



UNIVERSITY OF WASHINGTON SELECTS ALTATECH'S CVD SYSTEM TO DEVELOP NEW PROCESS MATERIALS

Montbonnot, France and Berlin, Germany, March 31, 2014 — Altatech, a subsidiary of Soitec, has received an order from the University of Washington in Seattle for an AltaCVD™ chemical vapor deposition (CVD) system whose unique combination of capabilities allows users to develop new process materials with high added value. The Altatech's CVD system will be installed at the university's Washington [Nanofabrication Facility \(WNF\)](#), where it will be used by both internal and external researchers in fabricating a broad range of semiconductor-based devices including leading-edge CMOS transistors, MEMS, ICs built with the latest in through-silicon-via (TSV) technology, advanced LEDs and solar cells.

Altatech's pulsed CVD systems are currently used extensively in R&D and pilot production facilities throughout Europe; however, the University of Washington's order represents the first such system to be delivered to a North American university R&D and pilot production facility. The university's acquisition of the AltaCVD system, along with recent installations of an advanced deep reactive ion etcher (DRIE) and a plasma-enhanced CVD (PECVD) tool, provides the capability to assemble an electroplated TSV fill process.

Commenting on the tool's capabilities, Dr. Michael Khbeis, acting director of the WNF, claims, *"The AltaCVD system provides a unique capability that enables researchers to deposit conformal metal films for TSV applications as well as metal oxides and nitrides for high-k dielectrics and piezoelectric materials. The higher deposition rate enabled by pulsed CVD makes ALD (atomic layer deposition) films a tractable solution for scale-up paths toward high-volume manufacturing for our researchers and industrial clients. This ensures a viable pathway from academia to real economic impact in our region."*

"Extending the use of our CVD systems into this acclaimed user facility in North America continues to demonstrate the widely recognized advantages of our pulsed deposition technology," said Jean-Luc Delcarri, general manager of Soitec's Altatech subsidiary. *"We are very pleased to add the University of Washington to the growing list of our CVD equipment adopters."*

Altatech will support its AltaCVD installation at the University of Washington from its U.S.-based business and service operation center.

The AltaCVD system uses pulsed deposition technology to offer a unique combination of capabilities for developing new materials. It can perform ALD for exceptional 3D coverage at deposition rates matching those of more conventional CVD techniques. This allows superior stoichiometry control while creating highly conformal thin and thick films, which cannot be achieved using many of today's existing technologies.

Altatech's system design combines a unique vaporizer technology, gas/liquid panel integration, dual-channel showerhead and chamber design. The combination of Altatech's proprietary reactor design and precursor introduction path with pulsed liquid injection and vaporization enables nanoscale control of film thickness, uniformity, composition and stoichiometry in complex materials.

About the University of Washington Nanofabrication Facility:

The University of Washington – Washington Nanofabrication Facility (WNF) is a national user facility that is a part of the [National Nanotechnology Infrastructure Network](#) (NNIN). Located on the [University of Washington](#), Seattle campus, WNF is a full-service micro- and nanotechnology user facility and is the largest public access fabrication center in the Pacific Northwest, with 15,000 square feet of laboratories, cleanrooms, and user spaces focused on enabling basic and applied research, advanced research and development, and prototype production. With substantial equipment and developed capabilities and in partnership with the UW Center for Commercialization (C4C) New Ventures Facility, WNF bridges academia with local start-ups, businesses and professional organizations and seeks to promote economic and job growth in the local region by fostering innovation. Nationally and internationally, WNF provides foundry-lite services (remote use) through which devices are fabricated and characterized by expert staff engineers. At the present time, WNF offers a silicon photonics foundry for quick-turn development of new photonics devices and waveguides. WNF is expanding its foundry-lite services to add an R&D-volume TSV process flow to provide a cost-effective capability for researchers to vertically integrate electronics and sensors into compact modules.

About Altatech's Technology and Equipment Expertise:

Soitec's Altatech offers a unique portfolio of equipment for mature and advanced materials deposition and holistic defect inspection. It develops highly efficient, cost-effective inspection and chemical vapor deposition (CVD) technologies used for R&D and manufacturing of semiconductors, LEDs, MEMS and photovoltaic devices. Altatech Semiconductor S.A. became a subsidiary of Soitec in January 2012.

About Soitec:

Soitec is an international manufacturing company, a world leader in generating and manufacturing revolutionary semiconductor materials at the frontier of the most exciting energy and electronic challenges. Soitec's products include substrates for microelectronics (most notably SOI: Silicon-on-Insulator) and concentrator photovoltaic systems (CPV). The company's core technologies are Smart Cut™, Smart Stacking™ and Concentrix™, as well as expertise in epitaxy. Applications include consumer and mobile electronics, microelectronics-driven IT, telecommunications, automotive electronics, lighting products and large-scale solar power plants. Soitec has manufacturing plants and R&D centers in France, Singapore, Germany and the United States. For more information, visit: www.soitec.com.

International Media Contacts

(trade press)
Camille Dufour
+33 (0)6 79 49 51 43
camille.dufour@soitec.com

(business press)
Marylen Schmidt
+33 (0) 4 76 92 87 83
marylen.schmidt@soitec.com

Investor Relations

Olivier Brice
+33 (0)4 76 92 93 80
olivier.brice@soitec.com

###