October 7 & 8, 2008
Versailles Satory - France
Night Drive Test on the 7th, Satory

V.I.S.I.O.N

Moving forward together
Progressions ensemble
OVERVIEW AND OBJECTIVES

In the light of the successes of the V.I.S.I.O.N. Congresses in 2002, 2004 and 2006, SIA (French Society of Automotive Engineers) will host this event again in 2008. 2008 will see the progress of many innovations in lighting systems (LEDs / OLED, AFS, night vision, beam shaping systems, ARS..) and detection systems (camera, radar, lidar, ultrasonic...). SIA is dedicated to the sharing and promotion of the automotive technology and through the V.I.S.I.O.N Congress seeks to raise awareness of the latest research and development in this area amongst engineers and road safety professionals.

CONFERENCE CHAIRMAN: HECTOR FRATTY

SCIENTIFIC COMMITTEE

Accident research and human factors
Jude CHARLTON, MUARC
Viola CAVALLO, INRETS
Yves PAGE, RENAULT
Michael STANZEL, VW
Pierre VAN ELSLANDE, INRETS

Driving assistance
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Didier WAUTIER, RENAULT

Lighting systems
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Christophe CHENEVIER, Renault
Emmanuel D’ORSAY, SIA
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Martin ENDMARK, BMW
Hector FRATTY, DRIVING VISION NEWS
Michael HAMM, AUTOMOTIVE LIGHTING
Wolfgang HUHN, AUDI
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Laurent SEREZAT, PSA Peugeot Citroën
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Kiyoshi WADA, KOITO

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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.

SIA
79 rue Jean-Jacques Rousseau - 92158 Suresnes Cedex
• France
Tel : +33 1 41 44 93 70 • Fax : +33 1 41 44 93 79
www.sia.fr
08:30 Participants registration
09:00 Opening Speeches

Session 1: Accidentology and Human Factors
Chair: Yves PAGE - Renault

09:10 Human Detection Failures in adverse conditions and safety functions devoted to vision and visibility: an innovative way to improve safety benefit.
P. VAN ELSLANDE, K. FOUQUET – Inrets, France

09:30 Bright colours cut the odds of a motorcycle crash: a case-control study
A. MARINONI, M. COMELLI, A. MORANDI – Università di Pavia, Italy

09:50 Visual perception model of road users in nocturnal fog by videophotometric image analysis
M. COLOMB, P. MORANGE, F. FOURNELA – Ponts et Chaussées, France

10:10 The assessment of day time running light experiment
J. CHAPELON – Sécurité routière, France

10:30 General discussion on Accidentology and Human Factors

10:40 Break and exhibition visit

Session 2: Lighting Systems / Styling and Safety
Chair: Jean Paul CHARRET - Valeo

11:10 Benefits of Headlamp Leveling and Cleaning for Current U.S. Low Beams
M. SIVAK, M. J. FLANNAGAN, B. SCHOEETTE - University of Michigan, USA

11:30 Advanced Lighting Technology: Vision and Strategy between customer perception, Styling Opportunities and safety features.
R. NEUMANN – Visteon, Germany

11:50 Night-time visibility as a function of headlamp beam pattern and pavement reflection properties
E. DUMONT, R. BREMOND – Ponts et Chaussées, France

12:10 Investigation on automotive rear lamp intensities using a daylight simulator
A. KALtenbach - BMW Group, Germany

12:30 The new Peugeot 308 rear lamp with Hella light curtain technology: How to push innovation concept into an industrial application
M. KLEINKES - HELLA KGaA Hueck & Co, Germany

12:50 General discussion on Lighting Systems / Styling and Safety

13:00 Lunch and exhibition visit

Session 2: Lighting Systems / LED technologies
Chair: Wolfgang HUHN - Audi

15:00 Full-LED-Headlamps - Introduction in serial production and future applications
M. KLEINKES – HELLA KGaA Hueck & Co., Germany

15:20 The introduction of World first full LED headlamp. Records of Advances in Technology and Energy Saving
M. HAMM - Automotive Lighting, Germany

15:40 LEDs Front Lighting: From Compact Bifunction module to Full AFS LEDs: Headlamp
B. REISS – Valeo, France

16:00 LED headlamp and its electronic: when does the boom start?
S. GIANORDOLI - SiemensVDO Austria, Continental Corporation

