

TUESDAY, JANUARY 22, 2008

ANASAZI BALLROOM

8:00-8:15 Welcome & Introductions -- *Mark Hartney, USDC; Abbie Gregg, AGI***SESSION 1 MARKET OUTLOOK**

CHAIR: MARK HARTNEY, USDC

- 8:15-8:45 1.1 Keynote: The Army's Need for Revolutionary Electronic Solutions-- A Valuable Partner to the Flexible Electronics Industry
Dr. Michael Andrews, L-3 Communications Corp.
- 8:45-9:15 1.2 Invited Talk: Challenges & Opportunities for Flexible Displays
Dr. Barry Young, DisplaySearch
- 9:15-9:40 1.3 Invited Talk: Advances in the Technology & Markets for Electronic Paper
Dr. Michael McCreary, E Ink Corporation

Q&A

9:45-10:10 Break - Poster Session & Exhibits

SESSION 2 NEW MARKETS & APPLICATIONS

CHAIR: MALCOLM THOMPSON, MJT CONSULTING

- 10:10-10:35 2.1 Invited Talk: Impact of an Entirely New Industry: Printed Electronics
Dan Lawrence, IDTech/Agile Tag
- 10:35-11:00 2.2 Invited Talk: Crossing the Display Commercialization Chasm
Mark Willner, nFlexion
- 11:00-11:25 2.3 Invited Talk: Flexible Electronics: Capacity and Investment Forecast
Lawrence Gasman, NanoMarkets
- 11:25-11:50 2.4 The Role of Networking as an Essential Tool for Research Development and Commercialization
Ric Allott, UK Displays & Lighting Network

Q&A

12:00-1:15 Lunch – Served in South Garden

SESSION 3 FUTURE FLEXIBLE ELECTRONIC PRODUCTS

CHAIR: DAN LAWRENCE, AGILETAG/IDTECH

- 1:15-1:40 3.1 Invited Talk: Breakthroughs in Volume Production of Credit Card Displays
Dennis Brestovansky, Aveso
- 1:40-2:05 3.2 Invited Talk: Flexible Electronics for Life: Medicine and Health Care
Prof. Christopher Ober, Cornell University
- 2:05-2:30 3.3 Invited Talk: RFID Opportunities for Printed Electronics on Paper
Richard Morris, Soligie Inc.
- 2:30-2:55 3.4 Invited Talk: Towards Intelligent Materials Manufacture— From 'soft machines' to 'things-that-start-to-think' to healthcare for the individual
Dr. Raymond Oliver, PTeC Centre, Cenamps
- 2:55-3:20 3.5 Invited Talk: Printed Organic Transistors and MEMS Switches for Skin-like Sensors and Actuators
Dr. Takao Someya, University of Tokyo

Q&A3:30-4:00 **Break - Poster Session & Exhibits****SESSION 4 FUTURE DISPLAY PRODUCTS**

CHAIR: KEITH ROLLINS, DUPONT TEIJIN FILMS

- 4:00-4:25 4.1 Invited Talk: Practical Approach to Manufacturing Flexible Displays
Nam-Seok Roh, Ph.D., Samsung Electronics
- 4:25-4:50 4.2 Invited Talk: Rollable Displays - The Start of a New Mobile Device Generation
Dr. Edzer Huitema, Polymer Vision
- 4:50-5:15 4.3 Invited Talk: Development of Flexible AMOLED Displays
Ray Ma, Universal Display Corporation
- 5:15-5:40 4.4 Design, Fabrication, and Integration of a Rugged Low-Power PDA Incorporating a Flexible Electrophoretic Ink Displays
Dr. Greg Raupp, FDC, E Ink, InHand, NSRDEC, ARL

