

## Upcoming Events

### MEPTEC Symposium Semiconductor to Solar

Talk by Victor Chia Ph.D

A contamination reduction program for improving materials, process tools, manufacturing environment and clean manufacturing

**Santa Clara, CA**  
November 19, 2009

### SPIE

### Advanced Lithography

Talk by Mark Camenzind Ph.D.

Chemical contamination analysis for advanced lithography

**San Jose, CA**  
February 21-25, 2010

## Optima Seminars

Expand your knowledge in engineering and manufacturing solutions to identify, reduce and control contamination. (More information [here](#))

Fremont, CA  
January, 2010

Upcoming dates in the US

Designed for all levels of scientists, engineers, and technicians.

To register, please provide your name, title, company name, company email address and send to [info@balazs.com](mailto:info@balazs.com)

## UPW Sampling Valves: Minimizing Contamination for State-of-the-Art Sample

Sampling is the fundamental step of high purity water testing. An appropriate, representative sample is critical for accurate results. Extremely low levels are only achieved by continually refining and improving our basic knowledge and understanding of sample collection. Sample valve design and set-up can be a significant hindrance to obtaining clean samples. False high data generates confusion for facilities operations personnel where port or environmental artifacts must be explained or rechecked to show the UPW system is or is not in compliance. It also wastes time and money due to resampling. Eliminating or minimizing false high hits is possible by investigating proper sample valve designs, set-up and preparation techniques.



[Read Full Article](#)

## Comparison of Solar-Grade Silicon Analytical Methods for Metallic Contamination

Although more forgiving than silicon used in integrated circuit semiconductor processes, solar-grade silicon (SoGSi) and ultimate photovoltaic efficiency can still be affected via minority carrier lifetime if impurities are above a certain contamination threshold. With considerable emphasis placed on solar energy in the last 2-3 years, and with crystalline or amorphous silicon representing more than 80% of current solar technologies, the need for expedient and low level metallic impurity analysis has increased. In this brief article we will compare and contrast Glow-Discharge Mass Spectrometry (GD-MS) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) as a means to easily quantify metallic contamination in bulk silicon samples....



[Read Full Article](#)

## SEMI Certificate of Appreciation

Dr. Hugh Gotts, Balazs' Director of Research and Development was granted a certificate of appreciation by SEMI for his effort and support of the SEMI International Standards Program in the Photovoltaic Committee this year.

[See Certificate](#)