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FOR IMMEDIATE USE BEFORE APRIL 10

Avantor® Experts to Discuss Alternative Semiconductor Wafer Etching Technology at Annual Surface Prep and Cleaning Conference (SPCC)

Center Valley, PA (USA) – March 22, 2018 – Sherman Hsu, Ph.D., Global R&D Director, Electronic Materials at [Avantor®](#), will deliver a technical presentation titled “Novel EHS-Friendly Ru Select Etch and SPM Alternatives for 5nm Applications” at the 20th Surface Preparation and Cleaning Conference ([SPCC](#)) April 10-11 in Cambridge, MA.

In addition, Avantor is sponsoring the conference and will have experts available in the exhibit area to discuss J.T.Baker® brand advanced chemistries for surface preparation and other [semiconductor manufacturing](#) applications.

With today’s advanced semiconductor technologies, new material integration has been an option to resolve resistance-capacitance delays. For example, cobalt (Co) interconnects have been integrated in some 10 nm and 7 nm devices, and ruthenium (Ru) filled contacts and interconnects without a barrier or adhesion layer deliver even better resistivity and are being considered for 5 nm or below.

Selective Ru etching presents great challenges with limited satisfactory options since Ru is a hard metal resistant to common etch chemistries such as sulfuric acid-hydrogen peroxide mix (SPM), concentrated hydrofluoric acid (HF) or aqua regia. Another longstanding challenge is to find a more environmentally-friendly SPM replacement for effective heavy hydrocarbon removal.

Hsu’s presentation will demonstrate the results achieved using Avantor’s RSE-1—a fully aqueous, more environmentally-friendly chemistry.

“SPM incompatibility with many materials further limits its applications,” said Hsu. “Our researchers have developed a chemistry to solve technical challenges of ruthenium select etch with broad substrate compatibility and effective multilayer photoresist/bottom anti-reflective coating removal or rework including implanted photoresist.”

For information about Avantor visit: www.AvantorInc.com or twitter.com/avantor_news or www.facebook.com/AvantorInc.

About Avantor

Avantor is a leading global provider of integrated, tailored solutions for the life sciences and advanced technology industries. Strengthened by the recent acquisition of VWR, the Company is a trusted end-to-end partner to customers and suppliers from discovery to delivery. With operations in more than 30 countries and a diverse portfolio that includes more than four million products, Avantor supports customer success through innovation, cGMP manufacturing and comprehensive service offerings. Collectively, we set science in motion to create a better world. For more information visit www.settingscienceinmotion.com.

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