Brand with the four rings shines at world’s largest lighting congress

- Nobel Prize winner and Audi guest speakers are at podium at ISAL 2015
- IAA concept car has future-oriented OLED lighting technology

Ingolstadt, September 23, 2015 – At the eleventh International Symposium on Automotive Lighting (ISAL 2015), Audi presenters will offer insights into the lighting technology of the future. The congress begins on September 28, 2015 in Darmstadt. After the keynote address by Shuji Nakamura, the 2014 Nobel Prize winner for physics, Audi guest speakers will give presentations on the latest trends and developments at this largest and most influential conference for automotive lighting technology. The next step in automotive lighting technology is also being shown in the latest IAA concept car with the new Matrix OLED technology.

“This symposium is an important forum for Audi to put lighting technology into the spotlight. Our customers will benefit from the results of these discussions among professionals,” explains Dr. Wolfgang Huhn, Head of Development for Lighting at Audi. The premium brand is a leader in lighting technology; among other achievements, it has established LED headlights on the market. “Technical progress and larger production volumes give us the opportunity to offer customers excellent lighting technology at an attractive cost-benefit ratio,” says Huhn. “At Audi, lighting developers work closely together with designers. On a team, they create a perfect harmony in the car design as well as a coherent appearance of the lighting technology and its visual illumination. The driver also benefits from this coherent look.”

Immediately following the keynote address by Nobel Prize winner Shuji Nakamura, Stephan Berlitz, Head of Development for Lighting Innovations at Audi, opens the 2015 ISAL lecture series with his presentation on “The future of lighting technology”. In addition to standard technologies that are currently available, such as Matrix LED headlights and lighting assistance systems, the Audi presenters will also address future-oriented themes such as Matrix Laser headlights. In this technology, a laser that is spatially separate from the headlight generates the light. A micro-mirror then produces an intelligently controlled light distribution pattern.
“The Matrix LED and Matrix Laser technologies still have a lot of potential,” says Stephan Berlitz. Audi plans to use camera systems to control the light very precisely. In this way, Car-to-X technologies – the interplay with other cars and the infrastructure – can also be used where the driver’s own visual field ends. “We are setting the pace for the entire technical field, in which the interplay of aesthetics, dynamics and interaction play a major role,” emphasizes Berlitz. “We are developing our lighting to react more intensively with other participants in traffic and the environment.” One example of this is what is known as construction zone lighting: Here, Audi engineers are currently working on technology that projects the vehicle’s width onto the roadway as precisely defined strips of light. They give drivers a feeling of being well guided as they travel safely through the narrow bottleneck areas.

As the leading brand in automotive lighting technology, Audi continues to set milestones. From LED daytime running lights in the Audi A8 W12 (2004) and the first all-LED headlights in the Audi R8 (2008) to the networking of headlights with navigation data in the Audi A8 (2010) and dynamic display of turn signal lights in the Audi R8 (2012) and finally the Matrix LED headlights in the Audi A8 (2013) and a high-beam implementation with a laser spot in the Audi R8 LMX (2014). The latest lighting innovation is a traffic sign anti-glare function in the Audi A4 with Matrix LED headlights (2015).

The brand with the four rings is driving progress in lighting even further. At the 2015 IAA, Audi showed the Audi e-tron quattro concept car with Matrix OLED lights. OLEDs (Organic light emitting diode) are merging high tech and design in an ideal way. In each OLED unit, two electrodes – at least one of which must be transparent – incorporate numerous thin layers of organic semiconductor materials. Their light attains a new level of homogeneity, and its dimming is continuously variable. It does not cast any shadows and does not require any reflectors, light guides or similar optical parts. New flexible substrate materials lend themselves to three-dimensional forming, and this will open up entirely new creative spaces for designers. Audi wants to introduce OLED technology into the tail lights of production cars for the first time.

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In 2014, the Audi Group delivered approximately 1,741,100 cars of the Audi brand to its customers. The company achieved revenue of €53.8 billion and an operating profit of €5.15 billion in 2014. Audi operates globally in more than 100 markets and has production facilities in Ingolstadt and Neckarsulm (Germany), Győr (Hungary), Brussels (Belgium), Bratislava (Slovakia), Martorell (Spain), Kaluga (Russia), Aurangabad (India), Changchun and Foshan (China) as well as Jakarta (Indonesia). The brand with the Four Rings will start producing cars in Curitiba (Brazil) this year and in San José Chiapa (Mexico) in 2016. Wholly owned subsidiaries of AUDI AG include quattro GmbH (Neckarsulm), Automobili Lamborghini S.p.A. (Sant’Agata Bolognese, Italy) and sports motorcycle manufacturer Ducati Motor Holding S.p.A. (Bologna, Italy). The company currently employs approximately 80,000 people worldwide, thereof around 58,000 in Germany. Total investment of about €24 billion is planned from 2015 to 2019 – primarily in new products and sustainable technologies. Audi is committed to its corporate responsibility and has anchored the principle of sustainability for its products and processes in its strategy. The long-term goal is CO₂-neutral mobility.