

AGENDA

Symposium on Chemical Mechanical Polishing
August 10-13, 2003
Hilton Lake Placid Resort

Sunday, August 10:

- 12:00 - 5:00 P.M. Hotel Check-in and CAMP Registration
- 6:00 - 7:00 P.M. Cocktail Cruise Reception aboard the Doris (No formal dinner provided) (First 60 to sign up - need to be at Marina Dock by 5:45 P.M. at the latest)
- 6:15 - 7:30 P.M. Dancing Bears Lounge: For those arriving late - light hors d'oeuvres and a drink on CAMP

Monday, August 11:

- 7:00 - 8:00 A.M. Breakfast - Terrace Room

MEETING HELD IN MEDALLION ROOM

- 8:00 A.M. S.V. Babu: Opening Remarks

Session I - Chair:

- 8:05 A.M. "New Formulations and New Particles for STICMP"
- Shawn Feng and Brian Santora, Ferro
- 8:30 A.M. "Direct STICMP by Selective Deceleration Mechanism"
- Maria Peterson, Cabot
- 8:55 A.M. "Abrasive Particle Effects on the Planarization of Cu Films"
- Song Chang, Ashland
- 9:20 A.M. "Metal CMP Technology for Damascene Gate Transistor"
- Keisuke Suzuki, Selete
- 9:45 A.M. "Development of Novel Barrier Structures for Ultra-Low k Applications"
- Zhendong Liu, Rodent Inc.
- 10:10 A.M. Coffee Break

Monday, August 11 Continued:

Session II- Chair:

- 10:40 A.M. "Influence of Slurry Chemistry on Copper Polish Defects"
—Anne Miller, P.B. Fischer, A. Daniel Feller, T. Andryushchenko, and K. Cadien, Intel Corporation
- 11:05 A.M. "Stabilization Method of Fumed Silica Slurry"
—Masanobu Hanazono, S. Haba, Y. Ohta and K. Fukuda, Roden Italia
- 11:30 A.M. "Advanced Metallizations: Novel Materials and Processes to Challenge CMP Technology" —Daniel Joseil, NIST
- 11:55 A.M. Discussion
- 12:00 P.M. Lunch - Terrace Room

Session III- Chair:

- 4:00 P.M. "Investigation into the CMP Mechanism of Silicon Oxide through the By-products"
—William America, IBM Microelectronics, J. Keleher and K. Rushing, Clarkson University
- 4:25 P.M. "Effects of Hydrothermal Treatment of Ceria Coated Silica Particles on CMP Slurry Properties" —Lee Seung-Ho, KICT Korea
- 4:50 P.M. "Friction & Removal Rate Studies of ILD CMP using Novel Cerium Oxide Slurries"
—Deanna King and Ara Philipossian, University of Arizona
- 5:10 P.M. Coffee Break

Session IV - Chair:

- 5:30 P.M. "Friction Force Measurement and CMP"
—Hong Liang, University of Alaska
- 5:55 P.M. "Advanced AFM Techniques for Cu/bulk Characterization"
—Todd VanDeusen, Veeco
- 6:20 P.M. "Electroplating: Effects on CMP"
—David Merricks, Ferro
- 6:45 P.M. Discussion
- 7:00 P.M. Dinner

Tuesday, August 12:

7:00 - 8:00 A.M. Breakfast - Terrace Room

Session V - Chair:

8:05 A.M. "TaCMP Slurry with Low Mechanical Effect"
- Yasushi Kurata, Hitachi Chemical Co., Ltd.

8:30 A.M. Electrochemical Impedance Studies of Surface Reactions in CMP of
Tantalum and Copper
- Dip Roy, Clarkson University

8:55 A.M. "Thermal Analysis of Polishing Pad"
- Nina Chechik and David James, Rodel

9:20 A.M. "A New Pad for CMP"
- Bill Allison, PPG

9:45 A.M. "Thermal and Mechanical Properties of CMP Pads Containing Embedded Water
Soluble Particles" - Leslie Chams, Masano Sugiyama and Ara Philipossian,
University of Arizona

10:10 A.M. Coffee Break

Session VI - Chair:

10:40 A.M. "EBARA Bonded Abrasive Pad"
- Yutaka Wada, Ebara Corporation

11:05 A.M. "Copper CMP with Abrasives Tailored For Performance"
- Stuart Helting, PPG

11:30 A.M. "Surface Preparation Chemistry for CMP and Post-CMP Processes"
- Kyle Bartosh, ESC, Inc

11:55 A.M. Discussion

12:00 P.M. Lunch - Terrace Room

Session VII - Chair:

4:00 P.M. "Diffusion and Adsorption of Colloidal Particles Under Transient Conditions During
a Rinsing Step" - Win Fyen and Paul Mertens, MEC

4:25 P.M. "Corrosion Protection Technique in Post-CMP Cleaning"
- Manabu Tsujimura and Masako Kodera, Ebara Corporation

4:50 P.M. Novel Abrasive Slurry for Cu and W CMP
- S. Hegde, S.V. Babu, Clarkson University and S. Jha, Climax Molybdenum Co.

5:15 P.M. Break

5:30 - 7:00 P.M. Poster Session/Open Bar - Medalion Room

7:00 P M . Dinner
Wednesday, August 13:

7:00 - 8:00 A M . Breakfast - Terrace Room

Session VIII - Chair:

- 8:05 A M . "Theory of Pad Conditioning and Wear"
- Len Borucki, Intelligent Planar
- 8:30 A M . "The Role of Pad Asperity Structure and Pad Conditioning in CMP"
- A. Scott Lawing, Rodel, Inc.
- 8:55 A M . "Active Pad Surface Management Technology Dramatically Improves Polishing Performance, and Control" - Steve Benner, TBW Industries
- 9:20 A M . "Pad Conditioning Optimization and Impact on the CMP Process"
- Rob Rhodes, Polishing Solutions International
- 9:45 A M . "An Introduction to CMP for MEMS"
- Michael Busse, Sandia
- 10:05 A M . Break
- 10:25 A M . "TBD"
- Fred Higgs, George W. Woodruff School of Mechanical Engineering
- 10:50 A M . "Chemical Mechanical Polishing Patterned Wafer Standards"
- Sookap Hahn, SKW Associates, Inc.
- 11:15 A M . "3D Copper CMP"
- Paul LeFevre, Fujimi
- 11:40 A M . Closing Remarks, S.V. Babu, CAM P
- 11:45 A M . Checkout
- 12:00 Noon Lunch - Terrace Room

Revised 7/28/03