



Applied Materials' UVision SP Solves Defect Inspection Challenges for Immersion Lithography at CNSE's Albany NanoTech

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SANTA CLARA, Calif.--(BUSINESS WIRE)--Dec. 5, 2006--Applied Materials, Inc. (Nasdaq:AMAT) today announced that its Applied UVision(R) SP brightfield inspection system has achieved a significant breakthrough in resolving defect inspection challenges related to immersion(1) lithography at the College of Nanoscale Science and Engineering (CNSE) of the University at Albany's Albany NanoTech complex. Using new variable laser polarization technology, the UVision SP is the first system to capture critical 30nm immersion lithography defects, including micro-bridges between dense structures.

"The comprehensive detection results provided by the Applied UVision SP system allowed full characterization and optimization of the immersion lithography process," said Dr. James G. Ryan, professor of nanoscience and associate vice president of technology at CNSE. "The knowledge gained from defectivity trends and root cause studies will be extremely beneficial in advancing the cutting-edge research and development being conducted at CNSE's Albany NanoTech complex by faculty, scientists and our growing complement of global corporate partners."

The Applied UVision SP system's DUV laser inspection technology provides a unique advantage in detecting immersion lithography-related defects. While the DUV wavelength suppresses noise from previous layers, the laser brightness and high-sensitivity photomultiplier array capture the weak defect signals typically found in lithography layers. Variable laser polarization capability further extends UVision's sensitivity in finding small defects on complex backgrounds. Visit <http://www.appliedmaterials.com/products/resolution.html>.

"We are excited to be part of the immersion lithography program at the Albany NanoTech complex and are pleased with the outstanding results obtained using the UVision SP system," said Dr. Gilad Almogy, vice president and general manager of Applied Materials' Process Diagnostics and Control Group. "With the UVision SP, chipmakers can now fully characterize their immersion lithography process and move closer to implementing it in production."

CNSE, the College of Nanoscale Science and Engineering of the University at Albany-State Univ. of New York, is the first college in the world devoted exclusively to the research, development and deployment of innovative nanoscience, nanoengineering, nanobioscience and nanoeconomics concepts. CNSE's Albany NanoTech complex has more than 250 U.S. and worldwide partners, including some of the world's largest semiconductor and semiconductor-related tool manufacturing companies. For more information, visit CNSE website at <http://cnse.albany.edu>.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in Nanomanufacturing Technology(TM) solutions with a broad portfolio of innovative equipment, service and software products for the fabrication of semiconductor chips, flat panels, solar photovoltaic cells, flexible electronics and energy efficient glass. At Applied Materials, we apply Nanomanufacturing Technology to improve the way people live. Learn more at www.appliedmaterials.com.

(1) Immersion: a chip patterning technique for extending 193nm wavelength lithography methods.

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