The Symposium on Polymers for Microelectronics  
Winterthur Museum & Gardens, Copeland Lecture Hall  
*15th Meeting Agenda*  
May 8-10, 2012

**Tuesday**  
**May 8, 2012**  
8:35 - 8:40 a.m.  
**Session 1 - Novel Polymers and Methods for Electronics**  
*(Morning Session Chairs: Susan Bagen, Mike Gallagher)*  
Welcome; Symposium Opening Remarks

8:40 - 9:25  
**KEYNOTE ADDRESS: Current and Future Needs for Polymeric Materials;**  
Questions / Comments

9:25 - 9:30  
Reducing Gel Particles with Advanced Dispense and Filtration Technology;  
Jennifer Braggin, Entegris, Inc.

9:30 - 10:00  
**A Critical Review: Adhesion Measurement of Thin Polymer Films for Microelectronic Applications;**  
Markus Wöhrmann, Technical University of Berlin and Fraunhofer IZM

10:00 - 10:30  
**Simultaneous Measurements of Effective Chemical Shrinkage and Modulus Evolutions During Polymerization;**  
Bongtae Han, University of Maryland

10:30 - 11:00  
**Break**

11:00 - 11:30  
**Printed Electronics - An Update;**  
Don Hayes, MicroFab, Inc.

12:00 - 1:30  
**Lunch**  
*(Afternoon Session Chairs: Tim Daubenspeck, Jack Craig)*

1:30 - 2:00  
**Investigation of pattern reflow phenomenon on photosensitive polymer by ARES;**  
Hyun Yong Cho, Samsung Cheil Industries, Inc.

2:00 - 2:30  
**High Thermal Conductivity Networked Composite Films for Thermal Interface Applications;**  
Joel Plawsky, Rensselaer Polytechnic Institute.

2:30 - 3:00  
**Break**

3:00 - 3:30  
**Conducting Polymers in Microelectronics;**  
E.Nagabhushan, University College of Technology, Osmania University, Hyderabad, India.

3:30 - 4:00  
**Hybrid Polymer Composite Assembly Materials for Emerging Electronics Markets;**  
Gene Kim, Cookson Electronics Assembly Materials Group.

4:00 - 4:30  
**Improved Solvent Resistance for High Temperature, Transparent OLED and LC Substrates;**  
Matt Graham, Akron Polymer Systems, Inc.

4:30 - 5:00  
**Development of Flexible Polymeric Electronic Substrates for Medical Devices;**  
Susan Bagen, EIT, Inc.

5:30 - 7:00  
**Symposium Reception - Reflecting Pool**
Wednesday  May 9, 2012

Session 2 - Advances in Polymers & Methods for Semiconductor Fabrication (Morning Session Chairs: Jim Chung, Joel Plawsky)

8:35 - 8:40 a.m. Welcome; Symposium Day 2

8:40 - 9:25 KEYNOTE ADDRESS: Semiconductor Paradigm Shift and Increased Foundry Roles; Douglas C. H. Yu, Taiwan Semiconductor Manufacturing Company, LTD.

9:25 - 9:30 Questions / Comments

9:30 - 10:00 Low-temperature Curing Positive-Tone Photosensitive Polyimide Coatings for Next-generation Semiconductors; Satoshi Kamemoto, Toray Industries, Inc.

10:00 - 10:30 Photosensitive Polyimide Buffer Coat Material for FC-BGA; Atsushi Fujii, Asahi Kasei E-materials Corporation.

10:30 - 11:00 Break

11:00 - 11:30 Development of Photosensitive Buffer Coating Materials; Masaaki Hanamura, JSR Corp.

11:30 - 12:00 Photosensitive Spin-On Dielectric Passivation Material Decisions for Flip-Chip Devices; Brian Erwin, IBM, Inc

12:00 - 1:30 Lunch (Afternoon Session Chairs: Rob White, Ed Prack)

1:30 - 2:00 Development of a Photosensitive PBO with Improved Chemical Resistance; Mamoru Sasaki, Hitachi Chemical, DuPont Microsystems.

2:00 - 2:30 Positive-tone Photodefinable Transparent Siloxane Materials; Toru Okazawa, Toray Industries.

2:30 - 3:00 Break

3:00 - 3:30 Single-Layer and Bi-Layer Spray Coating for Lift-off on Topographically Challenged Wafers; Chad Brubaker, E.V. Group, Inc.

3:30 - 4:00 SU-8 Formulation for 436 nm Lithography Applications; William Weber, MicroChem Corp.

4:00 - 4:30 Low-Temperature Curable Positive-Tone Photosensitive Dielectric for WLP Applications; Akitoshi Tanimoto, Hitachi Chemical, Inc.


6:00 - 9:30 Exhibitors/Cocktails/ Dinner
Thursday May 10, 2012  

**Session 3 - Polymers & Methods for 3-D, TSV, WLP and Emerging Applications.**  
*(Session Chairs: Bill Weber, Chris Milasincic)*

8:35 - 8:40 a.m.  
Welcome; Symposium Day 3

8:40 - 9:25  
**KEYNOTE ADDRESS:** Polymer Dielectrics in Wafer Level Packaging: Status and Direction; Phillip Garrou, Yole Developpement.

9:25 - 9:30  
Questions / Comments

9:30 - 10:00  
Handling and Processing of Thin Wafers by Temporary Wafer Bonding - Backbone of 3-D System Integration; Kai Zoschke, Fraunhofer IZM, Berlin.

10:00 - 10:30  
Growth in Cu Pillar and Material Requirements; E.Jan Vardaman, Tech Search, Inc.

10:30 - 10:50  
Break

10:50 - 11:20  
WLP1000 Dry Film Photoresist Applications for Wafer Level Package; Hao Yun, DuPont Electronics and Communications

11:20 - 11:50  
Chip Embedding by Spin-On Dielectrics; Fabrice Duval, IMEC

11:50 - 12:20  

12:20 - 12:25  
Wrap-Up; Closing Remarks