

FOR IMMEDIATE RELEASE

RASIRC Presents Process Control 'Ins and Outs' for Optimized Mass Delivery

New data reveals optimization opportunities in throughput and precursor utilization

San Diego, Calif – March 14, 2019 – Dynamic gas generation leader RASIRC will present new data on process optimization for low temperature ALD at the upcoming ALD for Industry 2019 conference. The presentation entitled "Optimization of Delivered Mass from Low Vapor Pressure Precursors through Process Control" is scheduled for 13:50 on Wednesday March 20 as part of the ALD Precursor Development session. RASIRC is a Gold Sponsor and exhibitor at the event held March 19-20 in Berlin, Germany.

"Controlled delivery of low vapor pressure liquids is challenging, but necessary, for low temperature thermal ALD," said Jeffrey Spiegelman, President and Founder. "Our data shows that both throughput and precursor utilization can be optimized through precise control of the many variables involved in the process, resulting in consistent and regulated vapor."

ALD for Industry is an annual event sponsored by the European Society for Thin Films (EFDS). New materials and complex 3D structures now common in many semiconductor and display devices require deposition at the atomic layer and at low temperature. RASIRC is a leader in controlled delivery of highly reactive oxidants and nitrides for low temperature thermal ALD.

Spiegelman will present findings from automated test programs that simulated process recipes in common ALD conditions. Data collected quantified mass flowrates at different process conditions. Spiegelman will also be available to answer questions and discuss findings at the RASIRC exhibit.

About RASIRC Products

BRUTE[®] Peroxide is a novel oxidant that improves passivation and nucleation density at film interfaces when compared to other oxidants. Surface functionalization is denser and initiation is faster using this anhydrous hydrogen peroxide gas compared with alternatives. This high reactivity allows for less chemistry use and higher throughput due to shorter required purge times.

BRUTE[®] Hydrazine enables conformal growth with low wet-etch-rates for SiN. BRUTE[®] Hydrazine gas is virtually water free and has a relatively high flash point for safer handling. Highly reactive, BRUTE Hydrazine creates uniform nitride deposition for advanced materials at low temperature.

The RASIRC Peroxidizer[®] provides high volumes of reactive H₂O₂/H₂O mixtures for high throughput ALD. This reactive gas generator is ideal for roll-to-roll ALD coatings that require high speed deposition at reduced temperatures.

Additional RASIRC products include the RainMaker[®] Humidification System (RHS) and the Hydrogen Peroxide Steamer (HPS). The RHS generates water vapor for oxidation applications and the HPS provides surface cleaning, preconditioning, wet thermal oxidation and residual carbon removal.

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 safer and reliable gas flow for most processes. RASIRC technology delivers water vapor, 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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