



INTERNATIONAL CONFERENCE
AND EXHIBITION

OCTOBER
6-7
2010

Versailles
Satory
France

V.I.S.I.O.N

VEHICLE AND INFRASTRUCTURE
SAFETY IMPROVEMENT IN
ADVERSE CONDITIONS AND NIGHT DRIVING



V.I.S.I.O.N
CONGRESS
2010

PROGRAMME



OVERVIEW AND OBJECTIVES

In the light of the successes of the V.I.S.I.O.N. Congresses en 2002, 2004, 2006 and 2008, SIA (French Society of Automotive Engineers) will host this event again in 2010. 2010 will see the progress of many innovations in lighting systems (LEDs / OLED, AFS, night vision, adaptive lighting, ARS...) and detection systems (camera, Radar, Lidar, ultrasonic...). The 2010 congress will highlight affordable technologies in order to improve worldwide safety. This event will bring together the major players in this field to address key topics for vision and road safety, especially lighting systems and driving assistance. In addition, an exhibition and night drive tests with 20 expected prototype vehicles will take place to demonstrate many recent innovations in lighting and detection systems.

Conference Chairman: Hector FRATTY

ORGANISING COMMITTEE

Jean-Marc BLOSSEVILLE - INRETS/LIVIC
Jean-François BOISSOU - PSA PEUGEOT CITROËN
Jean-Paul CHARRET - VALEO
Hector FRATTY - DRIVING VISION NEWS
Nathalie LARRIBEAU - PSA PEUGEOT CITROËN

Paul-Henri MATHA - RENAULT
Joachim MATHES - VALEO
Daniel PFRIMMER - SIA
Didier WAUTIER - RENAULT

SCIENTIFIC COMMITTEE

Accident Research and Human Factors

Yves PAGE - LAB, France

Driver Assistance Systems

Didier AUBERT - INRETS, France
Uwe BEUTNAGEL-BUCHNER - BOSCH, Germany
Jean Marc BLOSSEVILLE - INRETS, France
Alberto BROGGI - VisLab & University of Parma, Italy
Jean-François BOISSOU - PSA PEUGEOT CITROËN, France
Arnaud DE LA FORTELLE - MINES PARISTECH, France
Lali GHOSH - DELPHI, Germany
Matti KUTILA - VTT, Finland
Patrice REILHAC - VALEO, Germany
Magnus RILBE - VOLVO, Sweden
Gideon STEIN - MOBILEYE, Israel
Bo WASS - AUTOLIV, Sweden
Didier WAUTIER - RENAULT, France

Lighting Systems

John D. BULLOUGH - LRC RENNELAER POLYTECHNIC INSTITUTE, USA
Jean-Paul CHARRET - VALEO, France
Hans-Theo DORISSEN - HELLA, Germany
Hector FRATTY - DRIVING VISION NEWS, France
Michael HAMM - AUTOMOTIVE LIGHTING, Germany
Wolfgang HUHN - AUDI, Germany
Pr. KHANH - TUD Darmstadt, Germany
Nathalie LARRIBEAU - PSA PEUGEOT CITROËN, France
Paul-Henri MATHA - RENAULT, France
Rainer NEUMANN - VISTEON, Germany
Ralf SCHÄFFER - PHILIPS, Nederland's
Ingolf SCHNEIDER - OPEL, Germany
Masaru SASAKI - KOITO, Japan

ORGANISING COMMITTEE

The Société des Ingénieurs de l'Automobile (the French Society of Automobile Engineers) is a society officially considered as serving the public interest. Its purpose is to represent technical excellence in the automobile industry through its expert and knowledge sharing networks. The SIA draws its members from the ranks of automobile engineers and technicians and all those active in promoting automotive engineering. SIA has 2 000 members and a network of over 8 000 engineers, technicians and research workers behind it.



