



Science and Technology
of Materials, Interfaces, and Processing
Southern California Chapter

Advances in Vacuum Quality Measurement

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Chief Scientist, Granville-
Phillips Instrumentation Div.,
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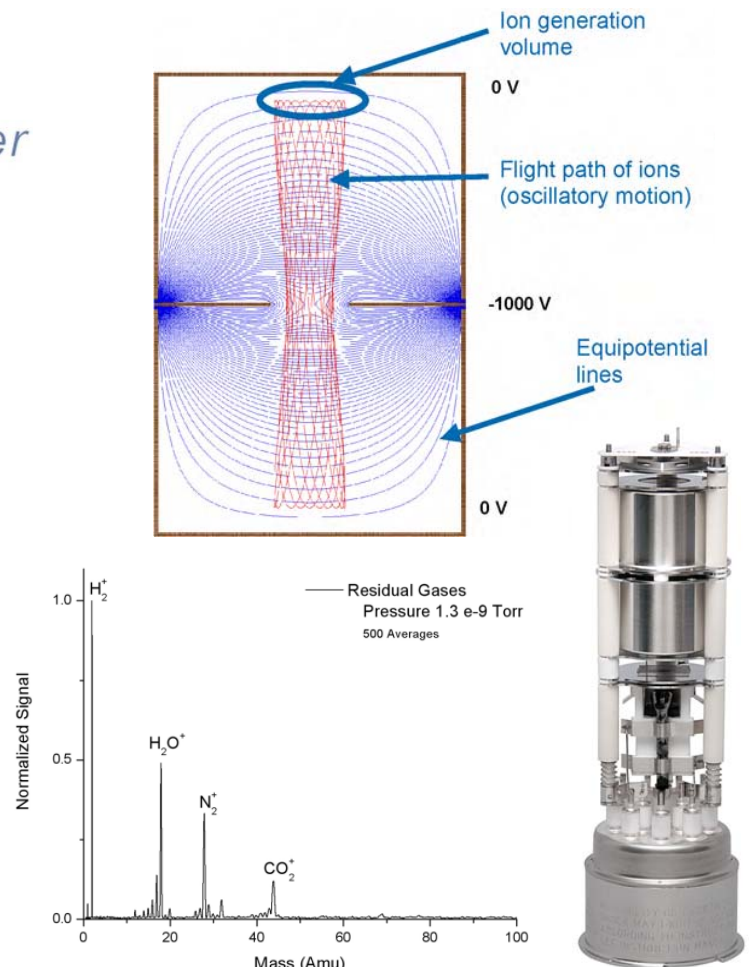
Tuesday, June 14, 2011

Dinner & Presentation Sponsored by
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the AVS

Synopsis

This talk will discuss the significant improvements being made possible by innovations in electrostatic ion traps and autoresonant mass detection.

Relying simply on total pressure to monitor vacuum system readiness and integrity is both dangerous and inefficient. Mass spectrometers – often based on quadrupole filtering – can be used to provide identification of the chemical species that are present in the background. The recently developed autoresonant ion trap mass spectrometer (ART MS) provides potential improvements in vacuum quality control for many industrial applications. For example, the fast response time of ART MS enables tracking of rapidly changing vacuum conditions. The principles of operation of ART MS will be described and compared to quadrupole mass spectrometry legacy technology. The application of ART MS traps to real vacuum quality measurement problems will be explored.



Our Speaker

Dr. Brucker is Chief Scientist at the Granville-Phillips Instrumentation Division of Brooks Automation Inc. located in Longmont, CO. Since 1992 he has been involved in the development and commercialization of scientific instruments including electrostatic ion traps, residual gas analyzers, high vacuum gauges, time-of-flight mass spectrometers, thermal analysis instruments and research-grade quartz crystal microbalance systems. Dr. Brucker is a short course instructor for AVS and a member-at-large of the Rocky Mountain Region AVS. He was previously responsible for the creation of the Vacuum and Analytical Products division at Stanford Research Systems, Inc.

Meeting Details

- Date: Tuesday, June 14, 2011
- Location: Holiday Inn, 2726 South Grand Ave., Santa Ana, CA 92705
Dyer Road & 55 Freeway in Orange County, Phone: 714-481-6300
- Schedule: 6:30 Networking (drinks available at bar in hotel lobby)
(PM) 7:15 Dinner
8:00 Presentation
8:45 Questions & Answers
9:00 End
- Cost: \$30 per person, \$15 students. *Advance payment is required.*
- Menu: "Chicken Picatta" Breast of Chicken with Sauce of Butter, Lemon Juice & Capers. Served with Rice Pilaf & Fresh Seasonal Vegetables. Dinner includes Small Mixed Green Salad, Coffee or Tea, and Chef's Choice of Dessert. Vegetarian option available.
- For additional information, contact us at: info@sccavs.org
- Reservations: Send a check payable to SCCAVS along with Registration Form by the *deadline of June 6, 2011.*

Registration Form

Deadline: June 6, 2011. Payment by check only (No Credit Cards or POs accepted).

Send to: SCCAVS, 1365 Delaware St., Unit 101, Huntington Beach, CA 92648

For additional information, contact: info@sccavs.org

Check enclosed, payable to SCCAVS (\$30 per person, \$15 students)

Chicken Picatta Vegetarian Option (Chef's Choice)

Name: _____

Company/Org _____

Address, Mail Stop _____

City _____ State _____ Zip _____

Phone: _____

Email: _____