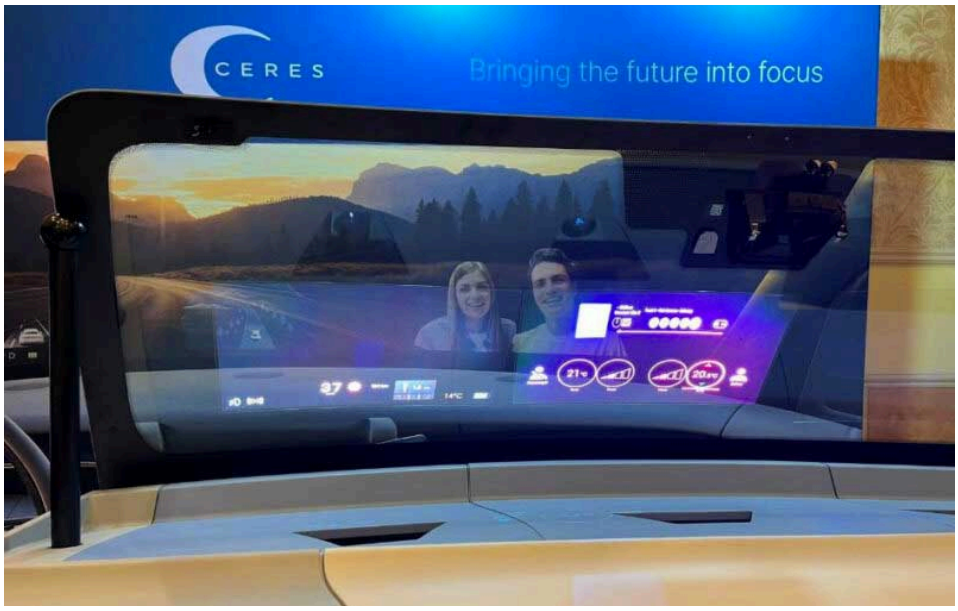
Yanfeng CTO Patrick Nebout will make a keynote speech describing Yanfeng's Chinese interior market experience. Nebout is responsible for Yanfeng's Smart Cabin, which includes group products strategies, consumer research, industrial design, and the development and introduction of new technologies and product innovations.

Renault

NEW ESPACE (RENAULT IMAGE)

Renault has been pushing the boundaries of HMI technology in their vehicles, and their lecture will focus on the development of user experience and related emotions. Their approach blends usability with aesthetic design. HMI Master Expert Xavier Chalandon will be the speaker with his extended experience on the fundamentals and finesse of HMI.

Ceres



DVN IMAGE

3D Holographic Displays systems will provide full 3D mapping or even virtual assistants displayed as holograms, changing the way users interact with the vehicle. Ceres Holographics is developing solutions for 3D display interfaces that can be integrated into automotive cockpits. CEO Andy Travers will present his lecture with partners Eastman and Covestro, entitled: HoloFlekt Windshield for Safer Driving and New Display UX.

Elektrobit

DVN IMAGE

At CES '25, Elektrobit showed their latest innovations for accelerating transformation toward the software-defined vehicle (SDV). Specifically, they showed a sleek pillar-to-pillar curved display, previewing the future of digital cockpits and in-vehicle infotainment. Senior UX-UI Manager Frank Uhlig will present a lecture entitled SDV, From Cloud to Cockpit.

Poly IC (Kurz Group)

KURZ IMAGE

Kurz is focused on enhancing UI through innovative coatings, which could lead to more intuitive touch interfaces in automotive HMI systems that can also provide haptic feedback or even change visual appearances based on the user's interactions. PolyIC, part of Kurz, is creating custom sensor solutions, and Dr Wolfgang Clement will give a lecture entitled Plastic-Based Touchscreen Panels and Displaylike Switches in Automotive HMI Applications.

Antolin

ANTOLIN IMAGE

Antolin focuses on automotive interiors, including cockpit HMI, and components like dashboards, doors, overheads, interior lighting, and user interfaces. Their lecture, to be given by Demetrio Galindez, is called New Challenges in the Integration of HMI Systems in Car Interior Trim.

Innowep

Prof. Dr. Wolfgang Weinhold will talk about HMI in a speech entitled To Touch or Not to Touch—Quality Control Priority Based on HMI Design Choices.

Today's and tomorrow's cars are being positioned and spoken of as the second living room. Preferences for the center console vary wildly. Do you prefer a clean, futuristic touchscreen, or a more haptical control with buttons and knobs? Depending on this design choice, quality control testing must be prioritized. The VDE Specification 90017 offers an all-round package for all interior designs, shown exemplarily for the iDrive system of the new BMW 4.

TactoTek

TACTOTEK IMAGE

TactoTek's IMSE technology combines electronics with molded plastic components, allowing for thinner, flexible, and cost-effective solutions for automotive HMI systems. Electronics include touch interfaces, sensors, and other electronics directly into the interior surfaces. Their lecture, from Dominique Heilborn, will be called IMSE by Tactotek: Series-Ready for Smarter, Cost-Effective Interiors.

Epicnpoc

Epicnpoc is an automotive startup company in Sophia-Antipolis, in the southeast of France, to support the user experience of customers' smart cockpits for new-mobility vehicles. They bring software engineering expertise to develop innovation prototypes. CEO-CTO Pierre Sigrist and Sales Director Olivier Cros will co-present a lecture called From SDV to Experienced Defined Vehicle: Test-Proof Your Innovation Concepts.