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 www.sia.fr





VISION PROGRAMME - OCTOBER 6, 2010

- 8:00 Participants registration
 9:00 Opening Speeches
Martin HAUB – Valeo, France

SESSION 1 : XENON

Chair : Kamislav FADEL - AL

- 9:10 The affordable, green and superior head-lighting solution for mid segments: Xenon 12V
J-S. STRAETMANS - Philips Technologie, Germany
 9:30 25 W BiXenon Systems and LED Technology to face the changing requirements in OEM's Low Energy Lighting Portfolio
M. HAMM - Automotive Lighting, Germany
 9:50 Low Power Bi-Xenon Headlamps
R. NEUMANN - Visteon Corporation, Germany
 10:10 A way to address future AFS challenges: integrated mechatronics solutions
C. HABEGGER - SONCEBOZ, Switzerland
 10:30 General discussion on Xenon
10:40 Break and exhibition visit

SESSION 2 : LED

Chair : Wolfgang HUHN - Audi

- 11:10 Fascination LED Headlamp – Dynamics through Technology and Design
M. KLEINKES - Hella KGaA Hueck & Co., Germany
 11:30 Adaptive Driving Beam with LED
V. SANCHEZ, B. REISS - Valeo Lighting Systems, France
 11:50 Enabling Maximum Design Diversity and Optimized Illumination in Vehicle Lighting using Customized LEDs
T. MANTH, B. WALDMANN - Odelo LED GmbH, Germany
 12:10 Requirements for the next Generation LED for Signalling- and DRL Functions
M. BRANDL, U. STREPPPEL, K-J. LANG - OSRAM Opto Semiconductors GmbH, Germany
 12:30 OLEDs - Potential and challenges for automotive lighting
K. DÜRKOPP, W. POHLMANN, T. RUTHS - Hella KGaA Hueck & Co., Germany
 12:50 General discussion on LED
13:00 Lunch and exhibition visit

SESSION 3 : LED

Chair : Hans-Theo DORISSEN - Hella

- 15:00 Regulatory Amendments for application of LEDs in Automotive lighting
W. VAN LAARHOVEN - KEMA Quality B.V., The Netherlands
 15:20 Optimization of new thermal management system for LED head Lamp
S-M. KIM, K-S. KIM, Y-G. JANG - Hyundai MOBIS, Korea
H-W. NO - Hyundai Motors, Korea
 15: 40 Cost-effective solutions with LEDs for automotive lighting
J. SCHUG - Philips Technologie GmbH, Germany
 16:00 Compact Low Cost LED Headlamp
L. M. RICE - OSRAM Sylvania, USA
 16:20 LEDS headlamp on the Nissan leaf
O. BARTHOMEUF - ICHIKOH, France
 16:40: General discussion on LED
16:50 Break

SESSION 4 : VISIBILITY AND GLARE

Chair : Rainer NEUMANN - Visteon

- 17:10 Reflection properties of road surfaces for assessing visibility conditions
S. KÖHLER - L-LAB, Germany
 17:30 On the impact of the lamp spectra on the detection and Conspicuity of Road Markings at night time driving
C. SCHILLER, T. QUOC KHANH - Technische Universität Darmstadt, Germany
 17:50 Study on spot lamps for early detection of pedestrians and obstacles
Y. KASAI, M. KOMATSU - Koito Manufacturing Co., Japan
 18:10 Optimized dynamic levelling system
P-H. MATHA, Renault, France
 18:30 Field Study: Photometrical Measurements of Headlamps - Efficacy of Headlamp Cleaning Systems
S. SÖLLNER, N. HAFERKEMPER, D. POLIN, T. QUOC KHANH - Technische Universität Darmstadt, Germany
 18:50 General discussion on visibility and glare
 19:00 Presentation night drive
 19:10 Shuttle service to the Night Drive Tests Circuit in Satory.

VISION PROGRAMME - OCTOBER 7, 2010

SESSION 5 : DA FUNCTION

Chair : Jean-Paul CHARRET - Valeo

- 08:30 Assessing Safety Outcomes Related to Driver Visibility and Behavior
J. D. BULLOUGH - Rensselaer Polytechnic Institute, USA
- 08:50 Lighting based Driver Assistance Systems as a Key Pillar for future Safety Functions
A. TEWES, K. TALMI – Hella Aglaia Mobile Vision GmbH, Germany
C. AMSEL - Hella KGaA Hueck & Co., Germany
- 09:10 Lighting assistance as part of the Integrated Safety
S. BERLITZ - AUDI AG, Germany
- 09:30 Driver assistance in construction areas
M. STRAUSS - Continental Division Chassis & Safety /Advanced Engineering, Germany
- 09:50 A trip from Italy to China using autonomous vehicles: behavior and testing
P. GRISLERI, S. CATTANI, M. FELISA - VisLab, University of Parma, Italy
- 10:10 Cooperative Vehicles to Facilitate the Crossing of Intersections by Emergency Service Vehicles
J. IBANEZ-GUZMAN, A. MOKADDEM, S. LEFEVRE - Renault S.A.S., France
S. RODHAIM - Viveris Technologies, France
- 10 :30 General discussion on DA function

