

the Catalyst



Official publication of the Philadelphia Section, ACS
<http://philadelphia.sites.acs.org/>

August 2012
Volume 97, No. 7



The Chemical Heritage Foundation Museum and Conference Center

Photo courtesy of the Chemical Heritage Foundation

HIGHLIGHTS

Chair's Column	138
Historic Sites and Museums	139
Getting Around in Philly	147
Philly Restaurant Guide	155
Chemical Heritage Foundation at 30	160
Shopping in Philly	164

ADVANCE NOTICE

SEPTEMBER MEETING

Thursday, September 20, 2012

TBA

See the SEPTEMBER issue of *the Catalyst* for details,
call the Section Office at (215) 382-1589 or email PhilaACS@aol.com.

A Full-Day Presentation on

THE WORK OF THE INNOCENCE PROJECT

innocenceproject.org



ACS
Chemistry for Life®

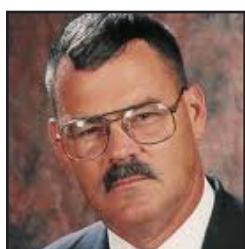
The Chemistry and the Law Division of the ACS discusses how Forensic Science can play a tragic role in convicting innocent people of crimes and sentencing them to prison and even death. We will discuss the effects on peoples lives and talk about what needs to happen to strengthen forensic science as we move forward.

SPEAKERS



**BARRY SCHECK,
ESQ.**

Law Professor and Co-founder of the Innocence Project will be speaking about strengthening forensic science and the work of the Innocence Project.



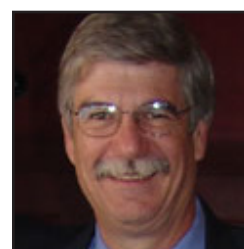
**FREDERIC WHITEHURST,
PH.D J.D.**

Former Supervisory Special Agent in the FBI crime lab will be discussing his discoveries, the continued struggle for valid forensic science in the courtroom, and his choice to do the right thing.



**GREG HAMPIKIAN
PH.D**

Professor and geneticist at Boise State and member of the Project will be speaking about the Amanda Knox and Troy Davis cases.



**JOHN J. LENTINI
CFI D-ABC**

will be speaking about how the State of Texas likely executed an innocent man - Cameron Todd Willingham.



**MARISSA BOYERS
BLUESTINE, ESQ.**

Legal Director of the Pennsylvania Innocence Project will be speaking about her involvement with the PIP and what it takes to run a statewide program.

EXONEREES



**RAY
KRONE**

Sentenced to death and spent 10 years in prison for a murder he did not commit.



STEVEN BARNES

Sentenced to 25-Life and spent 19 1/2 years in prison for a crime he did not commit.



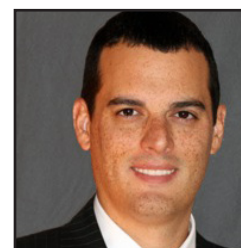
**RAYMOND
SANTANA**

Wrongfully accused in the Central Park Jogger case of 1989. Spent 5 years in prison for crimes he did not commit.

MODERATORS



**JUSTIN J.
MC SHANE, ESQ.**
Harrisburg, PA



**JOSH D. LEE,
ESQ.**
Vinita, OK

244th ACS NATIONAL MEETING

Philadelphia PA
Monday, August 20, 2012

Visit <http://bit.ly/acs2012> for
more information



Sponsored by

THE MC SHANE FIRM, LLC
TheMcShaneFirm.com

the Catalyst

ACS Philadelphia Section
Founded April 15, 1899

STAFF

EDITOR-IN-CHIEF

Robin S. Davis

EDITORS

News Atoms: Alan Warren

Proof Editors: Georgia Arbuckle-Keil
Kendra Luther
Marge Matthews
Alan Warren

ADVERTISING MANAGER

Vince Gale

COMMUNICATIONS COMMITTEE

Chair: Marge Matthews

Anthony W. Addison
Georgia Arbuckle-Keil
Robin S. Davis
Vince Gale
Robert Gates
Judy Summers-Gates
Kendra Luther
Victor Tortorelli
Alan Warren

CONTENTS

September Advance Notice	135
The Innocence Project	136
Chair's Column	138
Websites of Interest	139
Philadelphia's Major Historic Sites and Museums	139
Lens of the Market Workshop	145
Philadelphia Area Girls Enjoying Science™	146
Getting Around in Philly	147
Philadelphia Section on Twitter.	154
Looking for Comestibles in Philly	155
Chemical Heritage Foundation at 30.	160
Younger Chemists Committee Fun Run	163
Ready for a Shopping Break?	163
August Historical Events in Chemistry	166
Directory of Services.	167

Published monthly except July and December by the Philadelphia Section of the American Chemical Society. All views expressed are those of the editors and contributors and do not necessarily represent the official position of the Philadelphia Section of the American Chemical Society. Editorial matters should be sent to the attention of the Editor-in-Chief c/o the Philadelphia Section ACS, Department of Chemistry, University of Pennsylvania, 231 South 34th Street, Philadelphia, PA 19104-6323 or philcatalyst@aol.com.

Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050

phone: (781) 837-0424; email: cust-svc@mboservices.net.

From The Chair



Rick Ewing

On behalf of the Philadelphia Section of the American Chemical Society, I warmly welcome you to Philadelphia. This should prove to be an exciting meeting and I am sure that you are looking forward to the presentations, posters, networking and catching-up with colleagues that will occur over the week. In addition to the National Meeting, the city of Philadelphia has much to offer: history, arts, restaurants, family destinations such as the Philadelphia Zoo (<http://philadelphiazoo.org>) and Camden Adventure Aquarium (<http://www.adventureaquarium.com>), and science destinations

such as the Franklin Institute (<http://www2.fi.edu/>) and Academy of Natural Sciences (<http://www.ansp.org>). Details of these venues and much more can be found in this issue of *the Catalyst*.

I also would like to highlight two real treasures that are here in Philadelphia. The Chemical Heritage Foundation (www.chemheritage.org) has a major (and growing) collection that documents the history of chemistry in instruments, books, photographs and fine art. CHF is a short distance from the Pennsylvania Convention Center - Philadelphia and a visit is highly encouraged! As well, the University of Pennsylvania holds the Edgar Fahs Smith Collection which documents the History of Chemistry (much before 1850) available to view in person or online at <http://sceti.library.upenn.edu/sceti/smith/>. The Edgar Fahs Smith Memorial Collection has been designated a National Historic Chemical Landmark by the American Chemical Society.

Please visit the Local Section Booth near the registration booth in the Convention Center for any questions that you have about the city and venues. Enjoy the meeting and my hopes are that you get to enjoy the city of Philadelphia and all that it offers.



Science & Engineering Consultants

Free Custom Search and Interviews

Consultant Specialties

Pharmaceuticals • Biotechnology • Chemicals

www.cecon.com • 888-263-8000

WEBSITES OF INTEREST

Best all around information site: www.gophila.com

City Search: <http://philadelphia.citysearch.com>

PHILADELPHIA'S MAJOR HISTORIC SITES AND MUSEUMS

Historic Sites

Betsy Ross House—Where the nation's first flag was sewn.