Reichle Technologiezentrum

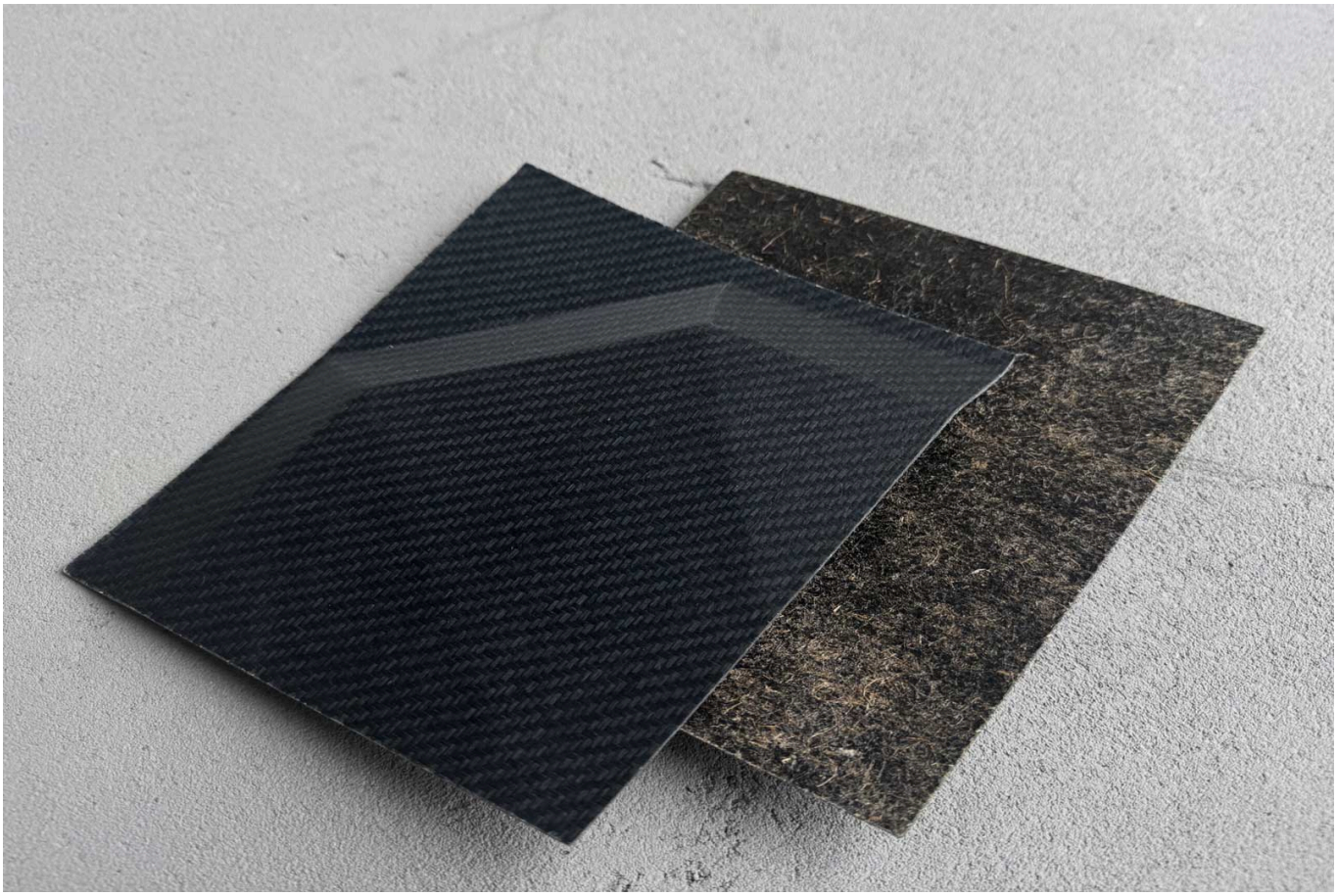
Reichle Technologiezentrum is a technology center for tool and mold making based near Stuttgart. They have five business areas—laser texturing and surface design, surface technologies, laser and TIG welding, and laser and CNC engraving. Head of Sales and Logistics Maximilian Blackwell will give a lecture entitled Laser Surface Treatment Technology—Merging Innovation, Luxury and Sustainability

This workshop session will give a wide review of the future of automotive cockpit HMI, with increasingly immersive, personalized, and intuitive systems with AI, AR, flexible and adaptive surfaces, and seamless multi-screen integration. Don’t miss it! Be in Köln on 8-9 April.

Interior News

Bcomp, SFG in Flax-Fiber Composites Pact

INTERIOR NEWS



BCOMP IMAGE

Bcomp, a clean-tech company pioneering high-performance bio-based materials that are sustainable and circular by nature, has entered into strategic collaboration with **SFG Composites** to bring flax fiber composites to the automotive industry. Bcomp will be speaking at the upcoming DVN Interior Workshop in Köln on 8-9 April.

SFG Composites (formerly Solico Composites) is a family-owned company established in 1966, specializing in SMC material production, end-to-end compression molding, and composite products manufacturing.

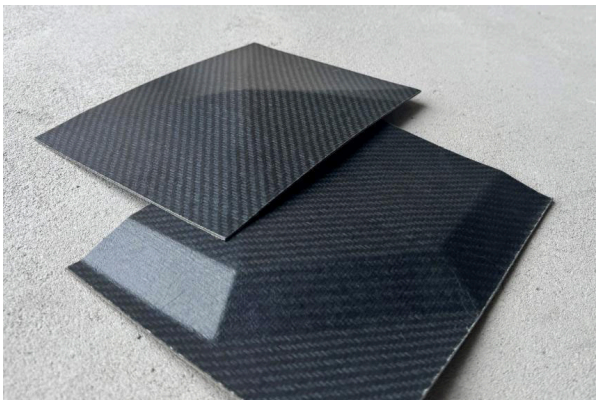
This collaboration will provide manufacturers with a high-performance, lightweight, and eco-friendly alternative to traditional plastic, glass and carbon fiber-based materials, helping drive the transition towards more sustainable vehicle production.

Bcomp's **AmpliTex™ and PowerRibs™ flax fiber technologies** provide an outstanding balance of weight reduction, safety, and durability. Compared to traditional materials, they offer:

- Down to half the weight of similar plastic parts, with equivalent performance, improving fuel efficiency and EV battery range
- Down to 60-per-cent lower CO_2 footprint versus similar plastic parts
- Better safety, with no sharp edges as found on carbon fiber
- Enhanced vibration damping, increasing ride comfort
- Circular opportunities to large-scale industries including for inevitable scrap that can be recycled into a new base material
- A full new range of sustainable design possibilities by using woven and non-woven natural fibers to fit the unique expressions of every brand

- Seamless integration into existing automotive processes, from one-step back-injection to compression molding

Bio-based materials also offer new possibilities in **interior aesthetics**. Bcomp's natural fiber composites are already used by BMW Motorsport, Volvo, and Cupra.