Q&A and Special Drawing: Win a Gift Card for Turning in the Day One Survey

6:15 – 7:30

RECEPTION – POSTER SESSION & EXHIBITS

WEDNESDAY, JANUARY 23, 2008

*Business, Markets and Developmental Track
Kiva & Kachina Rooms*

*Fundamental Research & Academic Track
Pueblo & Sonora Rooms*

SESSION 5: ADVANCED MATERIALS

CHAIR: ERAN ELIZUR, KODAK

- 8:30 5.1 Invited Talk: New Materials for Flexible Displays
Robert Miller, EMD Chemicals
- 8:55 5.2 Web Processed Transparent Barrier Films
Fred McCormick, 3M
- 9:20 5.3 A New Inorganic Template for Flexible Substrates
Julie Wessling, Applied Thin Films
- 9:45 **Q&A**
- 9:55 **Break - Poster Session & Exhibits**

SESSION 7: ADVANCED DEVICES

CHAIR: SHAWN O'ROURKE, FDC/ASU

- 10:20 7.1 Invited Talk: Organic Inverters Based on Polymer Transistor Array on Plastic Substrates
Jack Hou, ITRI
- 10:45 7.2 Invited Talk: Flexible Electronics: Path to Ubiquitous Electronics
Dr. Ahmet Gun Erlat, General Electric Global Research
- 11:10 7.3 Silicon-based Flexible Electronics Development at Princeton University
Prof. Jim Sturm, Princeton University
- 11:35 7.4 On a Roll: Manufacturing of Electronics on Flexible Substrates
Carl Taussig, HP & PowerFilm Solar

12:00 Q&A**12:10-1:00 Lunch Served in South Garden****12:10-1:15 Poster Session & Exhibits****SESSION 6: PRINTED ELECTRONICS**

CO-CHAIRS: HOWARD WANG, BINGHAMTON UNIVERSITY/CAMM AND JANOS VERES, KODAK

- 8:30 6.1 Flexible Wireless Power-Transmission System Fabricated by 13.56 MHz Polymer Rectifier
Chang-Yu Lin, ITRI
- 8:55 6.2 Collimated Aerosol Beam Deposition: Sub 5- μ m Resolution of Printed Actives and Passives
Dr. Doug Schulz, North Dakota State Univ.
- 9:20 6.3 Fabrication and Photoluminescence of Zn₂GeO₄ and GeO₂ Based Ge Doped ZnO Nanostructures
Dr. Congkang Xu, CAMM/Binghamton University

9:45 Q&A**9:55 Break - Poster Session & Exhibits****SESSION 8: ENABLING ELECTRONICS MATERIALS & CIRCUITS FOR FLEXIBLE ELECTRONICS**

CHAIRS: DAVID ALLEE, ASU/FDC & DEB YELLOWAGA, HONEYWELL

- 10:20- 8.1 Inorganic-Organic Barrier Coatings for Flexible OLED Applications
Dr. Junghyun Cho, Binghamton University
- 10:45- 8.2 Materials and Processing Issues for Integrated Passive And Active Devices on Flexible Substrates
Dr. Sebastiano Ravesi, IM Sector R&D, STMicroelectronics
- 11:10 8.3 Integrated a-Si:H Source Drivers For Electrophoretic Displays on Flexible Plastic Substrates
Dr. Sameer Venugopal, Flexible Display Center/ASU
- 11:35 8.4 Sintering Metal Nanoparticle Films
Prof. Howard Wang, Binghamton University & Russel Composto, University of Pennsylvania

12:00 Q&A**12:10-1:00 Lunch Served in South Garden****12:10-1:15 Poster Session & Exhibits**

SESSION 9: ADVANCED MANUFACTURING TECHNOLOGY

CHAIR: BOB REUSS, FORMERLY OF DARPA

- 1:15 9.1 Invited Talk: High Volume, High Throughput Manuf. Of Flexible Active Matrix Display Modules
Dr. John Mills, Plastic Logic
- 1:40 9.2 Invited Talk: Strategies for Roll-to-Roll Processing of Thin Films and Other Electronic Substrates
Mark Wegner, Northfield Automation
- 2:05 9.3 Roll-to-Roll Manufacturing Process for Transparent & Metallic Patterned Conductors
W. Dennis Slafer, MicroContinuum
- 2:30 9.4 Flexible Cholesteric Displays -- Product Development and Manufacturing
Asad Khan, Kent Displays