239 Arch St.

Daily 10 AM – 5 PM

Self-guided tours, \$5 adults; \$4 children, students, seniors, military

(215) 629-4026

www.betsyrosshouse.org

Christ Church—Historic church whose congregation included Benjamin Franklin and George Washington.

2nd & Market Streets

Mon-Fri 9 AM – 5 PM; Sun 1 PM – 5 PM

Free

(215) 922-1695

www.chris_Hlt327791282_Hlt327791283tBM_1_BM_2_churchphila.org

Christ Church Burial Ground—Final resting place of Benjamin and Sarah Franklin and five signers of the Declaration of Independence.

5th & Arch Streets

Mon-Sat 10 AM – 4 PM; Sun Noon – 4 PM

Free

City Hall—The city's government offices.

Broad and Market Streets

Mon-Fri, interior tour only at 12:30 PM

Mon-Fri, tours of the observation tower Noon – 4:15 PM

Mon-Fri, Tour Information Center, East Portal, Room 121, 9:30 AM – 4:30 PM

Free

(215) 686-2840

www.phila.gov/virtualch/body_pages/history.html

Eastern State Penitentiary—Philadelphia's historic prison built in 1829 that once housed Willie Sutton and Al Capone.

2027 Fairmount Avenue (corner of 22nd & Fairmount)

Daily 10 AM – 5 PM

\$12 adults, \$10 seniors, \$8 students and children

(215) 236-3300

www.easternstate.org

Edgar Allan Poe House—Where the author penned *The Tell-Tale Heart* and other works.

7th & Spring Garden Streets

Wed-Sun 9 AM – 5 PM

Free

www.np_hlt327791436_hlt327791437sBM_3_BM_4_.gov/edal

Elfreth's Alley—The nation's oldest residential street dating from 1702.

2nd Street between Race & Arch Streets

Museum Hours Tues-Sat 10 AM – 5 PM; Sun Noon – 5 PM

(215) 574-0560

Walking the street is free. Museum at 124 Elfreth's Alley, \$5 adults, \$2 children

www.elfrethsalley.org

Franklin Court—See where Benjamin Franklin once lived and worked; museum closed for renovation, but printing office and fragments remain open..

Between 3rd and 4th Streets & Chestnut and Market Streets (enter at 318 Market)

Daily 9 AM – 5 PM

Free

www.ushist_hlt327790862_hlt327790863oBM_5_BM_6_ry.org/tour/franklin-court.htm

Independence Visitor Center—Orientation for Independence National Historic Park and to arrange visits to the Liberty Bell, Independence Hall, suggested walking tours, and short films about Philadelphia history.

6th & Market Streets

Open daily 8:30 AM – 7 PM

Free

(800) 537-7676

www.independe_hlt75501896nBM_7_ce_hlt327790278_hlt327790279vBM_8_BM_9_i_sitorcenter.com

National Constitution Center—Learn what the United States Constitution stands for. Exhibits of historic artifacts and interactive exhibits.

5th & Arch Streets

Mon-Fri 9:30 AM – 5 PM
Sat 9:30 AM – 6 PM; Sun Noon – 5 PM
\$14.50 adults, \$8 children, \$13 seniors and students
(215) 409-6600
www.constitutioncenter.org

Museums

Academy of Natural Sciences—Dinosaurs and natural history displays of North American, Asian, and African flora and fauna.
19th Street & Benjamin Franklin Parkway
Mon-Fri 10 AM – 4:30 PM; Sat-Sun 10 AM – 5 PM
\$15 adults, \$13 children (3-12)
(215) 299-1000
www.ansp.org

African-American Museum—To preserve, interpret, and exhibit the heritage of African Americans.
7th & Arch Streets
Tues-Sat 10 AM – 5 PM; Sun Noon – 5 PM
\$10 adults, \$8 seniors, students, youth (4-12)
(215) 574-0380
www.aampmuseum.org

Barnes Foundation—Extraordinary art collection highlighted with paintings of Renoir and Cezanne among others, recently relocated to Philadelphia.
2025 Benjamin Franklin Parkway
Mon, Wed-Sun 9:30 AM – 6 PM; Fri 9:30 AM – 10 PM, closed Tuesdays
\$18 adults, \$15 seniors, \$10 students and youth (17 and below)
(215) 278-7000 RESERVATIONS RECOMMENDED
www.barnesfoundation.org

Chemical Heritage Foundation—Center for the history of chemistry and molecular sciences; museum and library.
315 Chestnut Street
Mon-Fri 10 AM – 6 PM
Free
(215) 925-2222
www.chemheritage.org

Franklin Institute Science Museum—A science museum for all ages with interactive exhibits, planetarium, IMAX Theatre.
20th Street & Benjamin Franklin Parkway
Daily 9:30 AM – 5 PM

\$16.50 adults, \$15.50 military, \$12.50 children (3-11), includes planetarium; IMAX Theatre is extra. For special combination prices with theatre or temporary exhibits, check the web site.

(215) 448-1200

www.fi.edu

Independence Seaport Museum—Maritime history of the Port of Philadelphia and Delaware River. Admission price includes two ships: Admiral Dewey's flag ship USS *Olympia* and the submarine USS *Becuna*, both within walking distance of the museum.

211 South Columbus Blvd. (the waterfront at Penn's Landing on the Delaware River).

Daily 10 AM – 5 PM; Thurs-Sat 10 AM – 7 PM

\$15 adults, \$10 seniors, students, military, children

(215) 413-8655

www.phillyseaport.org

Mummers Museum—The story of Philadelphia's famous New Years Day parade and its extravagant costumes.

1100 South 2nd Street at Washington Avenue in South Philadelphia

Wed-Sat 9:30 AM – 4:30 PM

\$3.50 adults, \$2.50 seniors, students, children under 12

(215) 336-3050

www.mummersmuseum.com

Mütter Museum—An overview of medical history and oddities, at the College of Physicians.

19 South 22nd Street between Chestnut and Market Streets

Daily 10 AM – 5 PM

\$15 adults, \$13 military and seniors, \$10 student and youth (6-17)

(215) 563-3737

www.collphyphil.org

National Museum of American Jewish History—The story of Jewish participation in the development of the United States.

5th & Market Streets

Tues-Fri 10 AM – 5 PM; Sat-Sun 10 AM – 5:30 PM

\$12 adults, \$11 seniors and youth (13-21)

(215) 923-3811

www.nmajh.org

The Pennsylvania Academy of Fine Arts—Stunning building designed by architect Frank Furness, housing early American paintings by Gilbert Stuart, the Peale family, and others.

