

## FOR IMMEDIATE RELEASE

## RASIRC Presents at Sematech Surface Preparation and Cleaning Conference Describes new hydrogen peroxide vaporization source

**San Diego, Calif. – May 30, 2013** – <u>RASIRC®</u> announced that the company gave an oral presentation at Sematech's Surface Preparation and Cleaning Conference on the topic "*New Vaporization Source for H2O2 for Pre-Treatment/Cleaning of ALD Deposition Surfaces.*" The conference, held April 2-4, 2013 in Austin, Texas, focuses on current developments and ITRS challenges in advanced wafer and mask cleaning and surface preparation technologies.

The RASIRC presentation described the advantages of dry chemistries over liquid-based cleaners to address contamination issues and reduce chemical consumption. Hydrogen peroxide vapor offers better interface control to reduce defect density through both carbon removal (cleaning) and surface preparation prior to Atomic Layer Deposition (ALD). RASIRC presented a new method of hydrogen peroxide vapor delivery that overcomes potential problems such as inconsistent delivery, dangerous concentration and decomposition at high temperatures.

"Hydrogen peroxide can now be delivered at stable flow rates and concentrations with this novel approach," explains Jeffrey Spiegelman, RASIRC Founder and President. "As a result, cleaning and surface preparation is effective even when dealing with sub 20nm and 3D structures."

Conventional cleaning and surface preparation methods are seriously challenged as device design dimensions move toward the molecular level. As geometries shrink the amount of material loss that can be tolerated shrinks proportionally. Cleaning steps must therefore be much more controllable and less aggressive. An additional challenge is smaller vias and 3D structures, creating areas in the device that cannot be properly wet cleaned because of surface tension issues and sensitive device structures that are too fragile for mechanical and/or spray jets. The surface tension of liquids will prevent wetting of small or high aspect ratio structures resulting in poor cleaning.

In the past, H2O2 could not be vaporized from a bubbler source without the source changing in concentration over time. The new vaporization technology has been shown to provide consistent delivery of H2O2 in the vapor phase as well as in the source container.

More information about hydrogen peroxide vapor delivery systems for cleaning and surface preparation is available directly from RASIRC.

## **About RASIRC**

RASIRC products purify and deliver ultra-pure liquids and gases. RASIRC technology is the first to generate ultra high purity (UHP) steam from de-ionized water. It reduces cost, increases yield, and improves safety. RASIRC humidifiers, closed loop humidification systems, and steam generators are of critical importance for many applications in the semiconductor, photovoltaic, pharmaceutical, medical, biological, fuel cell, and power industries. Call 858-259-1220, e-mail info@rasirc.com, or visit www.rasirc.com.

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