16:20 Photometrical and physiological aspects of the today LED-headlamp cars
C. SCHILLER, T. QUOC KHANH – Technical University Darmstadt, Germany

16:40 General discussion on Lighting Systems / LED technologies

16:50 Break and exhibition visit

Session 2: Lighting Systems / Adaptive lighting
Chair: Michael HAMM – Automotive Lighting

17:20 Lighting based Driver Assistance Systems – System Approach and Safety Benefits
C. AMSEL - HELLA KGaA Hueck & Co., Germany

17:40 Investigation of Adaptive Front-lighting System in human machine interface as driver assistance
Y. HORII, M. MORISHITA - Denso Corporation, Japan

18:00 Challenges and Solutions for Bundling Multiple DAS Applications on a Single Hardware platform.

18:20 Adaptive Front-lighting System Incorporating a Glare-Prevention Function
S. YAMAMURA – Koito Manufacturing Co. Ltd, Japan

18:40 General discussion on Lighting Systems / Adaptive lighting

18:50 End of the day

19:30 Shuttle service to the Night Drive Tests Circuit in Satory – Cocktail on the Circuit
Session 2: Lighting Systems / Adaptive Lighting
Chair: Laurent SEREZAT – PSA Peugeot Citroën

09:00 Active Safety Light
C. WEGWERTH, M. GONTER, J. HIGENSTOCK, S. THOMSCHKE - Volkswagen AG, Germany

09:20 Influence of New High Beam Assistance Systems on Driver Behavior
JH. SPRUTE - Technische Universität Darmstadt, Germany

09:40 Advanced high beam/low beam transitions: progressive beam and predictive levelling.
B. REISS, J. MOIZARD - Valeo, France

10:00 General discussion on Adaptive Lighting Technologies and night drive feedback

Session 3: Detection Systems / Pedestrian
Chair: Alberto BROGGI - Parma

10:10 Pedestrian accident context and technologic development in LOVe Project
S. CORNOU – Renault, France
B. FLEURY – Valeo, France

10:30 Improvement of pedestrian candidate detection by free-space detection
Styling Opportunities and safety features.
G. MA, SB. PARK, S. MÜLLER-SCHNEIDERS, A. KUMMERT – Delphi, Germany

10:50 A Far-Infrared Based Night-Vision System with Pedestrian Detection
B. WASS, Q. LIN, F. TJÄRNSTRÖM – Autoliv Electronics, Sweden

11:10 General discussion on Detection Systems / Pedestrian

11:20 Break and Exhibition Visit

Session 3: Detection Systems / Technology
Chair: Bo WASS – Autoliv

11:50 A major step in parallel architecture for Driving Assistance: Introduction of the NEC IMAPCAR2 family
C. CORDOBA – NEC Electronics Europe, France

12:10 PMD-Sensoric for automotive applications: State of development, Outlook and Presentation of real driving scenes
T. RINGBECK, B. BUXBAUM, B. HAGEBEUKER – PMD Technologies GmbH, Germany

12:30 Objects localization and tracking in automotive scenes by combining spatial and temporal information
C. LEGRAND, F. LARGE – PSA Peugeot Citroën
V. FREMONT – Heudiasyc CNRS, France

12:50 An innovative catadioptric vision device for the driver assistant systems
J-F. LAYERLE, X. SAVATIER, J-Y. ERTAUD – IRSEEM, France
E.M. MOUADDIB – MIS-University of Picardie Jules Verne, France

13:10 General discussion on new technologies for detection systems

13:20 Lunch and Exhibition Visit

Session 3: Detection Systems / Roadmaps
Chair: Didier WAUTIER – Renault

14:50 Perception and data fusion on autonomous vehicles: the TerraMax(TM) experience
P. GRISLERI, P. CERRI – VisLab, University of Parma, Italy

15:10 Development of Multi-function Camera for Automotive Use
Y. HORII, M. MORISHITA – Denso Corporation, Japan
S. DOI, T. WADA – Kagawa University, Japan

15:30 End-user Oriented Driving Assistance: a new Approach
P. REILHAC – Valeo, France

15:50 Challenges in the design of multi-functional video-based driver assistance systems
L. BERGÉN – Robert Bosch GmbH, Germany

16:10 General discussion on Detection Systems / Roadmaps
16:20 Conclusion speech
16:30 End of Conference

The organisers reserve the right to make changes to the programme should they be deemed necessary
NIGHT DRIVE TESTS ON OCTOBER 7th

FIND OUT UPDATES ON THE SIA WEBSITE www.sia.fr

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. Attendees will have the opportunity to test all the demo cars and discover new technologies.

