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This report is written primarily for automotive lighting and DA experts who were not present at VISION 2012 or who may have missed important lectures there. In around 80 pages, we précis and analyse the main presentations.

This year, VISION's lectures, posters, night-drive demonstrations, booths, and for the first time technological presentations, combined to make an exceptional congress on new technologies with emphasis on the unprecedented speed and proliferation of new and newly-mature technologies and techniques. Around 400 people attended.

The lectures cover:

- **LED technology** and its continuing improvements in optics, thermics, electronics, architecture, and power savings;
- **Adaptive light systems**, evolving very fast with the arrival of cameras to implement intelligent automatic beam selection with the several corresponding adaptive systems, high beam assistant, horizontal and vertical adaptive cutoffs, and glare free high beam;
- **Systems combining LED and adaptive light** including LED arrays to produce AFS, matrix-beam systems, and spot marking light functions;
- **Driver assistance systems** combining ADAS and lighting

We were impressed by the charismatic presentations by Rainer Neumann, Michael Hamm, Michael Kleinkes, the fantastic slides and video of Carlos Elvira, Ernst-Olaf Rosenhahn, Thomas Reiners, Masaru Sasaki, and the technical lectures of Benoist Reiss, Pierre Albou, and Michael Scholl, amongst others.

In the second part of the report, we present the drive night tests, with the main strong points:

- Performance differential with HID or LED is such that driving at night in bad weather with legal halogen headlamps can legitimately be considered dangerous;
- LED headlamps have evolved significantly since the 2010 demonstration, and can produce a good light effectively equal to HID in terms of coverage and beam flux, which permits safe driving at night in bad weather;

- Glare-free high beam is at long last a dependable, high-performance feature which permits maximum possible seeing range at all times for the driver, even in traffic.

In the third part, we summarise the best technical presentations, presentations introduced for the first time at VISION this year.

The report closes with pictures of the VISION 2012 lighting community gathering and exchanging ideas about automotive lighting.