2:55 Q&A

3:05 **Break & Exhibits Open**

SESSION 11 DEVICES & CIRCUITS

CHAIR: WILLIAM WONG, PARC

- 3:30 11.1 Invited Talk: The World IS Flexible
Dr. Scott Liu, Prime View International
- 3:55 11.2 Invited Talk: Polymer Electronics Devices by R2R Manufacturing Processes
Sheng-Fu Horng, ITRI
- 4:20 11.3 Towards Roll-to-Roll Processing of Large-Area Flexible Thin-Film Devices
Dr. AMB (Ton) van Mol, TNO Holst Centre
- 4:45 11.4 All Printed Flexible Backplanes for Large Area Displays
Ana Claudia Arias, PARC

5:10 Q&A

Special Drawing to Win a Best Buy Gift Card Enter by Turning in the Day Two Survey

SESSION 10: MANUFACTURING & PROCESS DEVELOPMENT

CO-CHAIRS: DARYL SANTOS, BINGHAMTON UNIV. & PURUSHOTHAMAN DAMODARAN, FLORIDA INTL. UNIV.

- 1:15 10.1 Low Driving Voltage of Electrowetting Display on Flexible Substrate
In-Cha Hseih, Ph.D., National Chung-Hsing University
- 1:40 10.2 Photolithographic Patterning in Supercritical Carbon Dioxide: Application to Patterned Light-Emitting Devices
Prof. Christopher K. Ober, Cornell University
- 2:05 10.3 Electrode Patterning for Organic Diodes by R2R Processes
Jack Hou, Industrial Technology Research Institute
- 2:30 10.4 Three-Dimensional, Real-Time, and High-Accuracy Inline Monitoring System for Roll to Roll Manufacturing
Prof. S B Park, BU & Zhaoyang Wang, Catholic Univ.

2:55 Q&A

3:05 **Break & Exhibits Open**

SESSION 12 ORGANIC ELECTRONICS

CO-CHAIRS: BRYAN VOGT, ASU/FDC & HOWARD KATZ, JOHNS HOPKINS UNIVERSITY

- 3:30 12.1 Organic-Inorganic Flexible and Transparent Electronics
Dr. Antonio Facchetti, Northwestern University
- 3:55 12.2 Interfacial and Nanostructural Enhancements in Organic Semiconductor Sensors and Diodes
Prof. Howard E. Katz, Johns Hopkins University
- 4:20 12.3 A Gate Dielectric Last Approach to Integrate Organic Based Devices in Plastic Substrates
Srinivas Gowrisanker, Univ. of Texas at Dallas
- 4:45 12.4 High Performance Transistors in Low Mobility Organic Semiconductors for Analog and High-Frequency Applications
Dr. Xiaojun Guo, Adv. Tech. Inst., Univ. of Surrey

5:10 Q&A

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THURSDAY, JANUARY 24, 2008

*Business, Markets and Developmental Track
Kiva & Kachina Rooms*

*Business, Markets and Developmental Track
Pueblo & Sonora Room*

SESSION 13 MATERIALS & MANUFACTURING I

CHAIR: BAHGAT SAMMAKIA, SUNY-BU

8:30 13.1 Invited Talk: Continuous R2R Coating Methodology to Manufacture Precision Microstructures
Robert Pricone, 10X Technology

8:55 13.2 Invited Talk: Cost Modeling for Flexible Substrates Roll to Roll Processing
Dr. Scott Mason, Univ. of Arkansas

9:20 13.3 Ink Jet Manufacturing for Flexible Displays
Martin Schoeppler, FujiFilm Dimatix

9:55 Q&A

10:05 **Break - Exhibits**

SESSION 14 PRODUCTS & MARKETS

CHAIR: RAY MA, UNIVERSAL DISPLAY CORP.