DEMO CARS EXPECTED
Audi, Autoliv, Automotive Lighting, Continental Automotive, Delphi, Hella, IAV, Livic, Osram, Philips, PMD Technologie, PSA Peugeot Citroën, Visteon, Valeo, Volvo...

TECHNOLOGIES PRESENTATIONS EXPECTED
Xenon, Front Full LED, AFS, Adaptive Lighting, Rear LED, ARS, Pedestrian Detection, Detection System Technologies and Roadmap...

POSTER 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, Germany
• Autoliv Electronics, Sweden
• Automotive Lighting, Germany
• BMW Group, Germany
• CEA, France
• COLAS, France
• Continental Corporation, Germany
• Delphi, Germany
• Denso Corporation, Japan
• FrattyConsulting, France
• Hella KGaA Hueck & Co., Germany
• Heudiasyc CNRS, France
• Hitachi Ltd, Japan
• INRETS / LIVIC, France
• INRIA, France
• IRSEEK, France
• Kagawa University, Japan
• Koito Manufacturing Co. Ltd, Japan
• LAB, France
• LASMEA, France
• MIS-University of Picardie Jules Verne, France
• MobileEye Vision Technologies Ltd, Israel
• Monash University, Australia
• NEC Electronics Europe, France
• Parma University, Italy
• Philips Lighting, Germany
• PMD Technologies GmbH, Germany
• Ponts et Chaussées, France
• PSA Peugeot Citroën, France
• Renault, France
• Robert Bosch GmbH, Germany
• Sécurité routière, France
• Siemens VDO Austria,
• Sonceboz, Switzerland
• Technical University Darmstadt, Germany
• TUD Darmstadt, Germany
• UMTRI, USA - University of Pavia, Italy
• University of Michigan, USA
• Valeo, France
• VisLab, University of Parma, Italy
• Visteon, Germany
• Volkswagen AG, Germany

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.

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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

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
  Tel : +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
  Tel : +33(1)39 30 18 00
  Fax : +33 (1)30 57 15 22
  Email : H1983@accor.com

  CAMPANIL**
  CENTRE COMMERCIAL REGIONAL
  2 PLACE GEORGES POMPIDOU
  78180 ST QUENTIN EN YVELINES
  Tel : +33 (1) 30 57 49 50
  Fax : +33 (1)1 39 44 27 37
  Email : stquentinenyvelines@campanile.fr
REGISTRATION FORM
VISION CONFERENCE 2008
OCTOBER 7 & 8 2008 – VERSAILLES, FRANCE
REF: 2008-02

PLEASE COMPLETE AND RETURN THIS FORM TO:
SIA – 79, rue Jean-Jacques Rousseau – F-92158 Suresnes Cedex
Tel: +33 (0)1 41 44 93 70 – Fax: +33 (0)1 41 44 93 79
REGISTER DIRECTLY ON LINE: www.sia.fr

Please use BLOCK LETTERS when filling in this form

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Registration fees (Tick as appropriate)
❑ 980,72 € VAT Incl. (820 € VAT Excl.) SIA Members
❑ 1112,28 € VAT Incl. (930 € VAT Excl.) Non Members
❑ 490,36 € VAT Incl. (410 € VAT Excl.) Researchers, laboratories
❑ 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”
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I hereby authorise the organisers to charge my credit card to the amount of ........................................ €
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REGISTRATION CONDITIONS
• Registration fees include participation in the conference, CD of proceedings, book of abstracts, refreshment breaks, lunches, cocktail and night tests session
• 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 8, 2008, 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.
La Passion en Ingénierie

La passion – et la volonté de faire évoluer le progrès – c’est ce qui motive nos équipes d’ingénieurs, où qu’elles soient dans le monde. IAV, société d’ingénierie automobile, offre à ses clients un large éventail de prestations d’ingénierie pour les véhicules série du futur ainsi qu’un engagement qui en fait un partenaire absolument unique.

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Innovation en série