The Fourth International Surface Cleaning Workshop Agenda

The Colonnade Boston and Northeastern University Campus

November 7-8, 2006

Sponsored By:

Tutorial: Surface Cleaning With Emphasis on Post-CMP Cleaning

Monday, November 6, 2006

8:00 - 8:30	**Registration & Breakfast**	**406 Egan Building, Northeastern University**
8:30 - 10:00	Fundamentals of Particle Adhesion	
10:00 - 10:20	**Morning Break**	
10:20 - 12:00	Hydrodynamic (Shear Stress) and Brush Cleaning	
12:00 - 1:00	**Lunch**	
1:00 - 3:00	Megasonic and Ultrasonic Cleaning	
3:00 - 3:20	**Afternoon Break**	
3:20 - 5:00	Dry Cleaning (Cryogenic Areosol and Laser)	

Surface Cleaning Workshop

Tuesday, November 7, 2006

8:30-9:00	**Registration & Breakfast**	**Colonnade Hotel Boston Ballroom**
9:00 - 9:15	**Welcome - Ahmed Busnaina**	
9:15 - 10:00	Keynote Speaker Takeshi Hattori, Sony *Wafer-Cleaning Challenges for the Next-generation SoC Manufacturing*	
10:00 - 10:30	Randolph Knarr, IBM *Damage-Free Cleaning Challenges in Emerging Technologies*	
10:30 - 11:00	Dave Maloney, EKC/Dupont *Dual Damascene Post-Etch Cleaning Challenges - Today and in the Near Future*	
11:00 - 11:20	**Break**	
11:20 - 11:50	Ahmed Busnaina, Northeastern University *Effect of Medium and Aging on Particle Adhesion and Removal*	
11:50 - 12:20	Abbas Rastegar, Sematech *EUV Mask Blank defects and their removal*	
12:20 - 1:20	**LUNCH**	**Colonnade Hotel Boston Ballroom**
1:20 - 1:50	Woo-Kwan Shim, Samsung *Development of a New Particle Cleaner for W Gate*	
1:50 - 2:20	Hitoshi Morinaga, Fujimi Inc. *Cleaning and Planarization*	
2:20 - 2:50	Paul Mertens, IMEC *Critical issues for 45 nm technologies and beyond*	
2:50 - 3:10	**BREAK**	
3:10 - 4:20	**PANEL DISCUSSION**	
5:00 - 7:00	**RECEPTION AND POSTER SESSION**	**Northeastern University - Raytheon Amphitheater, 240 Egan Building**

Surface Cleaning Workshop

Wednesday, November 8, 2006

Colonnade Hotel
Boston Ballroom

8:30 - 9:00	**Registration & Breakfast**
9:00 - 9:30	Jingoo Park, Hanyang University *Control of Defects in Poly Silicon CMP*
9:30 - 10:00	Harald Okorn-Schmidt, SEZ *Cleaning, interface engineering and surface preparation – the challenges continue*
10:30 - 11:00	Gautam Kumar , Purdue *Scaling of Adhesion Forces – Micron to Nanometer Size Contaminants*
11:00 - 11:20	**Break**
11:20 - 11:50	Steven Verhaverbeke, Applied Materials *Cleaning Technologies for 45nm and beyond.*
11:50 - 12:20	Rick Reidy, University of North Texas *Characterization of Plasma Damage in Porous Low-k Dielectrics*
12:20 - 1:20	**Lunch**
1:20 - 1:50	Robert Wadja, Entegris *Membrane Filters with Dual Particle Capture Mechanisms for Acidic-Based Sub-Micron Processes*
1:50 - 2:20	John Rosato, Applied Materials *A Multiple Transducer Megasonics Technology Utilizing a Controlled Single Bubble Cavitation Mechanism for Nanoparticle Cleaning*
2:20 - 2:50	Deborah Yellowaga, Honeywell *Highly Selective Removal of Plasma Etched and Ashed Inorganic BARC Materials*
2:50 - 3:10	**Break**
3:10 - 3:40	Ken Finster, EHD Technology Group, Inc. *Surface Preparation for In-Process Semiconductor Wafers Using Electrohydrodynamics (EHD)*
3:40 – 4:10	Victoria Chaplick, UV Tech Systems *A Novel Photoreactive Surface Processing System*