



SOCIETY FOR INFORMATION DISPLAY
METROPOLITAN DETROIT CHAPTER

Vehicles and Photons 2009

16th Annual Symposium on Vehicle Displays

OCTOBER 15 & 16, 2009

FAIRLANE CENTER, UNIVERSITY OF MICHIGAN - DEARBORN, MICHIGAN

<http://www.vehicledisplay2009.org>

AGENDA

THURSDAY, OCTOBER 15, 2009

- 8:00 am – 9:00 am **REGISTRATION AND REFRESHMENTS**
 9:00 am – 5:00 pm **TABLETOP EXHIBITS OPEN**
 9:00 am – 9:45 am **Welcoming Remarks/Keynote Address**
 Silviu Pala, SID-DE Chair, *Denso International America, Southfield, MI*
 Ben DiCicco, Symposium Co-Chair, *Chrysler Automotive, Auburn Hills, MI*
 Steven Stringfellow, Symposium Co-Chair, *General Motors, Warren, MI*
 Mark Larry, Symposium Co-Chair, *Ford Motor Company, Dearborn, MI*
 9:45 am – 10:15 am **Refreshment Break (Tabletop Area)**

SESSION 1: AUTOMOTIVE MARKET (10:15 am – 12:15 pm)

Chair: **B. DiCicco**, *Chrysler Automotive, Auburn Hills, MI*; **M. Larry**, *Ford Motor Company, Dearborn, MI*

- 10:15 am – 10:45 am **1.1 INVITED ADDRESS**
 Diamonds in the Dirt: New Display Technologies and Opportunities for the Automotive Industry
 M. Fihn, *Veritas et Visus, Temple, TX*
 10:45 am – 11:15 am **1.2 WITHDRAWN**
 11:15 am – 11:45 am **1.3 INVITED ADDRESS**
 Small/Medium Displays Market and Supply Trends
 V. Jakhanwal, *iSuppli Corporation, Santa Clara, CA*
 11:45 am – 12:15 pm **1.4 INVITED ADDRESS**
 Vehicular Flat Panel Displays Technology and Trends
 S. Pala, *Denso International America, Southfield, MI*
 12:15 pm – 2:00 pm **LUNCH (Tabletop Exhibits Open)**

SESSION 2: APPLICATION ISSUES WITH VEHICULAR DISPLAYS AND LIGHTING (2:00 – 3:40 pm)

Co-Chairs: **V. Birman**, *Continental Corporation, Auburn Hills, MI*; **J. Troxell**, *Consultant, Sterling Heights, MI*

- 2:00 pm – 2:20 pm **2.1 Rear-View Virtual Image Displays**
 E. Buckley, L. Lacoste and D. Stindt, *Light Blue Optics, Inc., Colorado Springs, CO*
 2:20 pm – 2:40 pm **2.2 Angled Speedometer and Tachometer Pointer**
 V. Birman, G. Wang, D. Tollis and R. Struck, *Continental Corporation, Auburn Hills, MI*
 2:40 pm – 3:00 pm **2.3 Curved Display Technology for Automotive Applications**
 W.C. Yang, W.Y. Chien, M.S. Chen, and W.M. Huang, *AU Optronics Corporation, Hsinchu, Taiwan*
 3:00 pm – 3:20 pm **2.4 LCOS Microdisplays: A Roadmap to the Road**
 S. Krueger, *HOLOEYE Systems, Inc. Carlsbad, CA*
 3:20 pm – 3:40 pm **2.5 Easy-to-Clean Surfaces for Mobile Devices**
 N. Shashidhar, *Corning Incorporated, Corning, NY*
 3:40 pm – 4:00 pm **Refreshment Break (Tabletop Area)**
 4:00 pm – 5:30 pm **TUTORIAL**
 Automotive Touch Screen Technologies
 G. Walker, *NextWindow, Milpitas, CA*

FRIDAY, OCTOBER 16, 2009

- 8:30 am – 9:30 am **REGISTRATION AND REFRESHMENTS**
 9:00 am – 12:00 pm **TABLETOP EXHIBITS OPEN**

SESSION 3: HUMAN-VEHICLE-INTERFACE (A.K.A. HMI) AND SYSTEM SOLUTIONS (9:30 – 11:40 am)

Chair: **V. Bhise**, *University of Michigan, Dearborn, MI*

- 9:30 am – 10:00 am **3.1 TUTORIAL**
 Implementing Touch Screen Displays in Automobiles: An Ergonomics Tutorial
V. Bhise, *University of Michigan, Dearborn, MI*
 10:00 am – 10:20 am **3.2 WITHDRAWN**
 10:20 am – 11:00 am **Refreshment Break (Tabletop Area)**
 11:00 am – 11:20 am **3.3 A Historical Review of the Helmholtz-Kohlrausch Effect**
 (including application in Automotive and Aviation industries)
 R. Donofrio, *Display Device Consultants LLC, Ann Arbor, MI*
 11:20 am – 11:40 am **3.4 Evaluation of Perceived Depth of Image for Navigation on Heads-up 3-D Display Using Simulated View**
 K. Uehira and M. Suzuki, *Kanagawa Institute of Technology, Japan*
 11:40 am – 1:00 pm **LUNCH (Pizza and drinks)**

SESSION 4: PANEL DISCUSSION – TOUCH SCREENS AND AUTOMOTIVE CHALLENGES (TECHNOLOGY AND HUMAN FACTORS ISSUES) (1:00 – 2:30 pm)

Co-Moderators: **S. Stringfellow**, *General Motors, Warren, MI*; **S. Pala**, *Denso International America, Southfield, MI*

Participants: Touch Screen Manufacturers, Automotive OEMs, System Integrators

Exhibitors:

Corning, Inc.
 Holoeye Systems, Inc.
 Konica Minolta Sensing Americas, Inc.
 Optis North America, Inc.
 Optrex America, Inc.
 OSRAM Opto Semiconductors
 Sharp Microelectronics of the Americas
 SHOEI Co., Ltd
 SMK Electronics Corp.
 Stantum

Panelists (Session 4):

Geoff Walker (Next Window)
Mark Finn (Veritas et Visus)
Prof. Vivek Bhise Phd (UofM)
Bruce Banter (TECH-D-P)
Jim Meador (STANTUM)
Jeff Greenberg (Ford)
Scott Griesmann (Consulting)

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