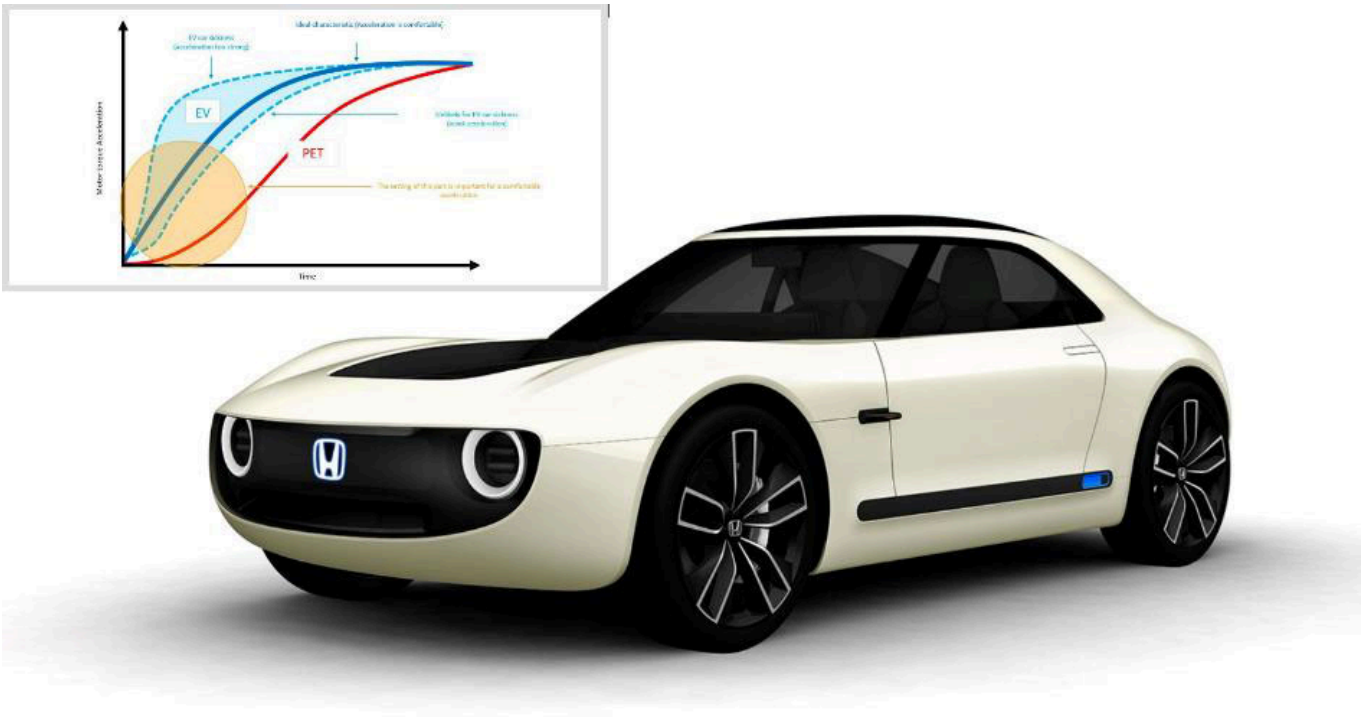


BCOMP IMAGE

SFG Composites will incorporate Bcomp's flax fiber reinforcements into their compression molding technology and manufacturing processes. With 11 presses running year-round and a production capacity of up to 6,000 tons, SFG provides high-volume manufacturing, making it easier for OEMs to adopt natural-fiber composites on an industrial scale.

How Honda, Hyundai, and Cadillac Countervail EV-Sickness

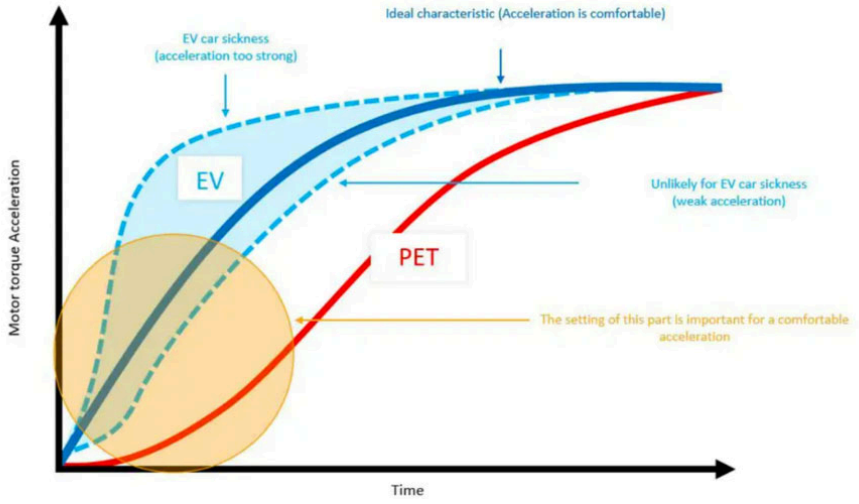
INTERIOR NEWS



HONDA IMAGE

Around 25-30 per cent of the population regularly experiences motion sickness when travelling in a car, and the issue seems to be even more severe with EVs, for two reasons: **EVS are much quieter; audiovisual and physical feedback is almost absent.** People used to driving a traditional car (almost all of us) are accustomed to the sensory input of a combustion engine, and when this is lacking, the brain senses that you are moving but not getting the sensory feedback, therefore it has trouble piecing together the situation, and so you feel dizzy.