8:30 14.1 Invited Talk: Summary of Flexible Displays Efforts in Europe
Eliav Haskal, Philips Research

8:55 14.2 Single Layer Color Cholesteric Liquid Crystal Display
Yuan-Chang Liao, ITRI

9:20 14.3 Commercializing Flexible, Printed P-OLED Displays: From R&D to Manufacture and Product
Devin MacKenzie, Add-Vision

9:55 Q&A

10:05 **Break – Exhibits**

SESSION 15 MATERIALS & MANUFACTURING II

CHAIR: ABBIE GREGG, AGI

10:20 15.1 Invited Talk: Latest Developments in Polyester Films for Flexible Electronics
Bill MacDonald, DuPont Teijin Films

10:45 15.2 Transparent Polymer Electrodes for Flexible Display Applications Using Silver Nanoflake Based Inks
Jim DiBattista, Sigma Technologies

11:10 15.3 Spin-on Hybrid Materials for Flexible Displays
Deb Yellowaga, Honeywell

11:35 15.4 New Generation of Orgacon™ Films with Improved Surface Resistance and Stability
Dr. Frank Louwet, Agfa Materials

12:00 Q&A

12:10-1:15 **Lunch Served in South Garden Exhibits Open**

SESSION 16 FLEXIBLE SENSOR TECHNOLOGY

CHAIR: CARL TAUSSIG, HEWLETT-PACKARD

10:20 16.1 Applications of Flexible Electronics and Display in the Payment Card Industry
Daniel Chatelain, QSecure

10:45 16.2 Flexible Amorphous Silicon Image Sensor Arrays Fabricated by Digital Lithography
William Wong, PARC

11:10 16.3 Metal Rubber™ Flexible Sensors and Interconnects
Michael Bortner, NanoSonic

11:35 16.4 Development of Conformal, Printed, Irradiance and Temperature Sensor Arrays
Jay Lewis, RTI International

12:00 Q&A

12:10-1:15 **Lunch Served in South Garden Exhibits Open**

SESSION 17 MATERIALS & MANUFACTURING III**CHAIR: NICK COLANERI, FDC/ASU**

- 1:15 17.1 Invited Talk: Small Scale Electronic Systems – A New Direction for Integration
Mark Poliks, Endicott Interconnect Tech.
- 1:40 17.2 Laser-Based Surface Cleaning Method
Dr. Robert Bousquet, GES
- 2:05 17.3 Multi-nozzle Aerosol-Jet® Printing
Michael Renn, Optomec
- 2:30 17.4 Excimer Laser Ablation Machine for Flexible Electronics & Displays Manufacture
Matt Souter, Tamarack Scientific
- 2:55 17.5 Multilayer Barrier Coatings for Protection of Flexible Displays
Robert Visser, Vitex Systems
- 3:20 17.6 A 4-in gVGA Flexible AMOLED Using a-Si TFT on Ultra Thin Stainless Steel Foil
Nackbong Choi, LG Philips-LCD

