TUESDAY, SEPTEMBER 24, 2019

7:30 – 8:30 am  REGISTRATION AND REFRESHMENTS

9:00 am – 5:00 pm  TABLETOP EXHIBITS OPEN

8:35 – 8:45 am  Welcoming Remarks
Silviu Pala, Automotive Display, Southfield, MI, US

8:45 – 9:30 am  KEYNOTE ADDRESS
HMI Between Now and Autonomous Drive
Doug Patton, Jupiter Consulting LLC, Novi, MI, US

9:30 – 10:00 am  REFRESHMENT BREAK

SESSION 1: AUTOMOTIVE MARKET (10:00 – 11:00 am)
Co-Chairs:  Silviu Pala, Automotive Display, Southfield, MI, US
Michael Boyd, Yazaki North America, Canton, MI, US

10:00 – 10:20 am  INVITED ADDRESS
1.1  The Evolution of User Experience and In-Vehicle Displays
Kyle Davis, IHS Markit, Southfield, MI, US

10:20 – 10:40 am  INVITED ADDRESS
1.2  Automotive Touch Screen, Touchless Control, Micro and mini LED and Smart Windows Market Forecast

10:40 – 11:00 am  INVITED ADDRESS
1.3  Bob O’Brien, President
Display Supply Chain Consultants, Ann Arbor, MI, US

SESSION 2: EXHIBITOR PRESENTATIONS (11:00 am – 12:45 pm)
Co-Chairs:  Bruce Banter, Tech-D-P Inc., Northville, MI, US
Eric Miciuda, Continental Corporation, Auburn Hills, MI, US
SESSION 3: NEW DISPLAY SOLUTIONS (2:20 – 3:40 pm)

Co-Chairs: David Lambert, Panasonic, Farmington Hills, MI, US
            Jerzy Kanicki, University of Michigan, Ann Arbor, MI, US

2:20 – 2:40 pm  Conformable and Shapeable OLCDs for Automotive:
                3.1 Enabling a Revolutionary Change in HMI with an Incremental Change in Supply Chain
                Simon Jones, FlexEnable, Cambridge, UK

2:40 – 3:00 pm  Ambient Contrast Ratio Improvement of Low-Reflection LCD for Automotive Application
                3.2 Lihong Chen, Yaqiong Long, Liting Fang, Binglin Su, Ling Wu, Poping Shen, Xiamen Tianma Microelectronics Co., Xiamen, China

3:00 – 3:20 pm  Transparent Window Displays for Next-Generation Vehicles:
                3.3 Solving Challenges and Design Considerations
                Jason Thompson, Ross Schneider, Sam Martin, Daisuke Nakajima, Kazuhiro Tomura, Texas Instruments, Inc., Dallas, TX, US

3:20 – 3:40 pm  High-Transparency Borderless Active-Matrix MicroLED Display
                3.4 Ying-Tsang (Falcon) Liu, Kuan-Yung Liao, Yu-Hung Lai, Yun-Li Li, PlayNitride Inc, Hsinchu, Taiwan

3:40 – 4:00 pm  REFRESHMENT BREAK

SESSION 4: HUDs (4:00 pm – 5:00 pm)

Co-Chairs: Ross Maunders, FCA US LLC, Auburn Hills, MI, US
            Dan Cashen, Continental Automotive Group, Auburn Hills, MI, US

4:00 – 4:20 pm  Augmented-Reality Human-Machine Interface:
                4.1 Defining the HUD Eye Box
                Dan Cashen, Esaias Pech,
                Continental Automotive Group, Auburn Hills, MI, US

4:20 – 4:40 pm  Cold-Mirror Reflective Polarizer Film Stray-Light Considerations in HUD Applications
                4.2 William Diepholz, John VanDerlofske, Steve Pankratz,
                3M, St. Paul, MN, US

4:40 – 5:00 pm  Consideration of Cognitive Tunneling with Augmented-Reality Head-Up Displays
                4.3 Joseph Pullukat, N.S. International, Troy, MI, US
5:00 – 5:45 pm  TUTORIAL on What Do Today’s Driver Assistance Systems Suggest About the Future of Vehicle Displays?  
Bryan Reimer, Ph.D., MIT AgeLab, Cambridge, MA, US

6:00 – 9:00 pm  OPTIONAL DINNER AT BURTON MANOR  
Additional Charge (See Registration Form)
WEDNESDAY, SEPTEMBER 25, 2019

7:30 – 8:00 am  REGISTRATION AND REFRESHMENTS

9:00 am – 2:00 pm  TABLETOP EXHIBITS OPEN

8:00 – 8:15 am  Local SID Chapter Awards
    Bob O’Brien, Display Supply Chain Consultants, Ann Arbor, MI, US
    Silviu Pala, Automotive Display, Southfield, MI, US

SESSION 5: DISPLAY METROLOGY (8:15 – 9:55 am)

Co-Chairs:  Kimberly Peiler, OSRAM Opto Semiconductors, Inc., Novi, MI, US
            Vyacheslav Birman, Continental Corporation, Auburn Hills, MI, US

8:15 – 8:35 am  High-Resolution Characterization of Near-Infrared Light Sources
    5.1  for 3D Sensing Applications
    Pierre Boher, Thierry Leroux, ELDIM, Herouville St. Clair, France