118 North Broad Street at Cherry Street
Tues-Sat 10 AM – 5 PM; Sun 11 AM – 5 PM
\$15 adults, \$12 seniors/students, \$10 youth (12-18)
(215) 972-7600
www.pafa.org

Philadelphia History Museum (formerly Atwater Kent Museum)—A look at Philadelphia history from 1680 until today.
15 South 7th Street just south of Market Street
Wed-Sat 11 AM – 4 PM
Free
(215) 685-4830
www.philadelphiahistory.org

Philadelphia Museum of Art—One of the greatest art museums in the USA.
26th Street & Benjamin Franklin Parkway
Tues-Sun 10 AM – 5 PM (Fri until 8:45 PM)
\$16 adults, \$14 seniors, \$12 students, \$12 youth (13-18), 12 and under free
(215) 763-8100
www.phila_museum.org

Philadelphia Zoo—one of the country's greatest.
34th Street and Girard Avenue, West Philadelphia
Daily 9:30 AM – 5 PM
\$18 adults, \$15 children 2-11, under 2 free
www.philadelphiazoo.org

Please Touch Museum—Educational and cultural hands-on exhibits designed for youngsters.
Memorial Hall, Fairmount Park (4231 Avenue of the Republic)
Mon-Sat 9 AM – 5 PM; Sun 11 AM – 5 PM
\$15 adults and children
(215) 581-3181
www.pleasetouchmuseum.org

Rodin Museum—The largest collection of the sculptor's work outside the Rodin Musée in Paris; recently refurbished.
Between 21st and 22nd Streets & Benjamin Franklin Parkway
Tues-Sun 10 AM – 5 PM
\$5 Donation, free with same-day admission ticket to Philadelphia Museum of Art
(215) 568-6026
www.rodinmuseum.org

Rosenbach Museum & Library—18th and 19th century American and British furnishings; library of the Rosenbach brothers containing rare books and manuscripts.

2008 Delancey Street

Tues, Fri Noon – 5 PM; Wed, Thurs Noon – 8 PM; Sat-Sun Noon – 6 PM

\$10 adults, \$8 seniors, \$5 students and children

(215) 732-1600

www.rosenbach.org

University of Pennsylvania Museum of Archaeology and Anthropology—Artifacts and culture from many parts of the world with emphasis on ancient civilizations such as Egypt.

33rd & Spruce Streets in West Philadelphia

Tues 10 AM – 5 PM; Wed 10 AM – 8 PM; Thurs-Sun 10 AM – 5 PM

\$12 adults, \$10 seniors, \$8 students and children (6-17)

(215) 898-4000

www.penn.museum

Out of Town Sites

Adventure Aquarium—Worldwide marine life with interactive exhibits.

1 Riverside Drive, Camden NJ

Daily 10 AM – 5 PM

\$23.95 adults, \$17.95 children (2-12)

(856) 365-3300

www.adventureaquarium.com

Battleship New Jersey—The nation's most decorated battleship.

Camden, New Jersey waterfront across from Philadelphia's Penn's Landing

Daily 9:30 AM – 5 PM

\$18.50 adults, \$14 seniors, veterans, children (6-11)

(856) 966-1652

www.battleshipnewjersey.org

Longwood Gardens—World's premier horticultural gardens, both indoor and outdoor.

Route 1 (1001 Longwood Rd.), Kennett Square PA

Sun – Tues 9 AM – 6 PM; Wed – Sat 9 AM – 11 PM

\$18 adults, \$15 seniors, \$8 students (5-22)

(610) 388-1000

www.longwoodgardens.org

—Alan Warren

Join us at the Fall 2012 ACS National Meeting for...

Lens of the Market Workshop

*Are you a researcher in materials for health, medicine, or other markets?
Do you want to translate your research into a commercial innovation?
Do you need to define which markets and what you need to do to get to them?*

JOIN US on Sunday, August 19, 9 am – 3 pm at the Philadelphia Marriott Downtown for the Lens of the Market Workshop and gain the vocabulary of the market and the key basics to help translate your research into commercial innovations for use in any market in this *intensive* workshop!

Learn about:

- Market Definition
- Technical Solutions
- Market Segmentation
- Market Research

Who should attend?

Existing teams of 2–5 researchers or innovators with research to translate into innovation

Space is limited to 5 teams. Each team member must register. Fee is \$60 and includes lunch. Register through ACS national meeting registration.



Judith C. Giordan



Joseph Steig

Workshop Leaders

Lens of the Market is a program of the Research to Innovation Education Series of the National Collegiate Inventors and Innovators Alliance (NCIIA). This workshop is supported and offered by the Women Chemists Committee, in conjunction with the Chemical Entrepreneurship Council (CEC).



Philadelphia Area Girls Enjoying Science™ Continues to Excite Girls

For almost 20 years, the Philadelphia Section of the ACS has been sponsoring hands-on science days for sixth grade girls at Chestnut Hill College. Philadelphia Areas Girls Enjoying Science™ (PAGES™), originally known as Expand Your Horizons, attracts ~ 125 girls and ~ 50 volunteers each spring and fall.

The goals of these mini-conferences are to: (1) to increase girls' interest in science and mathematics, (2) provide students an opportunity to meet women working in non-traditional fields, and (3) foster an awareness of varied career opportunities for women.



The program begins with a 45-minute talk by an inspiring scientist about her career path and passions. The girls are then given safety glasses and head to the labs for three 45-minute experiments. The experiments at each event vary and have included making slime, soda pop, lava lamps, Cartesian divers and ice cream; separating the colors in M&M® candy coatings; separating the components in over-the-counter analgesics; exploring surface tension; testing water; making polluted water and trying to clean it up;

discovering the properties of dry ice and liquid nitrogen; learning about the technology used in making disposable diapers; making circuits with conductive polymers; using fossil records to determine if various dinosaurs ran or walked; and being amazed by the flame chemistry of inorganic salts.

The day ends with goody bags, lunch, decorating a banner, and door prizes. There is plenty of opportunity for the adults to network with other volunteers at lunch. It is inspiring to see so many women giving up their Saturday to be chaperones and perform experiments with the girls. There are always many new volunteers and dozens of program veterans.



Check out our web site at <http://PAGESprogram.org>. You may even find a picture of someone you know. There are some great photos from the previous sessions.

We would also like to thank our sponsors and collaborating organizations. These include: The Makefield Area and Northeastern Montgomery County (NEMCO) Branches of AAUW (American Association of University Women); Philadelphia Chapter of Association for Women in Science (AWIS); Chemical Heritage Foundation; Fisher Scientific; and VWR Scientific.

Mark your calendars for November 3, 2012 and March 23, 2013 for the next PAGES™ mini-conferences. Please contact me at (215) 736-9285 or katt@verizon.net to volunteer.



—Kathy Shaginaw
ACS Philadelphia Section WCC Chair

..... turning the page to a bright chapter in the future of our girls.

GETTING AROUND IN PHILLY

Just about any attraction, historic or cultural site, entertainment venue, hotel, restaurant or event in Center City can be reached by SEPTA services. These services include the Regional Rail R1 Airport Line; the Market-Frankford line (running east-west); the Broad Street Line (running north-south); Bus Routes 21, 38 and 42; and LUCY, the loop bus through University City.

Accessible Transportation for Persons with Disabilities

Philadelphia does not have a wheelchair accessible taxi fleet at this time but it is coming.

Most SEPTA buses are equipped with a wheelchair lift and/or kneeling step for access by persons with disabilities. However, realistically it is frequently difficult or impossible to board vehicles due to overcrowding at peak times of the day and at busy tourist destinations. In addition, the majority of the stops on the Broad Street and Market-Frankford lines are NOT accessible because they lack elevators or escalators at the station stops. The Phlash and other trolley vehicles in the system are NOT accessible.

Before traveling, visitors with disabilities are **STRONGLY** advised to call SEPTA at: (215) 580-7800 (then press 0) or at (215) 580-7853 (TDD) to get assistance with their transportation questions.

Arriving in Philadelphia

Traveling by Air

Philadelphia International Airport provides visitors major access to Center City, the surrounding suburbs and South Jersey.