The second issue is the regenerative braking. EVs accelerate quicker than ICE cars and decelerate silently. The brakes generate force automatically while the driver's foot is off the accelerator. Many people report this system feels like their car is applying brake pressure when they aren't expecting it, throwing off their balance. And the effect can be stronger as a passenger as you don't have control of how it's being driven, so other people's driving can make you sick, especially in turning a corner fast with increased lateral acceleration.



HONDA GRAPHIC

Most EV drivers still don't know how to modulate strong regenerative braking, and the learning curve is slow. Automakers and suppliers are working on solutions.

HONDA E:NY1

So far, software solutions have brought the best results in reducing the effects. **Honda** has reportedly used software to delay power delivery to the wheels when the driver puts their foot down to slow acceleration. Acceleration is more linear and more in line with combustion engines, without it affecting performance. Early iterations of the software have already debuted in the Honda e:NY1. Honda's future EVs will monitor pedal angle, pedal angle speed, and vehicle speed to give drivers the best experience.

2025 HYUNDAI IONIQ 5 N WITH ARTIFICIAL ENGINE NOISES AND GEARING TO MIMIC AN ENGINE

Hyundai has addressed the problem by adding fake noises that play through your stereo. Hyundai's new Ioniq 5 N, for example, comes with fake gearing and artificial engine noises, delivering a gas-powered experience.

Hyundai's decision to include the fake gearing and noises (N e-shift and N active sound+) "were not created to alleviate queasiness or motion sickness, although it is possible that these features might indirectly help reduce some of those effects for electric vehicle drivers," said a company representative.

CADILLAQ LYRIQ

Cadillac's Lyriq does not have fake engine noises but delivers seamless torque when the throttle is pressed and accelerates more gently, much like the Honda solution.

The Lyriq offers three regenerative-braking modes: off, normal, and high. The majority of Lyriq customers choose the normal mode for the 'instant feel of negative torque'. Kevin Cansiani, a senior engineer at Cadillac, says the car has 'blended braking': "The brake pedal, when pressed, will command as much regen as possible. When maxed out, only then will it transition to friction braking. You're not losing a lot of range".

VW Brings Back Knobs and Buttons

INTERIOR NEWS

VOLKSWAGEN IMAGE

Automakers have increasingly moved controls for functions like air conditioning and volume onto touchscreens. A recent Wall Street Journal article adds to the mountain of evidence that drivers hate it. Passengers, too; a 2024 J.D. Power study found car owners say passenger display screens are "not necessary," and drivers who review them negatively blame usability issues. Touchscreen controls are so **awful for safety** that **Euro NCAP is now incentivizing** real controls. Volkswagen is bringing back physical buttons and knobs for essential cabin functions in future models.

Volkswagen design chief Andreas Mindt told British car magazine Autocar that beginning with the electric ID.2all in 2026, the volume, heating, fans, and hazard lights will all have physical buttons again.

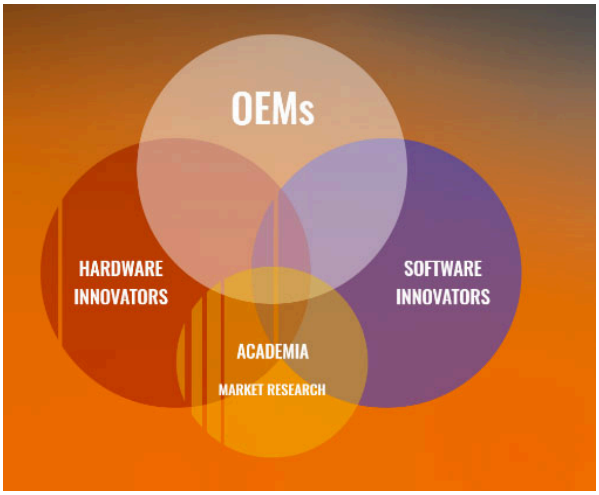
"We will never, ever make this mistake anymore," Mindt said. "Honestly, it's a car. It's not a phone: It's a car."

Audio Foundry's High-Tech Audio Design Platform

INTERIOR NEWS

AUDIO FOUNDRY IMAGES

The **Audio Foundry** platform was born in 2022 from the collaboration of **Tymphany and DSP Concepts**. Launched after a demonstration at the AES Automotive Audio Conference, the platform provides powerful tools and services to help develop advanced in-vehicle audio experiences. Matt Marchese, from Tymphany, describes it as ‘a space for OEMs and technology providers to accelerate audio development globally, with specialized equipment and expert support’.



Today the platform, based in Bridgend -UK, counts around 13 members, including for example Polestar, Sonified and different research companies and universities.

The association claims to be able to 'deliver cutting-edge services, disrupt tier-1 control, create differentiated solutions, reduce time-to-market, bridge value-chain gaps, and unlock production opportunities through collaboration'.

What is the offering for companies wishing to join? Audio Foundry members can:

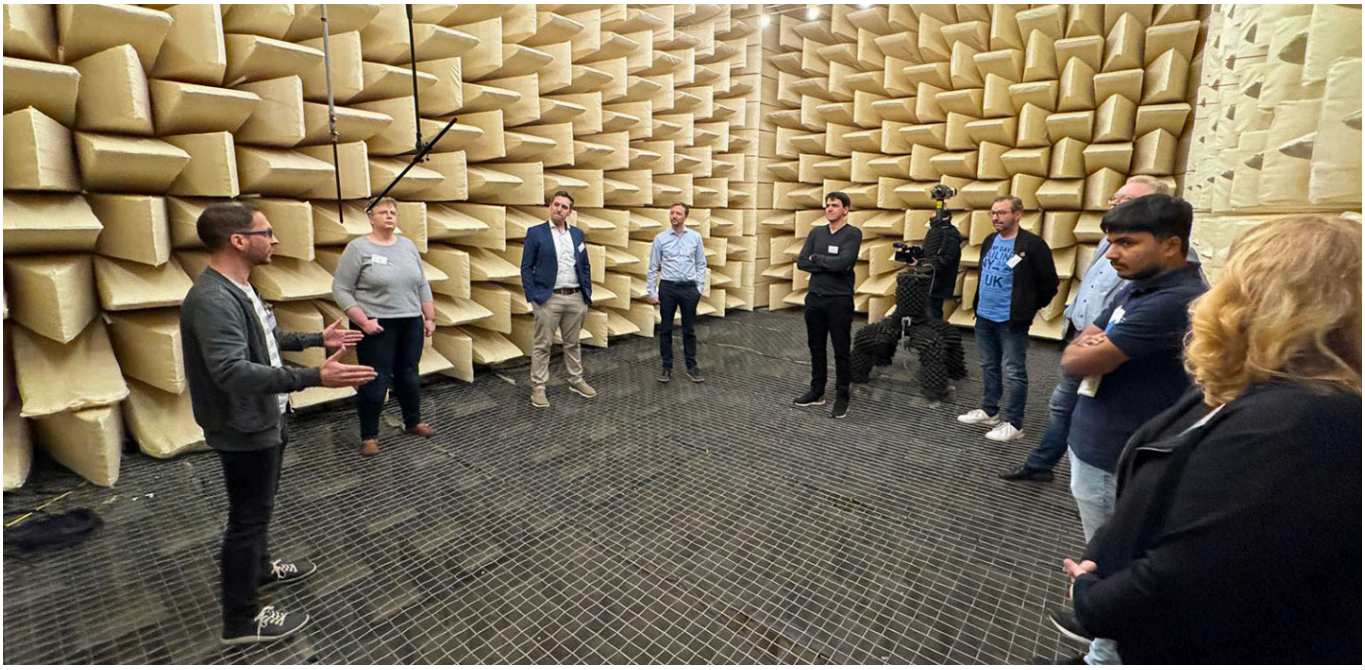
- gain access to the Makerspace, equipped with 3D printing labs for prototyping, and fully outfitted metal and wood shop
- consult with a team of experienced audio engineers for expert advice on audio requirements and insights and recommendations to optimize sound quality.
- gain access to **the RIG**, an SUV-sized development sandbox for acoustic design and system layout. The RIG features modular panels and complete networking for seamless and highly adaptable speaker placement and runs the leading software frameworks with robust onboard processing and centre console design interface access.

Since the beginning of this year Audio Foundry has announced the cooperation with three new companies:

- **MediaTek:** expert in semiconductor solutions, with expertise in developing innovative systems-on-chip (SoC). For example, the Dimensity Auto Cockpit chipsets have AI, bridging the gap between next-generation infotainment systems and audio-visual solutions
- **Denon:** with spatial audio technology, customized sound profiles, advanced noise cancellation and sustainability in audio technology
- **Bluacs:** Australia's speaker research and technology company, recognized expert in speaker distortion and low frequency speaker design. Their premier technology, the Fresh Air Speaker® enables a tenfold increase in sound pressure in the ultra-low frequency range.

Sound Must Be Audible, Tangible, Visually Perceptible: Fraunhofer

INTERIOR NEWS



FRAUNHOFER IDMT IMAGE

"Audio will play a decisive role in interior design in the future", says Christoph Sladeczek, Group Leader for Virtual Acoustics at the Fraunhofer Institute for Digital Media Technology (IDMT) in Ilmenau/

Florian Richter, Sound Developer at Mercedes-Benz in Stuttgart, demonstrated in a current model of the new E-Class, the interplay of sound, structure-borne noise and light. MB sees the acoustic interior design as a central component of the MBUX system, which makes the sound not only audible, but also tangible and visually perceptible. The active ambient lighting was developed in collaboration with the Fraunhofer IDMT, in which LED light strips synchronously transform music into a lighting mood.

Alexander von Hoffmann from Nuremberg Institute of Technology develops UX sounds that are intuitively understandable and emotionally appealing. For him, the ideal sound is one that the user immediately recognizes as a warning signal without the need for a manual. He includes synthetic engine noises that warn pedestrians of an approaching electric vehicle.

Even a pleasant, intuitively understandable UX sound is only effective if the listener locates it in the room. This is made possible by object-based audio (OBA) and the 3D audio technology SpatialSound Wave from Fraunhofer IDMT, which can be used to adapt audio content to the interior architecture and the position of the occupants in real time. Warning signals can thus be placed with spatial precision, for example in the direction in which the driver should turn.

While technologies such as object-based audio and 3D audio solutions from Fraunhofer IDMT are setting new standards for intuitive sound experiences, Novicos GmbH from Hamburg is focusing on the entire development process for acoustic systems.

This virtual prototype assembly makes it possible to develop acoustic systems more efficiently and cost-effectively because it virtually simulates and analyzes assemblies. This methodical construction kit allows sources of noise to be identified at an early stage and material adjustments to be made without having to build expensive physical prototypes.

Jörg Friedrich, Managing Director of Car Men, is currently observing that acoustic components are evolving from functional elements to status symbols. Visible loudspeakers that are enhanced with metals, lighting and elaborate decorative elements emphasize the value and style of modern vehicle interiors. According to Friedrich, the contrast between European and Asian design is particularly striking: While European manufacturers rely on the "shy tech" philosophy, wherein technology disappears inconspicuously into the design. Chinese brands such as Huawei and Xiaomi deliberately stage speakers as visual highlights.

Mercedes CLA Interior: All MB.OS

INTERIOR NEWS

MERCEDES-BENZ IMAGES

The introduction of the third CLA marks the beginning of a new era at Mercedes. Because under its bodywork is a massively upgraded electric drive. There are also far-reaching autonomous driving functions plus a combustion engine. It is the first vehicle to be based on the new MMA platform for Mercedes' entry-level models and is packed with innovations.

On 13 March, Mercedes invited journalists from all over the world to Rome to celebrate the premiere of the new CLA. These are probably the most important innovations from the German premium manufacturer in recent years.

MB.OS is the name of the complex operating system which, according to Mercedes, can be "hyper-personalized". Interaction data is connected to a cloud, the voice control system should be more powerful than ever. It is based on a water-cooled high-performance chip from Nvidia.