8:35 – 8:55 am  Physico-Realistic Ray-Tracing Simulation of an Automotive Display
    5.2  Inside a Vehicle
    Pierre Boher, Thomas Muller, Philippe Porral, Thierry Leroux,
    ELDIM, Herouville St. Clair, France

8:55 – 9:15 am  Comparison of Visual Appearance and Checkerboard Contrast
    5.3  Ratio Measurements of High-Contrast Displays
    Hao Wang, Vyacheslav Birman, Continental AG, Auburn Hills, MI, US

9:15 – 9:35 am  End-Of-Line Testing of Recent Display Quality Standards
    5.4  Silke R. Kirchner, Benjamin Kasdorf, Cameron R. Hughes, Nadine
    Gotte, Instrument Systems Optische Messtechnik GmbH, Munich Germany

9:35 – 9:55 am  Methods for Measuring Curved Displays: Evaluating Approaches
    5.5  and System Specifications
    Matt Scholz, Radiant Vision Systems, Redmond, WA, US

9:55 – 10:15 am  REFRESHMENT BREAK

SESSION 6: PANEL DISCUSSION (10:15 – 11:45 am)

Moderator:  Silviu Pala, Automotive Display, Southfield, MI, US
            Camera Monitor Systems or Electronic Mirrors for Future Vehicles
            Participants: Members of government, academia, industry

11:45 am – 1:30 pm  LUNCH
SESSION 7: DISPLAY AND HMI SYSTEMS (1:30 am – 3:00 pm)
Co-Chairs: Bruce Banter, Tech-D-P Inc., Northville, MI, US
Drew Harbach, Peterbilt Motors Denton, TX, US

1:30 – 1:50 pm
Development of DLP3030-Q1 and DLP553x-Q1 Qualified DMDs for Automotive Applications
Michael Douglass, Paul Konrad, Texas Instruments, Dallas, TX, US

1:50 – 2:10 pm
Non-Uniformity Correction in Recent Automotive Image-Sticking Evaluation Methods
Ingo Rotscholl, Udo Kruger, TechnoTeam Bildverarbeitung GmbH, Ilmenau, Germany

2:10 – 2:30 pm
Video Compression: A Vital Requirement for Next-Generation Vehicles
Alain Legault, Hardent, Montreal, Canada

2:30 – 2:50 pm
Driving Toward Performance Standards in Light Control for Automotive Displays
Matt Philippi, 3M, St. Paul, MN, US

2:50 – 3:10 pm
Responses to Dynamic Peripheral Communication for Automotive Interior Lighting
Kimberly Peiler, Johnathan Weiser, John Bullough, Nicholas Skinner, Mark Rea, Lighting Research Center, Rensselaer, Troy, NY, US

3:10 – 3:20 pm
REFRESHMENT BREAK

SESSION 8: MATERIALS I (3:20 pm – 4:40 pm)
Co-Chairs: Kai-Han Chang, General Motors Global R&D, Pontiac, MI, US
Mark Larry, Ford Motor Company, Detroit, MI, US

3:20 – 3:40 pm
Ambient Condition Processing of Highly Efficient Structural Colors
Saurabh Acharya, Chengang Ji, Kaito Yamada, Stephen Maldonaod and L. Jay Guo University of Michigan, Ann Arbor, MI, US

3:40 – 4:00 pm
Retained Strength for Auto-Grade Cover Glass
Khaled Layouni, Tim Gross, Matt Black, Jason Harris, Jong-Se Park, Corning, Corning, NY, US
4:00 – 4:20 pm  
**Development of Novel LOCA for Automotive, Free-Form, and 2.5D Displays**  
Tomoyuki Toyoda, Jingting Wu, Dexerials Corporation, Shimotsuke-shi, Japan

4:20 – 4:40 pm  
**Anisotropic Nano-Structure Light-Control Film**  
Pei-Hsun Wu, BenQ Materials, Taoyuan, Taiwan

4:40 – 5:00 pm  
**REFRESHMENT BREAK**

**SESSION 9: MATERIALS II (5:00 pm – 6:20 pm)**  
Co-Chairs:  
Kai-Han Chang, General Motors Global R&D, Pontiac, MI, US  
Mark Larry, Ford Motor Company, Detroit, MI, US

5:00 – 5:20 pm  
**Smart Switchable Liquid-Crystal Light Window for Automotive Windows**  
Yingfei Jiang, Dengke Yang, Kent State University, Kent, OH, US

5:20 – 5:40 pm  
**High Performance Optically Clear Adhesives for Automotive Display Bonding**  
Ryan Eismin, Shingo Amari, John VanDerlofske, 3M, St. Paul, MN, US

5:40 – 6:00 pm  
**Sunlight Resistance of Anti-Reflection Films for Displays on Glossy Piano Black Interior**  
Tadaaki Toyoshima, Jingting Wu, Dexerials Corporation, Shimotsuke-shi, Japan

6:00 – 6:20 pm  
**Functional Film Solutions for Next-Generation Automotive**  
Pei-Hsun Wu, BenQ Materials, Taoyuan, Taiwan