The Airport Line Regional Rail train provides a direct link to Center City and all of its popular attractions.

About the Airport Line and Train Stops – <http://www.septa.org/welcome/airport.html>

Philadelphia International Airport – <http://www.phl.org>

Traveling by Train

30th Street Station is a major City and Inter-City rail transit hub. Located between Center City and West Philadelphia, it provides connections to Amtrak, NJ Transit rail service and all SEPTA Regional Rail lines. 30th Street is on the west side of the station (opposite the memorial statue on the east). The BoltBus and Megabus, long distance coach services, are located straight ahead as you

come out — at 30th Street and JFK Boulevard; SEPTA trolleys and the El are to the left on 30th at Market Street.

SEPTA Station Information - <http://www.septa.org/stations/rail/30th.html>

AMTRAK Information

http://www.amtrak.com/servlet/ContentServer?pagename=am/am2Station/Station_Page&code=PHL

NJ Transit Atlantic City Line Information

http://www.njtransit.com/rg/rg_servlet.srv?hdnPageAction=LineDetailsTo&selLine=ATLC

Traveling by Car

If you are driving to Philadelphia, why not consider parking the car at a SEPTA station and taking public transportation? From outside Center City, many Regional Rail Stations have daily parking so taking the train and connecting with our other transit services in the city is easy.

Parking Tips at Regional Rail Stations - <http://www.septa.org/parking/tips.html>

Getting Around in Philadelphia is as Easy as 1-2-3

Visitors On The Go brochure [PDF](http://www.septa.org/welcome/pictures/visitors-on-the-go.pdf) - www.septa.org/welcome/pictures/visitors-on-the-go.pdf

Just strolling Center City Philadelphia? Download our Center City Street & Transit Map (<http://www.septa.org/maps/region/pdf/ccp.pdf>), our Center City Hotel Directory (<http://www.septa.org/maps/region/pdf/center-city-hotel-directory.pdf>), or select another map option from our Maps and Stations (<http://www.septa.org/maps/index.html>) section.

If you want to plan your own trip, we have a handy tool for you. Every page of the website includes two Trip Planning options - Google Transit or Plan My Trip. Just enter a start and end destination; date and time of travel (for trips now or in the future) and you will get information on the easiest way to get there using SEPTA. The most popular destinations, like Philadelphia Zoo or Please Touch Museum, may be found simply by typing in the name.

Google Transit also features the familiar Google Maps, which is another option to enter an address, attraction, zip code or category to find locations you may wish to visit. The SEPTA Plan My Trip tool features fare and accessibility information and more ways to choose specific service preferences.

Click through the other sections of the visitor site and plan your ideal Philadelphia vacation.

PHLASH Service

Details (<http://www.phillyplash.com>)

Route Map (<http://www.septa.org/maps/phlash-route-map.pdf>)

The PHLASH Downtown Loop is a quick and convenient way to travel from the Historic District, to the Parkway Museums District, to the Zoo and Please Touch Museum.

Schedule

Starting May 4, 2012, PHLASH begins a weekend service on Fridays, Saturdays and Sundays. Beginning on Memorial Day, May 28, PHLASH will run seven days a week through Labor Day. PHLASH service in September and October will return to weekend service on Fridays, Saturdays, and Sundays (PHLASH will operate on Columbus Day, October 8) with operations ending on October 28.

The hours of operation are 10:00 AM to 6:00 PM with service every 15 minutes. The PHLASH will make 19 stops between Penn's Landing, the Philadelphia Museum of Art and Philadelphia Zoo. New stops on the loop include Eastern State Penitentiary, Sister Cities Park Cafe & Visitor Center (opening May 10), and 16th Street & the Benjamin Franklin Parkway. There will also be a stop at 22nd Street & the Benjamin Franklin Parkway serving the Rodin Museum and the new Barnes Foundation.

As part of the PHLASH service, an updated Philadelphia Zoo and Please Touch Museum transfer loop will provide service every 15 minutes departing from the Philadelphia Museum of Art between 10:30 AM and 5:30 PM.

Fares

The SEPTA TrailPass, TransPass, One Day Independence Pass or Family One Day Independence Pass are all valid for riding PHLASH.

The Independence Pass is ideal for individuals or families looking for the independence of convenient, economical and unlimited one-day travel on SEPTA services. Occasional riders, visitors and families can travel on SEPTA to restaurants, shopping, casinos, sporting events and other attractions in the Greater Philadelphia region.

Prices for the pass are \$11.00 for an individual pass and \$28.00 for the family pass. One family of up to five people traveling together may use one pass, however one person, but no more than two, must be 18 years of age or older.

Customers using Regional Rail to or from New Jersey will pay an additional charge of \$5.00 per individual pass and \$15.00 per family pass in each direction you travel.

Independence Pass holders benefit from unlimited travel aboard these services:

Bus, Subway, Trolley, Regional Rail*, Mann Center Summer Bus Service

*Not valid on Regional Rail trains arriving Center City Philadelphia weekdays before 9:30 AM. However, the Independence Pass is valid at any time on Airport Line Regional Rail trains.

City & Suburban Transit – Senior Citizen Fares

Bus, subway, trolley and Norristown High Speed Line rides are **free at all times** for seniors age 65 or older with a valid PA Senior Citizen Transit ID Card (<http://www.septa.org/fares/discount/senior-id.html>) or Medicare Card, issued by the Social Security Administration.

Regional Rail Rides within Pennsylvania - Seniors

\$1.00 for all seniors with a valid PA Senior Citizen Transit ID Card (<http://www.septa.org/fares/discount/senior-id.html>), Railroad Retirement Annuity Card, or Medicare Card issued by the Social Security Administration.

Discount Senior Citizen Ten Trip tickets can be purchased for \$8.50 from any Ticket Office or online at shop.septa.org.

Regional Rail Rides outside Pennsylvania - Seniors

Traveling between Center City Philadelphia & New Jersey or Delaware; 50% of the regular weekday fare any time of travel.

Cash, Tokens, Transfers & Zone Charges

When riding on a City or Suburban Transit service, exact fare must be used.

Cash

The base cash fare for bus, trackless trolley, subway, and trolley service is \$2.00. Cash is accepted for travel on all services. Exact fare must be used.

Regional Rail fares are based on zones. Knowing the zone of the station you are boarding and traveling to will help you determine the correct fare.

The base cash fare for Paratransit and Shared Ride service is \$4.00.

Tokens

Tokens provide a discount off our base cash fare and cost \$1.55 each.

Tokens may only be purchased in packs of two or more. Two cost \$3.10; five are \$7.75, and a 10-pack costs \$15.50. They are also available for bulk purchase.

Tokens may not be returned at any time for a refund.

Purchase anytime at - https://shop.septa.org/index.php?target=categories&category_id=8

Transfers

A transfer may be purchased for an additional \$1.00 when a trip requires more than one transit service in the same direction of travel. A re-transfer may also be purchased for an additional \$1.00. The purchase of a transfer must occur when a customer boards the first service used; a re-transfer is purchased on the second service.

Transfers are sold on a bus, trolley, trackless trolley or Norristown High Speed Line onboard; and from a cashier booth attendant on the Market-Frankford Line and Broad Street Line.