MB.OS enables a radical reduction in the number of control units; instead, a supercomputer with high computing power forms the new brain of the vehicle. The software can be updated via the Internet at any

time. The MBUX infotainment system takes voice assistance to a new level by combining various AI agents from Microsoft and Google. The navigation graphics are reminiscent of 3D games. If Mercedes is to be believed, the AI assistant will even be able to simulate empathy.

The CLA is optionally equipped with a superscreen that extends across the entire width of the cockpit and allows the front passenger to watch movies or play Angry Birds. Dozens of apps from sports shows to Disney Plus are integrated.

Mercedes has also upgraded the assistance and safety features. If left unattended, the CLA could cruise through the city without any further intervention from the driver at Level 2++, which enables point-to-point driving in the city. The car takes over all tasks, even recognizing traffic light signals or crossing pedestrians. The driver only has to confirm every few seconds that they are still paying attention. This feature will probably be used for the first time in China, as European regulations are still unclear.

A center airbag, installed between driver and passenger for the first time in this segment, is intended to increase passive safety in side impact. Other technical highlights include bidirectional charging and a more powerful heat pump than before, which can use several energy sources simultaneously. These include the waste heat from the battery, the drivetrain and the ambient air.

The focus on the materials glass, leather and metal is intended to give the CLA a minimalist and timeless elegance. The design philosophy of a Zen garden was the inspiration here.

The Design Lounge

Fiat Grande Panda: Giugiaro '80s Revival?

THE DESIGN LOUNGE

FIAT GRANDE PANDA (ALL FIAT IMAGES)

Stellantis' latest addition to their **Smart Car platform** used for the Citroën C3, is the Fiat **Grande Panda. Its** ambitious goal is to bring Fiat back to dominate the B segment on a global scale, in which over 23 million units have been sold to date.

Designed in Turin at the **Centro Stile,** its angular line recalls in some ways that of the **first Panda designed by Giugiaro in the 1980s**: in fact, the graphics of the grille are asymmetrical, to pay homage to its ancestor. The square theme that characterizes the front and the headlights recalls the windows of the Lingotto factory, while the shape of the dashboard and that of the central console are inspired by the oval test track located on the roof of the building.

The interiors confirm the worldwide trend for city-cars: they're not lined boring black plastic anymore, but with **fun, dynamic, colored** materials. The infotainment area with the tunnel pad, the dashboard, the vents, and the seat stitching have yellow details, conveying a joyful feeling. The main interior theme includes a special color named Blu Tasmania, which matches the color mix. For **sustainability:** each Grande Panda contains the recycled material from 140 beverage cartons. Each of the 140 beverage carton bottles used per vehicle consists of 80 per cent carton and 20 per cent non-recyclable plastics and aluminum, usually thrown

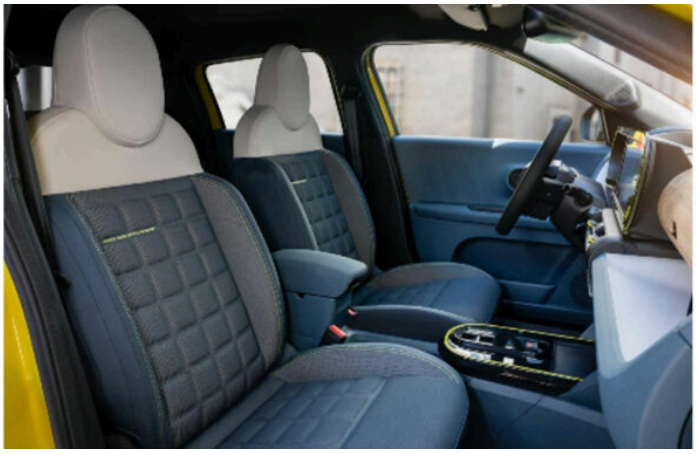
away during recycling. For each Grande Panda, Fiat recovers precisely that 20 per cent to create the vehicle interiors' blue plastic parts called Lapolen Ecotek. The result of this ecological process is explicitly perceivable through a shimmering effect given by the aluminum in the plastic blue details**.** In addition, the dashboard, with a bamboo-inspired design, is covered in a fabric made up of up to **30% real bamboo fibres**, **the Bambox Bamboo Fiber Tex®** (a subtle nod to bamboo being panda food).

The dashboard features a 10.25" display and wireless charger, automatic climate control, a center armrest. All the controls are within easy reach, including the physical climate control buttons (yes!) and those to deactivate the ADAS buzzers.

Driver Attention Alert, which detects signs of fatigue while you are driving is part of the ADAS package.

The big central storage shelf recalls the huge pocket of the original Panda, and, funny detail, a model of the latter peeps out from the transparent insert to the right of the infotainment.

Seats are nice and well-shaped, and quite high, very useful in a city and family car to have a panoramic view of what is happening. Rear seat row is 60/40 folding for added comfort, accommodating, even if a bit cramped, three adults.



The trunk on the electric version is 361 liters and can be further expanded by sacrificing the rear seats.

News Mobility

Is the UMV a New Vehicle Class?

