Adopt-A-Vet
Holiday Stocking Drive
November 15th - December 15th

Join with the Women Chemists Committee and the University of Pittsburgh ACS Student Affiliates, as we look to bring a little holiday cheer to the patients at the VA Hospital in Oakland. Last year we delivered 300 stockings, and 350 is the goal for this year!

**November 15th – December 15th** we will be collecting monetary donations (please feel free to utilize the link available on the upcoming events page of our website: www.pghwcc.org to donate online). If you would like to contribute another way, feel free to reach out to any of the executive committee or send a check made payable to "WCC" to the following address: Dr. Michelle Ward / 219 Parkman Avenue, Room 107 / Pittsburgh, PA 15260.

You can adopt an outpatient or inpatient veteran (as the in-patient vets often have dietary restrictions we are making two different versions of the stockings). We will purchase, assemble, and deliver the stockings the week before Christmas. Please consider contributing to this event and bringing a little holiday cheer to those we owe so much to.
Homeland Security

Date: Saturday, December 3, 2016
Time: 9:00 AM – 1:30 PM (lunch included)
Location: Old Town Buffet (formerly Tambellini/Misaki)
860 Saw Mill Run Blvd. (Route 51S) Pittsburgh, PA 15226
(near the entrance of Liberty Tunnel south end)

Agenda:
9:00 AM Registration
9:30 AM Dr. Chuck Gardner, ChemImage: Introduction
10:00 AM Dr. Bill McKinsey, Biometrics Services, FBI’s Criminal Justice Information Services: “Biometrics: Technology, Practice and Challenges”
11:00 AM Mr. Timothy J. Taucher, Homeland Security Investigations: “DHS Overview”
12:00 PM Q & A and Luncheon
1:30 PM Closing

Open to the Public by Advanced Registration
Registration Fee: $10.00 Per Person • Registration Deadline: December 1, 2016

To register, complete the form below, and send it with a check of $10.00 payable to:
Spectroscopy Society of Pittsburgh
c/o Ms. Amy Bovino
300 Penn Center Blvd., Suite 332, Pittsburgh, PA 15235

Name ___________________________________________ Phone No. ____________________

Institution _____________________________________ E-mail Address __________________

Mailing Address: ________________________________________________________________

Sanford A. Asher, Ph.D.
University of Pittsburgh

Abstract: Kyle Hufziger, Sergei Bykov, Katie Gares and Sanford Asher are developing deep UV resonance Raman standoff spectrometers to detect trace explosives. For this effort we are developing revolutionary compact UV lasers, ultrahigh efficiency spectrometers and novel imaging spectrometers. We will discuss our rastering instrument and a new imaging instrument that utilizes a novel photonic crystal narrow wavelength band selection optic. We are developing methodologies to detect explosives at standoff distances greater than 2 m. We are exploring the spectroscopic signatures of explosives as well as their photochemistries, which gives rise to specific dynamic spectral signatures. We will discuss the exciting deep UV Raman spectral signatures of NaNO3, NH4NO3, TNT, RDX, PETN and HMX and compare their behavior to the more boring signatures of typical lazy molecules.

Biography: Sanford A. Asher, Distinguished Professor of Chemistry at the University of Pittsburgh received his B.A. in chemistry at the University of Missouri, St. Louis in 1971 and completed his Ph.D. in chemistry at the University of California, Berkeley in 1977. Dr. Asher was a Research Fellow in Applied Physics at Harvard University between 1977 and 1980, and in 1980 he became Assistant Professor of Chemistry at the University of Pittsburgh. Dr. Asher’s research program at Pitt involves development of new materials and the development of new spectroscopic techniques. His group developed UV resonance Raman spectroscopy as a new technique for fundamental and applied structural and trace studies of molecules in complex matrices. His group is using UV resonance Raman to examine the first stages in protein folding. In addition, they are investigating the use of UV resonance Raman for the detection of explosive molecules, especially for stand-off detection. They are working with others in developing a deep UV Raman instrument for NASA’s 2020 Mars lander. In addition, Dr. Asher’s research group develops new photonic crystal optical devices and chemical sensing devices from self-assembling colloidal particles. He pioneered the development of smart hydrogel materials for chemical sensing.