There are three locations where customers may transfer for free between services. Signs and announcements often refer to this as a free interchange.

15th Street/City Hall Station provides a free interchange between the Market-Frankford Line, Broad Street Line and Trolley Lines.

13th Street/Juniper Station provides a free interchange between the Market-Frankford Line and Trolley Lines.

30th Street provides a free interchange between the Market-Frankford Line and Trolley Lines.

Up to two transfers are permitted for each one-way trip, and transfers are not permitted on trips near the trip's origin.

Customers who frequently use more than one service for a single trip may find a daily, weekly or monthly pass a more valuable option.

Zone Charges

Some bus routes and the Norristown High Speed Line have fare zones based upon the distance traveled.

The first zone is always covered by the base fare.

Customers using a TransPass must pay a \$.50 zone charge for each additional zone traveled. A TrailPass allows for travel through the same number of zones as the number printed on the front of the pass. Cross County Pass riders can travel through any fare zones outside the City Of Philadelphia without additional cost, however when traveling to the City of Philadelphia a zone fare must be paid.

PATCO

Transportation To/From New Jersey

New Jersey Transit serves the region with 20 bus routes and one train line from Atlantic City. For more detailed info, go to their website: www.NJTRANSIT.com

PATCO rail service to Center City is also a good alternative to driving and parking downtown. Seven PATCO stations in New Jersey offer ample parking: Lindenwold, Ashland, Woodcrest, Haddonfield, Westmont, Collingswood and Ferry Avenue. Trains run every 3 to 12 minutes on weekdays, 12 to 40 minutes during evenings and up to 40 minutes on weekends. Service is 24 hours a day. Visit www.RidePATCO.org for more information.

\$2.60 | SEPTA transfer from PATCO FREEDOM machine only.

PATCO and SEPTA have separate fare instruments and policies. However, riders can save money and time by purchasing a reduced-fare; round-trip SEPTA ticket from any FREEDOM automated vending machine in New Jersey PATCO stations.

The SEPTA ticket is printed in two portions, one for each trip. The first portion must be used on SEPTA within 60 minutes of being purchased. The second portion of the ticket remains valid for up to 24 hours. Time restrictions are not valid on weekends or major holidays. For additional PATCO information, visit www.ridepatco.org

—Bob Gates and Judy Summers-Gates

vacuubrand

Five Decades of Vacuum Innovation

Vacuum Pumps

Fast Delivery

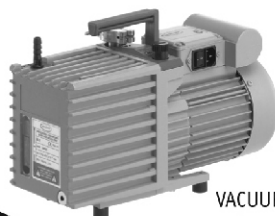
**Quiet, oil-free diaphragm pumps
and compact rotary vane**

**Call today!
888-882-6730**

**Most pumps
ship next day!**

VACUUBRAND, INC.
888-882-6730

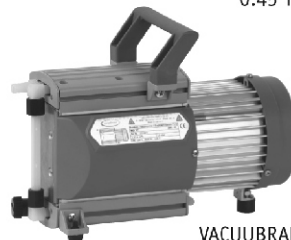
Visit us at
booth 1211 at the
ACS Fall Show
in Philadelphia!



VACUUBRAND RZ6
rotary vane pump
10⁻³ Torr, 113 lpm



VACUUBRAND
MV10C NT VARIO
0.45 Torr, 193 lpm



VACUUBRAND MD1C
chemical-resistant
dry pump
1.5 Torr, 25 lpm

www.vacuubrand.com
info@vacuubrand.net

The Philadelphia Section of the
ACS has taken to the social
media airwaves

Follow us on Twitter
@PhilaACS



@PhilaACS

Following or directly contacting the Philadelphia Section through Twitter and other social media outlets allows you to stay up to date on upcoming news and events relevant to chemists in the Philadelphia region. Join the next generation of communication!

LOOKING FOR COMESTIBLES IN PHILLY, IV*

— Tony Addison and Kathy Shaginaw, June 2012.

The Philadelphia Convention Center's main entrance is at 12th & Arch Streets. The combination of real Philadelphia character and proximity to the Convention Center makes the *Reading Terminal Market* a must-try location for breakfast, lunch or an early dinner (not fancy). Enter on the east side of 12th St., between Arch St. & Market St.: 8–6, Sunday 9–5 PM (not all vendors on Sundays, <http://www.readingterminalmarket.org/about/hours>). You can eat in or take out, from a variety of seafood, sandwich, pizza, deli, bread, coffee, pastry, and Pennsylvania Dutch (not for the lipophobe) stands. This venerable and bustling food bazaar also has bookstores and grocery, spice, fish, Lancaster County poultry and sausage, fruit and vegetable outlets, and even caters to turophiles. Also close to the Convention Center are *Fuel* (healthy fare, \$, 1225 Walnut St., GF); *Maggiano's* (chain Italian, \$, 1201 Filbert St., http://www.maggianos.com/EN/12th-Filbert_Philadelphia_PA/Pages/LocationLanding.aspx, GF), *the Gallery* (a shopping mall just east of the Convention Center with plenty of fast-food chain restaurants), and the eateries of Chinatown. A few blocks west is the city's newest and tallest skyscraper, the Comcast Center “thumb drive”; the *Market* food court in the lower level is a cut above the usual mall variety; you can sit out on the plaza at street level with your lunch; check out the neat video display in the lobby.

Philadelphia has a vibrant Chinatown with many restaurants, just a few of which are *Joy Tsin Lau* (\$, 1026 Race St., known for their endless dim sum, Sun–Sat 10–3:30, <http://www.joytsinlauchineserestaurant.com/>); *Ocean City Seafood Restaurant* – plastic tablecloths, but a large selection, including dim sum (\$, 234 N 9th St.); *Tasty Place* (\$, 143 N. 11th) Hong Kong-style entry in the underground restaurant scene; *Lee How Fook* (\$, 219 N. 11th St., <http://www.leehowfook.com/>); *Imperial Inn* (\$, dim sum, 146 N. 10th St.); *Shiao Lan Kung* (small BYOB \$, 930 Race St.); *Vietnam Restaurant* (\$, 221 N. 11th St., http://www.eatatvietnam.com/vietnam_restaurant.php). For a culinary adventure, you may want to try *Joseph Poon's* popular “[Wok 'N Walk Tours of Philadelphia Chinatown](#)” (1010 Cherry St.).

The majority of the dining establishments listed below are also within walking distance of the Convention Center. Remember that Philly is laid out on Ben Franklin's grid system – a north-south Center City block is about a minute long to walk, an east-west one about 2 minutes long. The y-axis is Broad (14th) St., the x is Market St. Our pricing guesses devolve from “\$\$\$”=medium=\$35–\$45. There's also a 7% sales tax whacked on top in Philly. A tip of about 16–18% is considered normal. Many of the restaurants that can serve diners with a gluten intolerance are tagged as “GF” (A wonderful web resource for gluten-free dining is <http://www.glutenfreephilly.com/p/gluten-free-restaurants.html>).

• Well-established and very popular restaurants include *The Fountain* (French, \$\$\$, Four Seasons Hotel, 18th St. & Ben Franklin Parkway,

http://www.fourseasons.com/philadelphia/dining/restaurants/fountain_restaurant/) and *Vetri* (superb American Italian \$\$\$\$, 1312 Spruce St., <http://vetriristorante.com/>, GF).