3:45 Q&A & Special Drawing: Win a Gift Card for Turning in the Day Three Survey

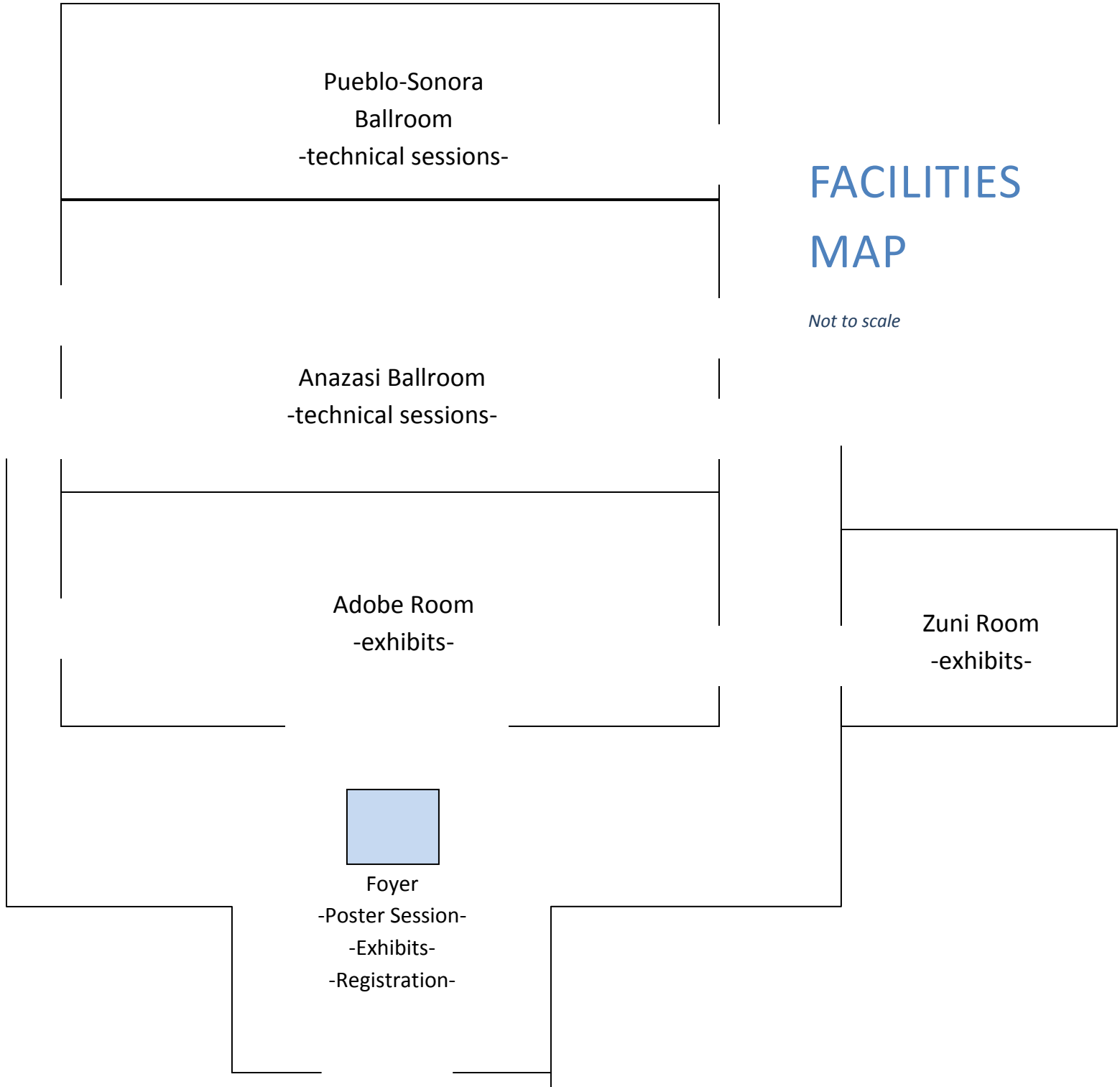
SESSION 18 MTG & PRODUCT DEVELOPMENT**CHAIR: DAN GAMOTA, MOTOROLA**

- 1:15 18.1 Multi-directional Asymmetrical Micro-lens Array Light Control Film for Image Enhancement of Flexible Reflective LCDs
Yi-Pai Huang, National Chiao-Tung Univ.
- 1:40 18.2 Microcup® Structural Response to Normal Axial Loading
Bryan Chan, SiPix Imaging
- 2:05 18.3 Mechanics of Thin Films on Polymer Substrates Produced by Roll-to-Roll Manufacturing
Dr. Albert Pinyol, EPFL
- 2:30 18.4 A New Method for Patterning Large Scale Electronics on Flexible Substrates
Ajay Jain, Versatilis LLC
- 2:55 18.5 RTR Particle Inspection System for Web Substrates
Vincent Cannella, ECD & V. Nacuta, Integral Vision
- 3:20 18.6 New Developments in Moisture Barrier Materials and Conductive Adhesives for Flexible Display Apps
Dr. Stijn Gillissen, Emerson & Cuming