NEWS MOBILITY

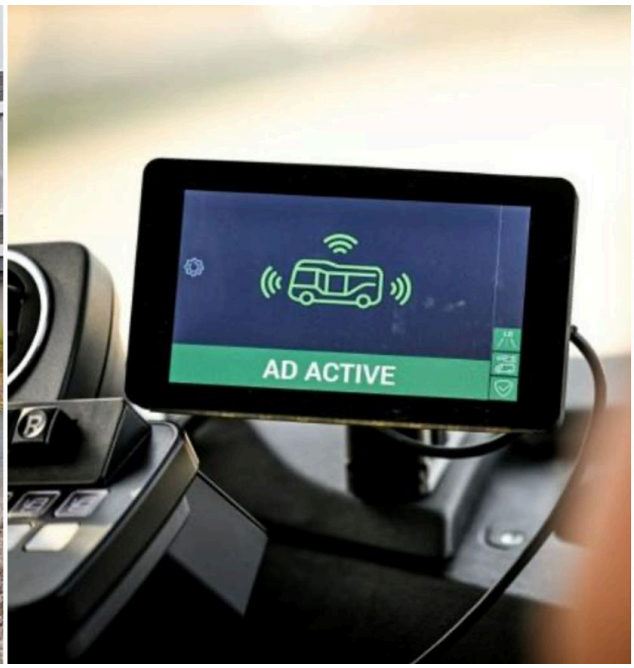
HYUNDAI IMAGE

Looking into the future can be curious and confusing: Is it still a car or already a moon rover? Or even a nimble robot? In any case, Korean car manufacturer Hyundai is fundamentally rethinking the concept of 'car' with vehicles that come along on four legs and actually can do what SUVs only promise: go far, far, far off-road. Up to now, the spindly concept cars Elevate Walking Car and Transforming Intelligent Ground Excursion Robot have only been shown at shows, but now the car manufacturer wants to launch a whole new vehicle class. Its name: Ultimate Mobility Vehicle (UMV).

No matter how rough the terrain is, the walking cars have to make progress. Rocks, fords, nasty ruts. No obstacles for the all-purpose UMV. After all, even if the vehicle does not resemble a conventional vehicle, its "feet" are still four wheels. However, they are attached to almost freely movable robot legs with various joints. Wheel hub motors drive each wheel, which further enhances the scrambling capabilities. Climbing, walking or driving, with a UMV you are spoiled for choice. Passengers are enthroned in a spacious glass cabin reminiscent of modern cable cars.

ZF Gets Green Light for Germany-Wide L4 Tests

NEWS MOBILITY



图源：采埃孚

Germany's Federal Motor Transport Authority is allowing ZF Mobility Solutions to test a Level 4 system for autonomous driving on public roads throughout Germany. Previously, the individual approvals granted applied to clearly defined stretches of road or urban areas.

According to ZF, the focus of the approval is on public—and therefore urban and regional—local public transport. Freeways, motorways, and roads with a speed limit above 100 km/h are excluded from the approval. The permit is valid until the end of 2026, and can then be extended until the end of 2028.

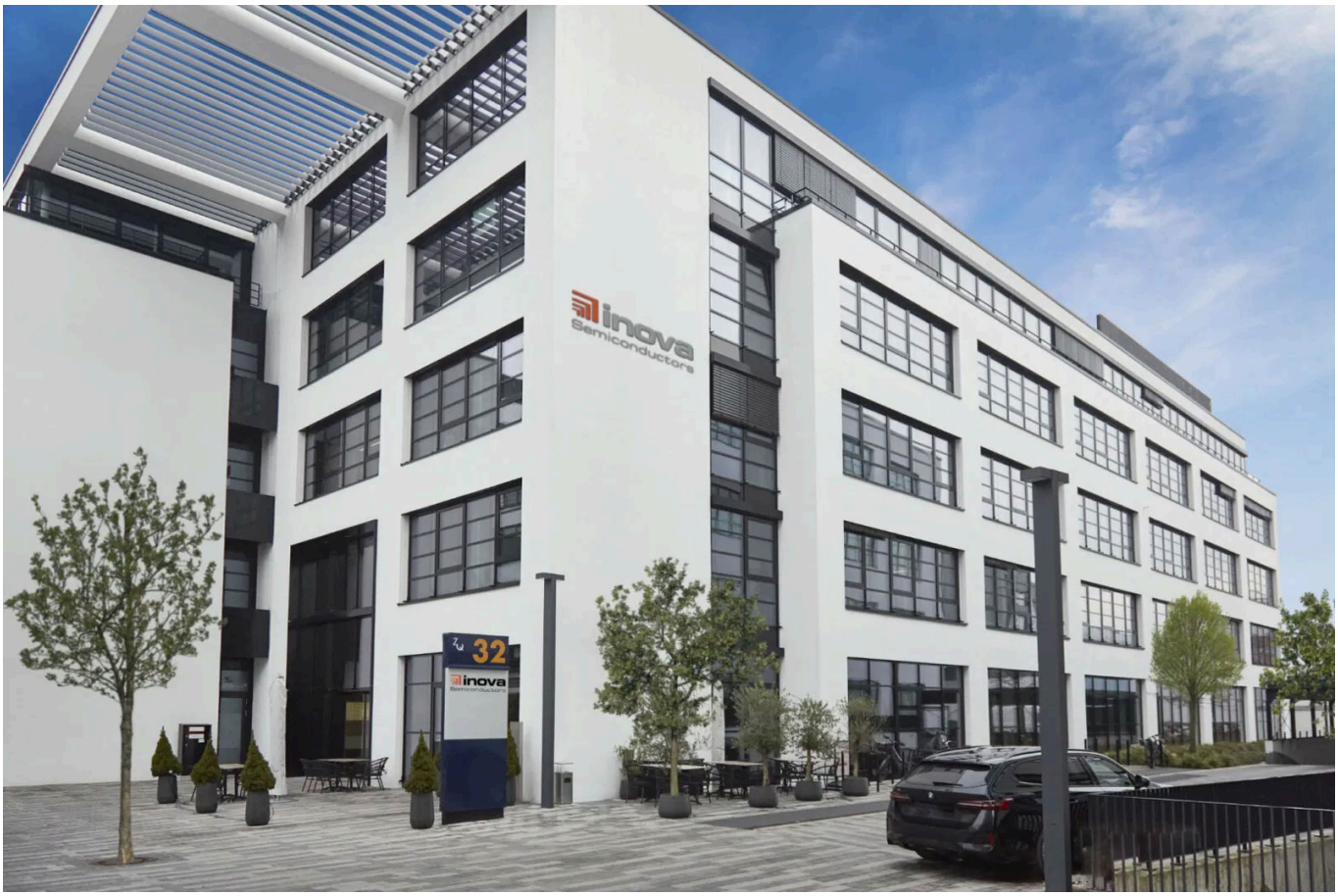
In Düsseldorf, ZF already tested an autonomous shuttle in February. During the "Xponential" trade fair for autonomous technologies and robotics, public transport operators, representatives of cities and local authorities and visitors were able to test the transport system between the trade fair parking lot and the exhibition halls in March. There was space for up to ten people. According to Messe Düsseldorf, the shuttle traveled at up to 40 km/h.