- Following on from these are some quite trendy places, including *Buddakan* (fusion/oriental, \$\$\$, 325 Chestnut St., GF), *Audrey Claire* (Mediterranean, no credit cards, BYOB, \$\$, 276 S. 20th St., <http://www.audreyclaire.com>), *Sampan* (Modern Asian street flavors, \$\$\$, 124 S. 13th St., GF), and *Square 1682* (out of the box dining on Rittenhouse Square, \$\$\$, 121 S. 17th St., GF). However, if for any of these last dozen or so, you did not make a reservation a while ago, you might be out of luck. On the other hand, I appreciate *Fork* (\$\$\$, 306 Market St.), where you can lunch *al fresco*. Several other places offer that opportunity, including *Rouge* (French, \$\$\$, 205 S. 18th, <http://www.rouge98.com/>, GF) and *Table 31* (\$\$, 1701 JFK Blvd., <http://www.table-31.com/>).

- For those of you who are fans of the Food Network and Iron Chef America, the Philadelphia area is home to Iron Chef Jose Garces and a number of his innovative restaurants (<http://garcesgroup.com/>), each with a different flair. Walking distance from the Convention Center are: *Armada* (Spanish tapas, \$\$\$, 217–219 Chestnut St, GF) and *Chifa* (Peruvian and Cantonese cuisine found in Peru, \$\$, 707 Chestnut St., GF), *Garces Trading Co.* (café, market and liquor store, \$\$, 1111 Locust St., GF). A bit west of the Convention Center are: *Distrito* (Modern Mexican, \$\$\$, 3945 Chestnut St. (entrance on 40th St.), GF), *Tinto* (Basque wine bar, \$\$\$, 114–116 S. 20th St., GF), *Village Whiskey* (\$\$, 118 South 20th St., GF), and *JG Domestic* (\$\$\$, 2929 Arch St., GF).

- If you cannot afford *Vetri*, try one of Marc Vetri's other Italian restaurants: *Osteria* (\$\$\$, 640 N. Broad St. – great pizza and wonderful chicken liver rigatoni, GF); *Alla Spina* (\$\$\$, 1410 Mt. Vernon St.); and *Amis Trattoria* (\$\$\$, 412 S. 13th St., GF).

- A couple of other upscale Americans are:

XIX Café and *XIX Restaurant*, American, views from the magnificent domed 19th floor penthouse rooms (\$\$\$\$, Park Hyatt/Bellevue, 200 S. Broad St.); *10 Arts Bistro & Lounge by Eric Ripert* (modern American with fun tasting menus and creative wine pairings, \$\$\$\$, 10 S. Broad St., GF) in the lobby of the Ritz-Carlton.

- You prefer seafood? *Devon Seafood Grill* (\$\$\$, 225 S. 18th St., GF) always good and sometimes wonderful; *Spasso* (\$\$, 34 S. Front St.); *Dmitri's* (Mediterranean \$\$, 2227 Pine St.); *DiNardo's Famous Seafood* (\$\$, 312 Race St.); *Kisso Sushi Bar* (\$\$, 205 N. 4th St.); *McCormick & Schmick* (an Oregon Irish seafood chain?, \$\$\$, 1 S. Broad St.); *SoleFood* (\$\$\$\$ 1200 Market St., in the Loews Hotel) seafood and American regional; *Morimoto* (\$\$\$, 723 Chestnut St.) more than just sushi platters; *Oyster House* (\$\$\$, 1516 Sansom St.) has a raw bar.

- Italian: Refined Northern style is easy to find in Philly; as you move southeast in the city, the brown reductions give way to tomato-based sauces, known locally as “gravy”.

Branzino – one of our BYOB faves – sometimes rushed service, but a great menu (\$\$, 261 S. 17th St.); *Bistro La Viola* – nice little BYOB, but not easy to get a table (\$\$, 253 S. 16th); *La Viola Ovest* – new extension of *La Viola*, BYOB (\$\$, 252 S. 16th); *Lo Locanda* (\$\$, 130 N. 3rd St.); *Le Castagne* – slick décor, good food and service – I like this classy place (\$\$, 1920 Chestnut St.); *Ristorante Valentino* (Italian BYOB, \$\$, 1328 Pine St., frequented by Drexel Chemists); and *Melograno* (\$\$, 2012 Sansom St.) - my kind of place, a BYOB; *Davio's Northern Italian Steakhouse* (\$\$\$, 111 South 17th Street, **GF**).

- French: Outnumbered by Italian – this is Philadelphia, after all. *Bibou* (\$\$\$, 1009 S. 8th St.) imaginative American-French BYOB. *Caribou Café* – French bistro style, a lunchtime fave (\$\$, 1126 Walnut St.); *Nan* – OK, it's a trek (take a cab to the corner of 40th & Chestnut Sts., \$\$), but we've had some very nice meals at this French-with-Thai overtones BYOB; *La Croix* (\$\$\$, the Rittenhouse Hotel, just south of Walnut & east of 18th); *Zinc* (\$\$, 246 S. 11th St.).

- Mexican: traditionally not a forté of Philly, but a newcomer *Xochitl* (pronounced so-cheet) (\$\$, 408 S. 2nd St., **GF**) has wonderful guacamoles and a nice tequila selection. Already mentioned are *Distrito* (Modern Mexican \$\$\$, 3945 Chestnut St. (entrance on 40th St., **GF**)) and *El Vez* (modern Mexican, \$\$, 121 S. 13th St., **GF**).

- You want a steakhouse for your expense account? *Prime Rib* (steakhouse, \$\$\$, 1701 Locust St.); *Capital Grille* (\$\$\$, 1338 Chestnut St., **GF**); *The Palm* (\$\$\$, Hyatt/Bellevue 200 S. Broad St., **GF**); *Ruth's Chris Steakhouse* (\$\$\$, 260 S. Broad St.; I dare you to consume three courses at one sitting, **GF**); *Morton's of Chicago* (\$\$\$, 1411 Walnut St., with cigars, **GF**); *Smith & Wollensky* (\$\$\$, Rittenhouse Hotel – see above) has some less expensive selections.

- Interested in places with noteworthy wine selections? *La Famiglia* (Italian, \$\$\$, 8th S. Front St.; extensive Italian wine list at this Philly favorite); *Ristorante Panorama* (Italian, \$\$\$, 14 N. Front St. – extensive wine bar); *Zavino Wine Bar Pizzeria* (fun tapas, great pizza in a cozy little place with some outside seating, \$\$, 112 S. 13th St., **GF** – great **GF** pizza), *Tria Café* (wonderful cheeses, meats, wine, and beers served by a knowledgeable staff, \$\$, two locations at Rittenhouse Square (18th & Sansom Sts.) and Washington Square West (12th & Spruce Sts.), **GF**).

- Many people say that you really cannot go wrong at a Steven Starr Restaurant (<http://www.starr-restaurant.com/restaurants.htm>) and I would agree. The ones that we have tried are: the trendy *Alma de Cuba* (modern Cuban, \$\$\$, 1623 Walnut St., **GF**), *the Continental* (global tapas and martini bar, \$\$\$, 138 Market St, **GF**), *El Vez* (modern Mexican, \$\$, 121 S. 13th St., **GF**), and *Pod* (contemporary pan Asian, \$\$\$, 3636 Sansom St., **GF**). There's also his French bistro-style *Parc* (\$\$\$, 227 S. 18th St.) and Brit Pub-style *Dandelion Pub* (\$\$, 18th & Sansom Sts.) - no veal, egg and ham pie, but they do have cheddars, shepherd's pie, numerous hand-pulled ales, and do afternoon tea as well.