3:45 Q&A & Special Drawing: Win a Gift Card for Turning in the Day Three Survey

4:00 CONFERENCE ADJOURNS

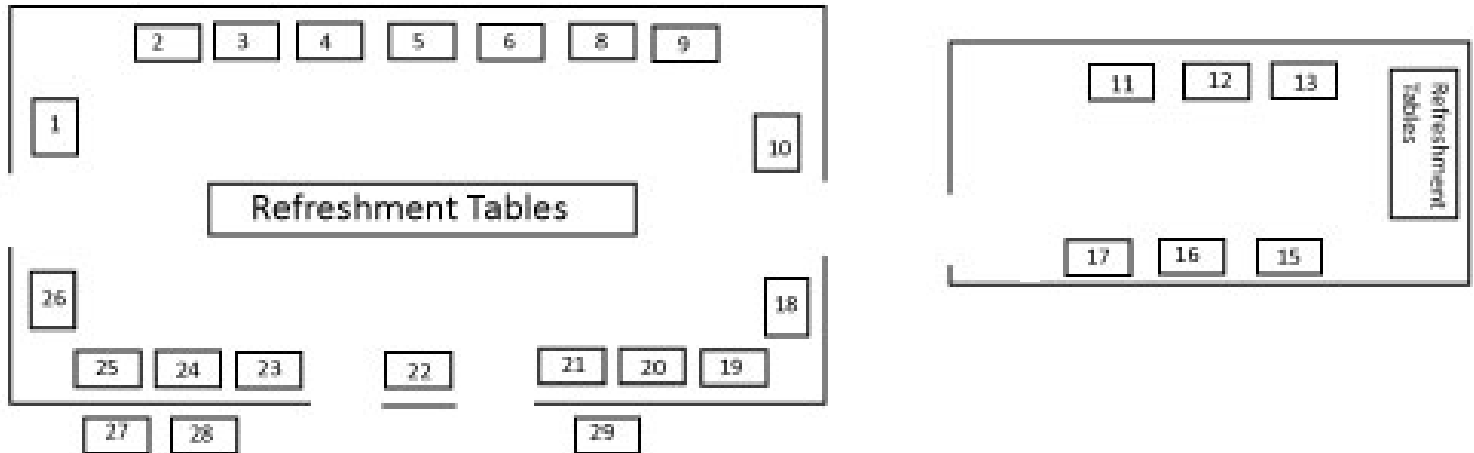
EXHIBITOR & SPONSOR GUIDE



FACILITIES MAP

Not to scale

EXHIBITORS



- | | |
|----------------------------------|----------------------------------|
| 1. Soligie | 15. Literature |
| 2. North Dakota State University | 16. (CAMM) |
| 3. Tamarack Scientific | 17. New Way Air Bearings |
| 4. Sonoplot | 18. FUJIFILM Dimatix |
| 5. Sartomer | 19. Northfield Automation |
| 6. Emerson & Cuming | 20. Abbie Gregg, Inc. |
| 7. Displaybank | 21. E Ink |
| 8. Cintelliq | 22. Plextronics |
| 9. GE Global Research | 23. Trident Systems |
| 10. Applied Materials | 24. ExoPack Coating Systems |
| 11. NanoMas | 25. Unijet |
| 12. Precision Process Solutions | 26. Hamilton Precision Metals |
| 13. iTi Corp. | 27. Flexible Display Center, ASU |
| 14. NanoMarkets | |