"The Germany-wide Level 4 test approval for our autonomous driving system marks a significant step towards autonomous mobility in local public transport. The KBA approval is a catalyst for the use of autonomous transport systems throughout Germany, and therefore also for the entire industry," comments Alexander Makowski, Head of ZF Mobility Solutions.

General News

Housewarming Party at Inova Semiconductors

GENERAL NEWS



INOVA IMAGE

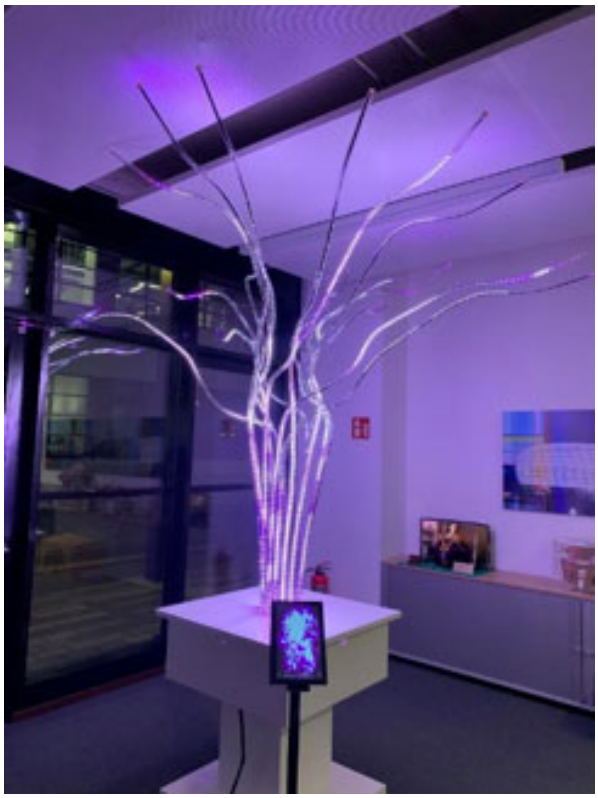
Inova Semiconductors is a private fabless semiconductor company with a new Headquarters in Munich, Germany. The company was founded in 1999; they provide semiconductor connectivity solutions to the automotive market with 25 years' experience in large volume deliveries of high-end devices. Inova has been a member of DVN Interior since the beginning, and will be speaking at the upcoming DVN Interior Workshop in Köln on 8-9 April.

INOVA IMAGE

The mission of Inova is the development, manufacturing and worldwide sales of innovative gigabit link solutions for serial data communication and smart LED solutions for the automotive market.

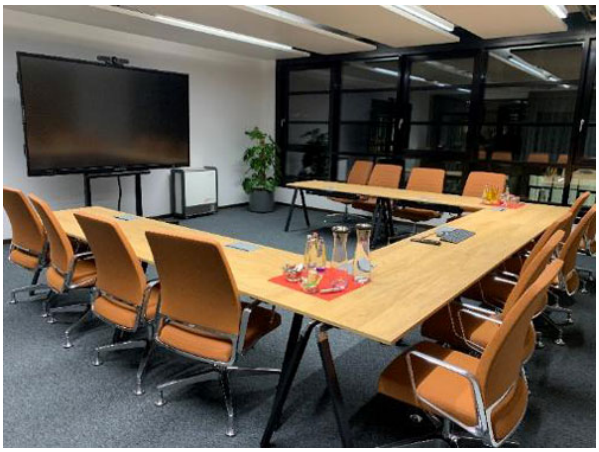
A completely different mission took place on March 18 in Munich / Zielstattstr. 32.

(R-L) ROBERT ISELE (CEO) AND THOMAS ROTHHAUPT / INOVA, CARSTEN BEFELEIN / DVN



ILAS-ISELED TREE (DVN IMAGES)

Inova hosted a housewarming party to inaugurate the new office building in Munich. Robert Isele (CEO) gave us a tour of the spacious offices and laboratories, which are spread over three floors. He explained to us that Inova would like to increase their workforce over the next few years and that additional space is therefore required.



CONFERENCE ROOM AND COLLEAGUES FROM SP3 AT THE ITALIAN RESTAURANT ON THE FIRST FLOOR (DVN IMAGES)

The offices have large panoramic windows for plenty of natural light and for a pleasant working atmosphere. However, you can only enter the laboratories if you are earthed, electrically speaking, because of the electrostatic protection measures for handling chips.

Without grounding, the inauguration of Inova's new office and laboratory space was then celebrated at the Italian restaurant on the first floor of the building with many familiar and new contacts.

Kyocera Invests in TactoTek

GENERAL NEWS

Kyocera has stepped up with €5m worth of investment for Finland-based IMSE (In-Mold Structural Electronics) expert. TactoTek IMSE technology integrates electronic functions into 3D injection-molded plastics, opening new possibilities in the design and manufacture of electronic devices.

Kyocera is developing their Haptivity haptic feedback solution by integrating piezoceramic actuators into IMSE parts. TactoTek, for their part, will gain access to Kyocera's expertise and resources to accelerate the company’s growth and market reach.

Kyocera's Haptivity platform is designed to combine force sensing and tactile feedback to create intuitive and user-friendly experiences. Force sensing activates capacitive touch interfaces with intent, while tactile feedback confirms actions by feel. Kyocera's piezoceramic actuators reflect the company's expertise in developing fine ceramic materials for industrial and consumer applications. As a TactoTek licensee, Kyocera have integrated their components within IMSE HMI surfaces. The result is thin, light, and tactile HMI solutions.

TaktoTek CEO Jussi Harvela says, "With Haptivity, Kyocera fulfils the intent of TactoTek licensing model, enabling our partners to combine IMSE technology with their own strengths to secure and extend their market position. Kyocera's significant investment in TactoTek current financing round reflects the market potential of IMSE technologies, including Kyocera's current customers and prospects."