- Place with music: *the Plough & Stars* (\$\$ Irish, 123 Chestnut St.)

- Greek: *South Street Souvlaki* (\$, 509 South St.); *Effie's* (\$\$, 1127 Pine St. – outdoors tables); *Estia* (\$\$\$, 1405 Locust St.) originally built on seafood flown in from the Mediterranean, they have since expanded their menu.

- Others ...

Bliss (\$\$\$ 220 S. Broad St.) modern American; *Fogo de Chao* (the more-meat-than-you-can-eat Brazilian churrascaria chain, \$\$, 1337 Chestnut St., **GF**); *Chima* (20th St. & JFK Blvd., **GF**); *The Black Sheep* (Irish moderne dining upstairs \$, 247 S. 17th St.); *Cuba Libre* (Cuban, \$\$, 10 S. 2nd St. – spirited décor, some routine dishes, some very good ones, **GF**); *Palace at the Ben* one of Philly's best Indian restaurants (\$\$\$, 834 Chestnut St., **GF**); *Mission Grill* (Southwestern U.S., \$\$, 1835 Arch St.); *Tir Na nOg* (trad. Irish pub, \$\$, 1600 Arch St.); *JG Domestic* (\$\$\$, Cira Center, next to 30th St. Station) riffs on top American ingredients; *Tequila's* (Mexican, \$\$, 1602 Locust St.); *City Tavern* ("18th century" menu, \$\$\$, 138 S. 2nd St., **GF**); *Ariana* (Afghani, \$, 134 Chestnut St.); *Karma* (Indian, \$\$, 114 Chestnut St.); *Buca di Beppo* – I went to one of these once. Once. Send your students troughing (\$, 258 S. 15th St., **GF**); *Friday Saturday Sunday* (retro continental, \$\$, 261 S. 21st St.); *Mixto* (Cuban, Latin American and Caribbean, \$\$, 1141 Pine Street); for chocolate and more chocolate, *Max Brenner* café (\$\$, 15th St., just south of Walnut St.)

Visitors from some other areas may suffer sticker shock at the wine markups in Philadelphia restaurants. The reasons for this are (i) they have to buy their wine from the Pennsylvania Liquor Control Board's state monopoly, (ii) there was an Unfortunate Incident in Johnstown, PA, a little while ago - the Johnstown Flood- and (iii) the number of liquor licenses is limited, so they cost $\$n \times 10^4$ each, pushing the restaurateurs to pile the charges on. About 20% of the price of a bottle of wine is an emergency tax that goes toward the Johnstown Flood Relief Fund. The Johnstown Flood was only just in 1889, but one remains ever-hopeful that the Relief will soon be consummated and the tax repealed. Meanwhile, the Pennsylvania legislature is currently enmired in their decennial debate about privatizing the retail stores. The limited supply of licenses has led to a plethora of quite good BYOB restaurants. In addition to the Italians mentioned above: *Sahara Grill* (Middle Eastern, \$, 1334 Walnut St.) (We order the delicious appetizer sampler plate as a main course. Treat your research group for dinner at this small BYOB and get out with your wallet intact. Oh, no, did I let the cat out of the bag? Reserve for >2, or get there before 6:45); *Kanella* (Cypriot Greek, \$\$, 1001 Spruce St.); *Kabul* (Afghani, \$, 106 Chestnut St.); and *Minar Palace* (Indian, \$, 1304 Walnut St.)

Philadelphia is often now referred to as "Brussels on the Schuylkill," as it has become the center of gravity of Eastern US craft brewing and microbrewery activity. The annual beer festival is (unfortunately for Fall ACS) in early Spring, but many places have regional brews on tap. Look out for those from Yards and Dock Street (in Philly), the superb Victory brews (especially their *Hop Devil* IPA), Stoudt's, Flying Fish and Dogfish Head (Delaware).

You can buy wine for your BYOB restaurant dinner at Pennsylvania Liquor Control Board stores. Anyhow, there are "regular" stores (as at 1111 Locust St., 5 N. 12th Street, 32 S. 2nd St. & 1628 JFK Blvd., Mon–Sat. 9/10 AM–7/9 PM, closed Sun., pass the Thunderbird) and also "premium

stores” which are more consumer-friendly by having a better selection and longer trading hours (Mon–Sat 9–9, Sunday! 12–5) at 1218 Chestnut Street; 1913 Chestnut St.; 326 S. 5th St. The State stores do not sell beer, but places in Center City where you can try good brews and get something to eat as well include *Monk’s Café* (Belgian) – with a big selection of domestic and imported beers, good burgers and mussels and yet more mussels; I like the *boudin blanc* sausage sandwich (\$, 264 S. 16th St. – get there early); *Jose Pistola’s* (Mexican, with Belgian beers, \$, 263 S. 15th St.); *Good Dog Bar* (untrendy, burgers, \$, 224 S. 15th St.); *Nodding Head Brewery* – reasonable bar food, piped-in rock (\$, 1516 Sansom St.). Slightly further away is another beer haven – *Eulogy Belgian Tavern* (136 Chestnut Street).

A bit further afield are some other eateries noteworthy for their particular ambience:

- The *Art Institute of Philadelphia* itself has pleasant eateries, including a vastly improved cafeteria, a restaurant and a café 1622 Chestnut St.). Nearby are *Figs* (Moroccan, \$\$, Meredith & 25th Sts.), and the *London Grill* (\$\$ American, 2301 Fairmount Ave., **GF**). As a side note, you may want to tour the Eastern State Penitentiary next to the London Grill; *Sonata* (contemporary American BYOB in Northern Liberties, \$\$\$, 1030 N. American St., **GF**); *Sazon* (Venezuelan BYOB with specialty hot chocolates, \$, 941 Spring Garden St., cash only, **GF**).
- *Famous 4th St. Delicatessen* (\$, 700 S. 4th St.) the best of Philly’s not many delis east of the Schuylkill River.
- *Fez* (Moroccan, \$\$, 620 S. 2nd St.) includes belly-dancers.
- The *Victor Café* (trad. S. Italian, \$\$, 1303 Dickinson St.). The proprietor possesses a huge collection of opera music (much on 78s, on my last visit), the waitstaff are nearly all classical singers in training, and at various random points in the evening, these two factors combine delightfully. In other words, you go for the entertaining ambience.
- *Moshulu* (American, \$\$\$) the recently refurbished four-masted restaurant floating on the Delaware at Penn’s Landing.
- *Geno’s Steaks*; *Pat’s Steaks* (Philly cheesesteaks, \$, both S. 9th St. & Passyunk Ave.). I include these guys not as sources of *haute cuisine*, but as they claim the fame of being the original sources. The classical Philly cheesesteak is made with onions, thinly-sliced beef, American cheese (though I suggest substituting *provolone* when possible) and a split long roll, onto the grill in that order. Actually, if you want a Real (Wo)Man’s Steak Sandwich, then we have to wait for an ACS meeting to be held in the Hunter Valley.
- The *Melrose Diner* (American, \$, 1501 Snyder Ave.). We can’t omit this classic American diner, can we? The *Oak Lane Diner* (6528 N. Broad St.) is noteworthy as a piece of Philadelphia Art Deco architecture. A local chain of fresh diner fare is *Sabrina’s Café* (\$, BYOB, locations at 910 Christian (in the Italian Market), 1804 Callowhill St. (near the Philadelphia Art Museum), and 227 N. 34th St. (near Drexel U.), **GF**).