Dr. Asher received numerous awards. He is the recipient of the 2016 SAS Honorary Membership Award, was named the 2016 14th Henry Kuivila Lecturer, University at Albany, SUNY, 2016 Society of Analytical Chemists of Pittsburgh (SACP) Award in Analytical Chemistry, 2015 FACCS Charles Mann Award in Applied Raman Spectroscopy, the 2011 Charles E. Kaufman Award and the 2008 Pittsburgh Spectroscopy Award. He became a Fellow of the Society of Applied Spectroscopy in 2007, and received the Sigi Ziering Award from the American Society of Clinical Chemistry in 2005. The University of Missouri awarded him the 2004 St. Louis Distinguished Alumni Award. He won the 2002 ACS Pittsburgh Award, and the 2002 Ellis Dinner Reservations: Please email the SACP Administrative Assistant, Valarie Daugherty at daugherty@pittcon.org by Tuesday, January 3, 2017 to make dinner reservations. Should you not have email, please call 412-825-3220, ext 204. Dinner will cost $10 ($5 for students) and checks are to be made out to the SACP. If you have any dietary restrictions, please let Valarie know when you leave message.

Parking: Duquesne University Parking Garage entrance is on Forbes Avenue. Upon entering the garage, you will need to get a parking ticket and drive to upper floors. Bring your parking ticket to the dinner or meeting for a validation sticker. Please contact Duquesne University, if any difficulties should arise.
Something is in the air....

Save the Date
Tripartite
Saturday May 20, 2017
NCW 2016 Illustrated Poetry Contest Winners!

The Pittsburgh Section of the American Chemical Society’s (ACS) sponsored an illustrated poetry contest for students in grades K-12 in support of the 2016 National Chemistry Week (NCW) program. Students could pick topics related to the 2016 NCW theme “Solving Mysteries Through Chemistry.” First and second place winners were selected from four grade categories: K-2nd, 3rd-5th, 6th-8th, and 9th-12th. Poems could be any style (free verse, limerick, haiku, etc.). Entries were judged based upon relevance to and incorporation of the theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.

Each 1st place winner will receive a check for $50 and their winning poem entered into the national poem contest sponsored by the ACS’s Committee on Community Activities. Each 2nd place winner will receive a check for $25.

And the winners of the Pittsburgh Section ACS’s NCW 2016 illustrated poem contest:

K-2nd Grade
No entries received.

3rd-5th Grade
1st Place: Eva C., Boyce Middle School
2nd Place: Asha S., Boyce Middle School

6th-8th Grade
1st Place: Nate G., Hopewell Memorial Jr. High School
2nd Place: Sam P., Jefferson Middle School

9th-12th Grade
1st Place: Rachael F., Ringgold High School
2nd Place: Mariah M., Shaler Area High School

Congratulations to all our local winners and good luck in the national contest!

Michael Mautino
Councilor and NCW Coordinator
Pittsburgh Section ACS

SACP January Meeting
Sanford A. Asher Bio Continued from Page 3

R. Lippincott Award from the Optical Society of America. He won the Pittsburgh Technology Council EnterPrize Award in 2000, the Coblentz Society’s Bomem-Michelson Award in 1999, and the Society for Applied Spectroscopy’s Lester W. Strock Award in 1998, the University of Pittsburgh’s Chancellor’s Distinguished Research Award in 1996, the American Chemical Society Award in Spectrochemical Analysis in 1994, the American Heart Association Established Investigator Award in 1984 and an NIH Career Development Award in 1984.

