



# Baltimore-Washington SPECTRUM

**Volume 11, Number 1**

**September 1999**

## LOCAL SECTION NEWS

Welcome to what I trust will be another year of intellectually simulating meetings and discussions. It is a pleasure to have the opportunity to chair the local section. In fact, I serve you as part of a small, elite group – those of us who are so gullible that we have returned to fulfill the responsibilities of the chairperson on an encore basis! Thanks for the (second) opportunity!!

Our kick-off speaker on Thursday, September 30, 1999 will be Dr. Marcus Schuetz of the USDA Food Composition Lab in Beltsville. The title of his presentation is "Continuum Source Atomic Absorption Spectrometry – An AA Method for the Terminally Suspicious". You gotta love a sense of humor! Come check it out -- show your support to the local section. And we'll be dining at one of our favorite "new" restaurants – The West End Grill in Bethesda.

I'm certain the year will go by way too quickly. And of course we are on a final countdown for Y2K! Looking down the pike, I'll do my best to ensure that the SAS Tour Speaker doesn't slip out of our grasp. And we'll try to do a group event at the National Aquarium in Baltimore, as we did when I last had the privilege of heading up our local chapter.

I look forward seeing old acquaintances that I have known for a number of years thanks to introductions made at the SAS local chapter meetings. I would be especially pleased to greet some newcomers to the meetings – so if you've never checked us out, or have been a stranger to the meetings for some time, don't be shy. We're actually a pretty decent group of people.

Larry Pollack  
Chairman, Baltimore – Washington Section, SAS

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To advance and disseminate knowledge and information concerning the art and science of spectroscopy and other allied sciences.

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## Biographical Sketch – Marcus Schuetz

Marcus Schuetz (WWW: <http://marcus.schuetz.com>, email: schuetz@bhnrc.usda.gov) received a Master in Physics from the Technical University in Berlin, Germany in 1994. The focus of his research was the construction of a multi-wavelength dye laser system for the simultaneous detection of up to four elements by Electrothermal Atomization – Laser Excited Atomic Fluorescence Spectrometry (ETA-LEAFS) in the UV. He then left the narrow field of lasers to work in the field of Continuum Source Atomic Absorption Spectrometry (CS-AAS). His graduate research about structured interferences in CS-AAS and their correction was performed at the Berlin branch of the Institute for Spectrochemistry and Applied Spectroscopy (ISAS). He received his Ph.D. in engineering in 1997. Since March 1998 he has worked as a post-doctoral research associate with Jim Harnly at USDA's Beltsville Human Nutrition Research Center's Food Composition Laboratory, where he continues his work on continuum source atomic absorption spectrometry. He is currently undergoing therapy to cure him from his paranoia, an occupational hazard of CS-AAS.

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# Meeting Announcement

## Continuum Source Atomic Absorption Spectrometry – An AA Method For The Terminally Suspicious

Marcus Schuetz

Sure, you think your results from your line source AA spectrometer are accurate and your background correction method works perfectly fine. But do you *really* know what is happening to your sample? Or rather, the question is: do you *want* to know? Continuum source Atomic Absorption Spectrometry (CS-AAS) is the perfect way to ruin your good night's sleep; it shows you what ugly things can happen during the atomization process. Molecular structures, wreaking havoc with your D<sub>2</sub>-, your Smith-Hieftje- and sometimes even your Zeeman-correction method, unnoticed by the unaware operator, the truth now dragged into the open by CS-AAS.

Find out how CS-AAS accomplishes this incredible feat, why not everybody uses it, why CS-AAS really isn't *that* bad, what nifty things you can do with it, and what an academy award winner and a Beatle have to do with analytical chemistry.

Let CS-AAS show you the light!!! (But bring your sunglasses!!)

This talk has been rated PG-13; some content might be unsuitable for chemists under 13.

**Date:** Thursday, September 30, 1999

**Place:** West End Grill  
7904 Woodmont Ave., Bethesda, MD  
301-951-9696

**Time:** 6 pm Social Hour, 6:45 pm Dinner, 8 pm Seminar.

**Cost:** \$20 -Choice from the menu. Included with each meal is a House Salad, Coffee, Tea, or Soft Drink and Dessert.

**Reservations:** Please make your reservations by NOON, Monday, September 27, 1999 by calling Larry Pollack at work 703-810-4351, or e-mail at [larry.pollack@dtra.mil](mailto:larry.pollack@dtra.mil)

**Directions:** From the Beltway take Wisconsin Ave. south past NIH. Take a right turn on Woodmont Ave. Restaurant is after the 4th light. Use street parking or the parking garage on the right in the next block.

## September Historical Events In Spectroscopy

by Leopold May  
Catholic University

September 1, 1877 Francis W. Aston who introduced the mass spectrograph in 1919, was born on this day. He received the Nobel Prize in 1922 for his work on isotopes and measured mass of several isotopes to accuracy of 1/1000.

September 8, 1966 First TV program of Star Trek appeared on this date.

September 10, 1892 Arthur H. Compton did research in cosmic and x-rays for which he received the Nobel Prize in 1927. He was born on this date.

September 13, 1937 Polaroid Corporation was incorporated on this date.

September 14, 1698 The birthday of Charles F. de Cisternay DuFay who discovered + and - electricity and repulsion between like charges. He did research in phosphorescence and double refraction.

September 20, 1842 James Dewar who invented the vacuum flask (Dewar flask) in 1892, was born on this day. In 1899, he was the first to liquefy hydrogen. He showed that many common substances phosphoresce at liquid air temperature.

September 22, 1791 Michael Faraday, who was born on this day, discovered that plane polarised light rotated in a magnetic field. He also discovered electromagnetic induction, specific inductive capacity and Faraday's Laws on electrolysis.

September 25, 1928 On this date, Motorola was incorporated as Galvin Mfg. Corp.

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Dated Material - SAS Meeting Notice