

FOR IMMEDIATE RELEASE

RASIRC Optimizes Precursor Mass Delivery Utilizing a Novel Thermal Sensor

President discusses key factors for improved control of atomic scale processing

San Diego, Calif – October 20, 2019 – RASIRC will showcase a recent study focusing on precursor optimization using a novel hydrogen peroxide mass flow sensor at the AVS 66th International Symposium & Exhibition, to be held October 20 through October 25, 2019 in Columbus, Ohio. RASIRC will also be an exhibitor during the conference.

"ALD precursor optimization is a long-standing challenge in semiconductor manufacturing. Precursors cost between \$5 - \$25/gram while utilization is estimated as low as 5-10%. Chip manufacturers have been burdened by precursor costs and low wafer throughput. A non-optimized process consumes excess material and requires longer purge time. For emerging selective deposition processes, control of precursor mass delivery is even more critical to process viability," said RASIRC President and Founder Jeffrey Spiegelman. "Our work uses a novel hydrogen peroxide mass flow sensor to characterize H₂O₂ delivery parameters to minimize the total precursor mass required while maximizing precursor mass delivered in the shortest time."

Technical Presentation

Spiegelman will present "Improved Control of Atomic Scale Processing: Characterization and Optimization of Precursor Mass Delivery Utilizing a Novel Thermal Sensor" on Tuesday, October 22 at 8:40am. The presentation is part of the Precursors and Process Development Session (TF+AP-TuM03) within the Thin Films Division. An abstract of the session is available in the AVS Technical Program.

Exhibition

Spiegelman will be available at Booth #513 to answer questions and discuss RASIRC products including BRUTE® Peroxide and the Peroxidizer® (hydrogen peroxide delivery

systems), BRUTE Hydrazine (anhydrous hydrazine delivery system) and the RainMaker® Humidification System (water vapor delivery system).

About AVS International Symposium and Exhibition

The AVS International Symposium and Exhibition addresses cutting-edge issues

associated with materials, processing, and interfaces in the research and manufacturing

communities. The weeklong Symposium fosters a multidisciplinary environment that cuts across

traditional boundaries between disciplines, featuring papers from AVS technical divisions,

technology groups, and focus topics on emerging technologies. The equipment exhibition is one

of the largest in the world and provides an opportunity to view the latest products and services

offered by 200+ participating companies. More than 2,000 scientists and engineers gather from

around the world to attend.

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. 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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Contacts:

RASIRC

Jeffrey Spiegelman

Phone: 858-259-1220

E-mail: jeff@rasirc.com