

## Brewer Science, Nantero to commercialize carbon nanotube solution for nonvolatile memory

## January 25 2005

Brewer Science, Inc., announced that it has entered into an agreement with Nantero, Inc., of Woburn, Massachusetts, to commercialize CMOSgrade carbon nanotube solution utilizing processes developed by Nantero. This will allow <u>carbon nanotubes</u> (CNTs) to be used in semiconductor fabs by Brewer Science customers. Brewer Science will use its skill in producing electronic grade chemicals to deliver high quality CMOS-grade carbon nanotube solutions which will enable the manufacturing of nonvolatile memory devices.

Carbon nanotubes are graphite-like structures composed entirely of carbon and having linkages called fullerenes, so named because the structure of CNTs resembles the geodesic dome structure developed by Buckminster Fuller. Carbon nanotubes were first discovered in 1991 by electron microscopist Sumio Iijima, who was studying the material deposited on the cathode during the arc-evaporation synthesis of fullerenes. In 1996, Richard Smalley, a professor at Rice University, developed a commercially viable method for producing CNTs.

Brewer Science is a multi-divisional technology company providing product and process solutions in the microelectronic, optoelectronic, sensor and MEMS industries. Since its founding in 1981, Brewer Science has been in the business of supplying high-quality chemicals to the integrated circuit industry. The company's family of products includes ARC anti-reflective coatings for state-of-the-art



photolithography applications; Cee benchtop spinners, coaters and hot plates for custom wafer processing; Talon track systems and CON-TACT planarization systems.

Under the leadership of Dr. Terry Brewer, president and founder, Brewer Science continues to seek innovative technologies, reliable products and meaningful services, each attuned to the specific needs of individual customers.

"This is a unique opportunity for Brewer Science and Nantero. By bringing together the skills and expertise of these two companies, we are creating more value than either company could create alone. By leveraging each company's strengths, we can develop a new model for developing new products in the nano-arena. This is a great opportunity for our company," said Terry Brewer, President and Founder, Brewer Science, Inc.

"As Moore's Law requires us in the IC industry to move to faster and faster devices, and therefore smaller and smaller features, nanotubes have the ability to give us a technological and therefore competitive advantage in supplying our customers," said Tony Flaim, Chief Technology Officer, Brewer Science, Inc.

"Nantero is pleased to be working with BSI, one of the most innovative and wellrespected suppliers to the semiconductor industry. By joining with BSI, we can together ensure a reliable and high-quality supply of carbon nanotube solution that meets the demanding standards of the semiconductor industry. This new product will help support the development of breakthrough new products leveraging carbon nanotubes," said Greg Schmergel, CEO, Nantero, Inc.



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