



NEWS RELEASE

Alchimer's Enhanced eG ViaCoat Achieves up to 80 Percent Reduction In Cost of Ownership for TSV Copper Seed

*Improved Process Can Be Easily Implemented on Most Industry-Standard
Wet Plating Tools for Deep Savings in Capital Spending, Depreciation*

MASSY, France — June 10, 2009 — Alchimer S.A., a leading developer of innovative chemical formulations and processes for semiconductor-related nanometric coating deposition, announced today that new enhancements to its eG ViaCoat process provide customer cost savings of up to 80 percent compared to dry vacuum processes. A major element of the savings is the ability to use existing plating equipment for the process, thus avoiding substantial capital investment and depreciation costs.

Alchimer's eG ViaCoat is a wet deposition process for the copper seed metallization of through-silicon vias (TSVs), which are used to create interconnections in advanced 3D-packaging applications. These structures are typically very narrow in comparison to their depth; this high aspect ratio creates a number of challenges to the deposition of uniform films.

The eG ViaCoat process uses liquid chemicals to deposit these films at quality levels that meet or exceed standard industry quality metrics. In addition to having a number of process advantages, this wet chemical approach allows the eG ViaCoat to be implemented on legacy plating equipment without retrofits or modifications.

"These enhancements represent an extended lifetime for existing equipment, and are an important step forward in our already aggressive cost reduction program. We want to help our customers adapt to the current economic conditions without compromising process quality and integrity," said Steve Lerner, CEO of Alchimer. "Depreciation of capital equipment is a large component of the overall cost-of-ownership for any new process, and this new development drastically reduces or eliminates that element of the cost structure."

Building on previous successes in adapting the technology to existing tools, Alchimer researchers are developing other replacements for related dry processes, and expect to provide additional cost-savings and process enhancements in the near future, including replacements for dry approaches to the isolation and barrier layers.

Chipmakers can achieve cost of ownership savings of nearly 80 percent with depreciated plating equipment by replacing typical dry processes such as PVD, CVD and ALD for Cu seed deposition. To support the advancement of 3D packaging and the emerging TSV market, Alchimer is also adding field personnel to support customers with IP transfers related to these new enhancements.

3D applications include stacked memory and logic arrays as well as MEMS/IC combinations. Their high-density via requirements will benefit substantially from eG ViaCoat and its implications for improved step coverage, conformality, adhesion, and other characteristics, as well as the cost reductions.

About Alchimer S.A.

Alchimer develops and markets innovative chemical formulations, processes and IP for the electrochemical deposition of nanometric films to create copper interconnects in semiconductor wafers and through silicon vias for 3D packaging. The company's breakthrough technology, Electrografting (eG™), is an electrochemical-based process that enables the growth of very thin coatings, of various types, on both conducting and semiconducting surfaces. Based in Massy, France, Alchimer is a spin-off from the Commissariat à l'Énergie Atomique (CEA). Founded in 2001, it won the First National Award for the Creation of High Tech Companies from the French Minister of Research and Industry and is a Red Herring Top 100 European Company.

Contacts:

Kathy Cook
Alchimer
Director of Business Development
Phone: +1 214 649 6153
kathy.cook@alchimer.com

Sarah-Lyle Dampoux
Loomis Group
Phone: +33 1 58 18 59 30
dampoux@loomisgroup.com