

## FOR IMMEDIATE RELEASE

## RASIRC Presents Hydrazine for Low Temperature ALD at ASMC 2017

San Diego, Calif – May 10, 2017–RASIRC will present at the 28<sup>th</sup> Annual SEMI Advanced Semiconductor Manufacturing Conference (ASMC 2017) held May 15-18 in Saratoga Springs, New York. The presentation will discuss a novel Hydrazine vaporization source that enables low temperature metal nitride ALD. Chief Technology Officer Daniel Alvarez will present "Enabling Low Temperature Metal Nitride ALD using Ultra-High Purity Hydrazine" in Session 15 – Advanced Equipment and Materials Processes & Emerging Technologies. The presentation is scheduled for Thursday May 18 at 10:25am.

Next generation channel materials including SiGe, Ge, and InGaAs put difficult thermal constraints (<400°C) on metal nitride deposition methods. These methods are needed for passivation layers, sidewall spacers, contact etch stop layers, TiN for metal gate electrodes and barrier layers, and other applications. Hydrazine shows promise as a low temperature nitrogen source for thermal ALD.

"Shrinking line width combined with three-dimensional structures makes older methods using ammonia or plasma ineffective at new lower thermal budgets. The use of our BRUTE Hydrazine Product enables thermal metal-nitride deposition methods previously not feasible," said Jeffrey Spiegelman, RASIRC President and Founder. "This solves a difficult problem at 7 nm and below."

RASIRC <u>BRUTE® Hydrazine</u> uses a proprietary chemical formulation to deliver ultra-high purity hydrazine from a liquid source that is safer and has quantified low water levels. The company recently released a compact Laboratory version designed for use under vacuum draw. This plug-and-play version enables universities, research institutes

and smaller testing environments to work with the chemistry without changing the

laboratory tools.

**About Ultra High Purity Hydrazine** 

Alvarez will be available throughout the conference to discuss the presentation and

ongoing research. For more information after the conference, follow up by contacting

RASIRC directly at <a href="mailto:info@rasirc.com">info@rasirc.com</a>.

About RASIRC

RASIRC specializes in products that generate and deliver gas to fabrication processes.

Each unit is a dynamic gas plant in a box—converting common liquid chemistries into

safe and reliable gas flow for most processes. First to generate ultra-high purity (UHP)

steam from de-ionized water, RASIRC technology can now also deliver hydrogen

peroxide gas and hydrazine gas in controlled, repeatable concentrations. RASIRC gas

delivery systems, humidifiers, and closed loop humidification systems are critical for

many applications in semiconductor, photovoltaic, pharmaceutical, medical, biological,

fuel cell, and power industries. Call 858-259-1220, email info@rasirc.com or visit

http://www.rasirc.com.

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