Professor Asher served as the Co-Director of the Materials Research Center of the University of Pittsburgh. He was the Chairman of the XV International Conference on Raman Spectroscopy held in Pittsburgh in 1996. He is Scientific Founder and Chairman of the Scientific Advisory Board of the startup company Vytrace Corp. (previously Glucose Sensing Technologies, LLC.), and is on the Scientific Advisory Boards of BioTools Inc. and Crystalplex Co. He consults for companies such as PPG Industries, Chemimage Corporation, Glucose Sensing Technologies, LLC, and ThermoFisher Co.

He is the author of greater than 295 publications and is an inventor in over 30 patents in the area of photonic crystals.
For the 18th consecutive year, the Pittsburgh Section’s National Chemistry Week (NCW) celebration was held at the Carnegie Science Center. For 2016, the event was conducted on Friday and Saturday, October 21-22 and featured the theme “Solving Mysteries Through Chemistry.” Major sponsors for the event included the Society for Analytical Chemists of Pittsburgh (SACP), the Spectroscopy Society of Pittsburgh (SSP), the PPG Science Education Council (PPG SEC), and the PPG Foundation.

A total of 372 volunteers from 48 groups and organizations conducted hands-on activities or helped run the event. Total attendance for the two-day event was 5,761 (2,575 on Friday and 3,186 on Saturday), an increase of approximately 32% compared to the 2015 NCW event attendance.

For the 2016 NCW celebration, the Pittsburgh Section reached out to underrepresented minorities in the Southwestern Pennsylvania area to promote science education and literacy. Through financial support provided by the SACP, SSP, PPG Industries Foundation, and PPG SEC, approximately 1,200 students were provided an opportunity to participate in the NCW celebration. Without the generous support from the above mentioned financial sponsors, these students would not have participated in a science-related school field trip during the 2016-17 school year.

The Pittsburgh Section wishes to thank its sponsors, the organizations that sponsored hands-on experiments and activities at the NCW celebration, and the 372 volunteers who dedicated their time and efforts to make the event a success. Working together with these dedicated partners, the Pittsburgh Section is able to accomplish the mission of the NCW program; to communicate to the public positive messages about the contributions of chemistry to our quality of life.

For pictures of the two-day event, visit the “Pittsburgh ACS NCW” Facebook page.

Mark Your Calendar: NCW 2017

The Carnegie Science Center has been reserved for Friday and Saturday, October 27-28, 2017 for the Pittsburgh Section’s NCW celebration. The NCW 2017 theme is “Chemistry Rocks!” and will cover the topics on chemistry of rocks (geochemistry).

Submitted by V. Michael Mautino, NCW Coordinator

For pictures of the two-day event, visit the "Pittsburgh ACS NCW" Facebook page.

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Submitted by V. Michael Mautino, NCW Coordinator
# JOB SEARCHING FOR CHEMICAL TECHNICIANS

**Presented by**

The Society for Analytical Chemists of Pittsburgh  
The American Institute of Chemical Engineers, Pittsburgh Chapter  
The American Chemical Society, Pittsburgh Section  
The Spectroscopy Society of Pittsburgh

**Friday, February 10, 2017**

**Pre-Registration is Required for this Free Event**

HARBOR GARDENS, STUDENT SERVICES AREA CONFERENCE ROOMS  
Bidwell Training Center, 1650 Metropolitan Street, Pittsburgh, PA 15233  
412-323-4000

**FREE ON STREET PARKING IS AVAILABLE**

## PROGRAM

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 A.M.</td>
<td>Registration</td>
</tr>
<tr>
<td>9:00 A.M.</td>
<td><strong>MANAGING AN EFFECTIVE JOB SEARCH</strong></td>
</tr>
</tbody>
</table>
|          | Daniel J. Eustace, Ph. D.  
|          | Career Consultant, American Chemical Society    |
| 11:30 A.M.| **OVERVIEW OF THE LOCAL JOB MARKET**            |
|          | Joseph D. Jolson, Ph. D.  
|          | Career Consultant, American Chemical Society    |
| 12:00 Noon| **INFORMAL LUNCH WITH QUESTION AND ANSWER SESSION** |
| 1:30 P.M.| **CLOSE**                                       |