10:40 Break

SESSION 6 : DA TECHNOLOGY

Chair : Jean-François BOISSOU - PSA

- 11:00 Predicting the Vehicle Path in a Night Vision System
J. ELBORNSSON SKOGSTJÄRNA, P. CRONVALL - Autoliv Electronics AB, Sweden
- 11:20 Video-based driver assistant systems with the TRW Scalable Camera
G. SCHNEIDER - TRW Automotive, Germany
- 11:40 Multi-application designed to cost 76/79 GHz radar network
A. SERVEL, B. DELORD – PSA Peugeot Citroën, France
P. MALLEJAC - TRW Autocruise, France
- 12:00 Integrated design and functional solution for a driver assistance camera with imager based rain-sensing capability
F. BLÄSING - Leopold Kostal GmbH & Co. KG, Germany
- 12:20 Low cost next generation multi sensor Night Vision system
R. SCHWEIGER, S. FRANZ, O. LÖHLEIN, W. RITTER - Daimler AG, Germany
J-E KÄLLHAMMER, Autoliv Development AB, Sweden
- 12:40 General discussion on DA technology

12:50 Break and Exhibition Visit

SESSION 7 : DA TOOLS

Chair : Didier WAUTIER - Renault

- 14:20 Effective Assessment of Pedestrian Visibility in the Nighttime by using Driving Simulator
Y. HORII – Denso Corporation, Japan
S. FUJIYOSHI – Toyota Motor Corporation, Japan
T. MIKAMI, K. MORIKAWA, T. WADA, S. DOI – Kagawa Univ., Japan
- 14:40 Human detection from mobile work machines with far-infrared camera and sensor data fusion
P. PYYKÖNEN, J. LAITINEN, J. AHTIAINEN - VTT Technical Research, Finland
- 15:00 Continuous evaluation of methods for sensor data fusion of video based driver assistance systems by using virtual test driving
M. ZIEGENMEYER, D. NIENHÜSER, T. SCHAMM, T. GUMPP, T. BÄR, J.M. ZÖLLNER - FZI Research Center of Information Technologies, Germany
J. HENNING, B. SCHICK - IPG Automotive GmbH, Germany
- 15:20 A new generic virtual platform for cameras modeling
D. GRUYER - LIVIC, France
N. HIBLOT, B. MONNIER - CIVITEC, France
P. DE SOUZA, G. LE BOUDEEC – Institut d'Optique, France
- 15:40 New advanced data analysis for road interpretation using mobile mapping system
J. NINOT, L. SMADJA, T. GAVRILOVIC – VIAMETRIS, France
- 16:00 General discussion on DA tools

16:10 Conclusion speech

16:20 End of Conference

NIGHT DRIVE TESTS ON OCTOBER 6TH

The tests will be carried out on the Satory Circuit, in Versailles.
A shuttle bus will take the attendees there and back to the conference venue.
You'll have the opportunity to test all the demo cars and discover new technologies..

Demo Cars expected

Audi, Autoliv, Automotive Lighting, Bosch, Continental Automotive, Hella, IAV, INRETS, Koito, Livic, Mercedes, Nissan, Osram, Philips, PMD Technologie, PSA Peugeot Citroën, Renault, TRW, Visteon, Valeo, Volvo, ZKW.



POSTERS SESSION

A poster area will be especially dedicated to the posters exhibition of more than 20 companies, laboratories and other industries specialized in the Conference field.

COMPANIES REPRESENTED

AUDI AG, Germany
Autoliv Electronics, Sweden
Automotive Lighting, Germany
CIVITEC, France
Continental Corporation, Germany
Delphi, Germany
Denso Corporation, Japan
FrattyConsulting, France
FZI Research Center of Information Technologies, Germany
Hella KGaA Hueck & Co., Germany
Hyundai MOBIS, Korea
ICHIKOH, France
INRETS / LIVIC, France
Institut d'Optique, France
IPG Automotive GmbH, Germany
Kagawa University, Japan
KEMA Quality B.V., The Netherlands
Koito Manufacturing Co. Ltd, Japan
L-LAB, Germany
Leopold Kostal GmbH & Co. KG, Germany

LIVIC, France
MobileEye Vision Technologies Ltd, Israel
Odelo LED GmbH, Germany
OSRAM Opto Semiconductors GmbH, Germany
Parma University, Italy
Philips Technology, Germany
PSA Peugeot Citroën, France
Renault, France
Rensselaer Polytechnic Institute, USA
Robert Bosch GmbH, Germany
Sonceboz, Switzerland
Technical University Darmstadt, Germany
Toyota Motor Corporation, Japan
TRW Automotive, Germany
Valeo, France
VIAMETRIS, France
VisLab, University of Parma, Italy
Visteon Corporation, Germany
VTT Technical Research, Finland
Viveris Technologies, France

EXHIBITION AND ADVERTISING OPPORTUNITIES

An EXHIBITION will also take place during the two days of the Conference.
For further information, please do not hesitate to contact us.

Your contact:
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GENERAL INFORMATION



OFFICIAL LANGUAGE

English: no simultaneous translation

VENUE / ACCESS

La Ferme du Manet • 61 avenue du Manet
78 180 Montigny le Bretonneux
Phone +33 (0)1 30 12 30 30
www.ferme-du-manet.com



Public transportation

- RER C direction St Quentin en Yvelines
→ Stop at Station “Trappes”
- Bus 414 (bus stop beside the station)
→ Bus Stop “College St François d’Assises”
(100m from the premises)



By car:

• From Paris Porte de St Cloud: A13 to A12

- Direction Trappes, Rambouillet till the junction between A12 and RN10.
- After 300 meters, turn right just before the petrol station and follow Montigny, Guyancourt, ZA de Trappes.
- At the first light turn right then follow the sign Ferme du Manet.

• From Velizy, Créteil, Paris Pont de Sèvre through A86

- After the tunnel, take the exit « Guyancourt, Voisin le Bretonneux, Montigny ».
- Follow the D127 ahead, till the end of the road.
- At the last light, turn right on the D36, direction Montigny, then follow the sign Ferme du Manet.



HOTEL ACCOMMODATION

We have selected a list of the most convenient hotels situated near the “Ferme du Manet”.
Delegates are encouraged to make their own hotel reservations early, directly with the hotels of their choice

Just aside from the Conference place

AUBERGE DU MANET***

61, Avenue du Manet
78 180 MONTIGNY LE BRETONNEUX
Phone: +33 (0)1 30 64 89 00
Fax: +33 (0)1 30 64 55 10

Less than 5 km

A shuttle service will be organised from the 2 following hotels to take you to the conference venue

MERCURE***

9 place E.F Choiseul
78180 MONTIGNY LE BRETONNEUX - FRANCE
Phone: +33(1)39 30 18 00
Fax : +33 (1)30 57 15 22
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CAMPANIL**

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Fax : +33 (1)1 30 44 27 37
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REGISTRATION FORM

VISION CONFERENCE 2010
October 6 & 7, 2010 – Versailles, France

Ref: 2010-04

Please complete and return this form to:
SIA – 79, rue Jean-Jacques Rousseau – F-92158 Suresnes Cedex
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■ Please use BLOCK CAPITALS when filling in this form

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Family Name: First Name:

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■ Registration fees (*Tick as appropriate*)

1028,56 € VAT Incl. (860 € VAT Excl.) SIA Members

1160,12 € VAT Incl. (970 € VAT Excl.) Non Members

580,06 € VAT Incl. (485 € VAT Excl.) Researchers, Labs and Small Firms (< 100 people).

FREE . Speakers (1 per conference) Session Chairmen

Preferential rates for students and retired – For further information, contact us

■ Payment

By check in Euros made payable to: “Société des Ingénieurs de l’Automobile”

By bank transfer in Euros made payable to: “**Société des Ingénieurs de l’Automobile**” in Euros made payable to: “Société des Ingénieurs de l’Automobile”

(please attach a copy and precise name and ref: **VISION 2010-04**)

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3 or 4 digit CVV or CVC number (on back of credit card): ___ Cardholder’s name:

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Date and signature:

Company stamp:

REGISTRATION CONDITIONS

- Registration fees include participation in the conference, CD of proceedings, book of abstracts, refreshment breaks, lunches, and cocktail.
- Where it is not possible to send the payment together with the form, each registration should be accompanied by an official purchase order. Failing reception of an official purchase order or payment on the day of the symposium, we regret that you will not be allowed entry to the symposium.
- When we have received the registration form, we will send you a confirmation letter and an invoice. Please indicate the accounts department address where necessary.
- In case of cancellation before September 6, 2010 30% of the registration fees will be retained by the organisers. After this date, the entire registration fee will be retained. Registered participants not able to attend may nominate a substitute. Written notice must be provided.



Créateur d'optiques