If you have a resume, bring it to the workshop

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**To Pre-Register for the Job Searching for Chemical Technicians Workshop**

Send an email to Karen Johnson (412-323-4000 Ext. 161) at:  

kjohnson@manchesterbidwell.org

Your email must include your full name, complete contact information including address, phone number and email address.
JOB SEARCHING FOR CHEMICAL PROFESSIONALS

Presented by
The Society for Analytical Chemists of Pittsburgh
The American Institute of Chemical Engineers, Pittsburgh Chapter
The American Chemical Society, Pittsburgh Section
The Spectroscopy Society of Pittsburgh

Saturday, February 11, 2017
Pre-Registration is Required for this Free Event

Room 150, Ashe Auditorium, Chevron Science Center, University of Pittsburgh
219 Parkman Ave. (off Bigelow Blvd.)
Parking at Soldiers and Sailors Garage and Lunch Provided.

PROGRAM

8:30 A.M. Registration
9:00 A.M. Welcome and Introduction
9:30 A.M. MANAGING AN EFFECTIVE JOB SEARCH
Daniel J. Eustace, Ph.D.
Career Consultant, American Chemical Society

12:10 P.M. OVERVIEW OF THE LOCAL JOB MARKET
Joseph D. Jolson, Ph.D.
Career Consultant, American Chemical Society

12:30 P.M. Networking Lunch
1:00 P.M. Resume Review and Personal Consultation

4:00 P.M. Close

Bring your parking ticket for validation and your resume to participate in the afternoon program
(Undergraduates without a resume may participate in the afternoon group resume review)

To Pre-Register for the Job Searching for Chemical Professionals Workshop
Send an email to Evon L. Nigro
at:

nigro@pitt.edu

Your pre-registration must be received by Monday, February 6, 2017 and include your full name and complete contact information including address, phone number, email address and whether or not you expect to participate in the resume review. Academic registrants - please include university affiliation and university department. Let us know when you expect to complete your B.S., M.S., Ph.D., post-doc, or other assignment.
Get Connected!

Stay up-to-date on all the happenings of the Pittsburgh Section ACS

**Section’s Website:**  [www.pittsburghacs.org](http://www.pittsburghacs.org)

**Facebook Page:**  Pittsburgh Section of the American Chemical Society

**Linked In:**  Pittsburgh Section of the American Chemical Society
Volunteers Needed!
There are a number of volunteer opportunities in the Pittsburgh ACS section! If you are interested in volunteering, please contact Heather Juzwa at hljuzwa@shimadzu.com!

Crucible Deadline
The deadline for items submitted to The Crucible is the 15th of the month prior to publication.

For example, all items for the January 2017 issue must be to the editor by December 15, 2016.

The Crucible
The Crucible is published monthly, August through May. Circulation, 2,500 copies per month. Subscription price, six dollars per year. All statements and opinions expressed herein are those of the editors or contributors and do not necessarily reflect the position of the Pittsburgh Section.

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www.pittsburghacs.org
Pittsburgh Area Calendar

Saturday, December 3
SACP and SSP Presents: Continuing Education Joint Symposium
Homeland Security
Old Town Buffet, 860 Sawmill Run Rd., Pittsburgh, PA 15226

Monday, January 9
Society for Analytical Chemists of Pittsburgh
Sanford A. Asher, Ph.D., University of Pittsburgh
Duquesne University, Pittsburgh, PA

Friday, February 10
Job Searching for Chemical Technicians
Harbor Gardens, Student Services Area Conference Rooms
Bidwell Training Center, 1650 Metropolitan Street, Pittsburgh, PA 15233

Saturday, February 11
Job Searching for Chemical Professionals
Harbor Gardens, Student Services Area Conference Rooms
Room 150, Ashe Auditorium, Chevron Science Center, University of Pittsburgh
219 Parkman Ave. (off Bigelow Blvd.), Pittsburgh, PA