Hey, speaking of architecture, we have to mention a couple of our favorite lesser-appreciated Philly gems. One is the Art Deco eastern facade of Suburban (ex-Pennsylvania RR) Station, which you can contemplate from the corner of 15th & JFK. Not far away is the 1928 WCAU Building, at 1620 Chestnut St. The Loew’s Hotel (1200 Market St., includes *SoleFood* restaurant, \$\$\$) now inhabits what looks like a perfectly ordinary 1960’s skyscraper. However, this was ac-

tually built in 1929–32, contemporaneously with the Chrysler and Empire State buildings, as the home of the PSFS bank. It bears the distinction of likely being the first Modernist skyscraper in all of the Americas. Take a dekko at its Art Deco lobby and bar. A bit further south and east, enter the Curtis Building *via* its 6th St. entrance just north of Walnut St., near Independence Hall. The lobby is *ab originale* from 1916, and the west wall comprises Maxwell Parrish's magnificent *Dream Garden* mural, executed in favrile glass by Louis Comfort Tiffany. This was Philadelphia's best-kept secret until about 1998, when a Las Vegas mogul created a local uproar by putting a down-payment on it for his casino. Hey, no way, buddy!

No Philadelphia restaurant review would be complete without mentioning sweet frozen endings to your meal. *Rita's Water Ice* is a classic Philly tradition, with many locations scattered about the city (GF). For true frozen decadence try *Capogiro*, makers of fine artisanal gelato and sorbetto (locations in Midtown Village (119 South 13th St., GF), Rittenhouse Square (117 S. 20th St., GF), University City (3925 Walnut St., GF), and Passyunk (1625 East Passyunk Ave., GF)). *National Geographic* featured *Capogiro* in their book of 500 *Food Journeys of a Lifetime*.

A set of positively-reviewed new restaurants that we haven't yet had a chance to try are in the 105-110 stretch of S. 13th. St., handy to the Convention Center: *Jamonera* (Spanish), *Lolita* (Mexican), *Bindi* (Indian) & *Barbuzzo* (Mediterranean).

* I: *the Catalyst*, August 1984; II: *the Catalyst*, August 2004, III: *the Catalyst*, August 2008.
© ACS Philadelphia Section, 2012.

THE CHEMICAL HERITAGE FOUNDATION at 30

—Tom Tritton and Neil Gussman

Thirty years ago the Chemical Heritage Foundation (CHF) was founded in Philadelphia. True to our original purpose, the organization now enjoys an international reputation among scholars of the history of chemistry, both for collections and for fellowships awarded to researchers from across the globe. In the upcoming academic year, CHF will once again be the leading grantor of fellowships in the history of science in America and among the top few in the world.

Our mission has broadened since the early years and we now describe our purpose as: library, museum and center for scholars. In short, our work is to tell the story of chemistry for all who will listen, and in as many ways as we can. And our name has come to signify the one place in the world where the history of chemistry, from alchemy to nanotechnology, is treated with all the admiration it is due and with all the complexity of the science that defines the material world.

A decade ago while celebrating our 20th birthday, the editor-in-chief of *Chimie Hebdo*, the French chemical news weekly, came to the first Heritage Day. In a front-page editorial, Cyrienne Clerc, wrote (translation):

What chemical professional in Europe could imagine one day celebrating the 20th anniversary of a museum dedicated to preserving the history and heritage of chemistry and the chemical industries, surrounded by all the top industry leaders and an erudite gathering of renowned researchers? He would wake up and believe he had just had a crazy dream. But America has made this dream a reality. And so in Philadelphia on June 28th the Chemical Heritage Foundation celebrated its 20th anniversary with great pomp. All of the great leaders of US industry were there—Chad Holliday of DuPont, Mike Parker of Dow Chemical, Raj Gupta of Rohm and Haas, Vincent Calarco of Crompton—surrounded by scientists, from the oldest pioneers like Joseph Labovsky, one of the inventors of nylon, to the most recent innovators like Robert Langer, discoverer of biocompatible polymers for drug delivery.

Ten years ago Cyrienne thought CHF could only exist in America, away from the national rivalries of Europe. Such barriers are reduced today, and the possibility of a CHF Europe, Asia, Latin America, or Africa is alive and well.

Ten years after Cyrienne's visit we have a new museum, new programs, new awards, new treasures. The Othmer library added the extraordinary Neville Collection of rare books since the first Heritage Day. We are imminently to break ground on a new and ultra modern storage facility, the *Archives of Science and Business*.

Our good name, Chemical Heritage Foundation, encompasses everything and everyone within our walls and reach. The library and collections, the museum, the myriad public programs, the rich web presence, and the work of our scholars all add up to CHF being the only place solely devoted to telling the story of chemistry. Unable to contain their enthusiasm, the historians on our staff and among our scholars say we exceed being just heritage: we nurture the legacy and transport the stories that are the birthright of what CHF founder Arnold Thackray called "The great cumulative story of mankind."

CHF is located at 315 Chestnut Street and is open for Public Tours Mon-Fri 10:00 CO - 6:00 RO ; (215) 925-2222; <http://www.chemheritage.org>.

Tom Tritton is President and Neil Gussman is Strategic Communications and Media Relations Manager at the Chemical Heritage Foundation.

BOOST OUR RATINGS

When you tell our advertisers that you saw their ads here they have more confidence in our newsletter's viability as an advertising medium. They advertise more. This supports our many activities.

Self-Regulating Evaporation Control

The NEW PC3001 VARIO^{pro} vacuum system automatically adapts to changing vapor conditions without programming.

You just press "start."

- **Automatically adapts** to changing vapor conditions without programming
- **Faster** – optimized vacuum levels and 20% more free air capacity (34 lpm)
- **Safer for samples** – virtually no bumping and foaming
- **Updated** – New generation control software
- **Productive** – Automatic regulation frees you from constant oversight

Find the right VACUUBRAND pump for your application with the BrandTech interactive Vacuum Pump Selection Guide at www.brandtech.com.



**PC3001 VARIO^{pro}
vacuum system**

Toll Free (888) 522-2726
www.brandtech.com

BRANDTECH[®]
SCIENTIFIC, INC.

Visit us at
booth 411 at the
ACS Fall Show
in Philadelphia!



Vacuum Inlet Traps

Because vacuum pumps don't grow on trees.



Oil Filtration Systems

Because a really old, really healthy vacuum pump is a beautiful thing.



Oil Mist Eliminators

Because no one wants to eat oily mist.



PRODUCTS

A Division of Mass-Vac, Inc.

247 Rangeway Road ■ PO Box 359 ■ North Billerica, MA 01862
978 667 2393 Fax 978 671 0014 sales@massvac.com www.massvac.com

SEE THE SIGHTS OF PHILADELPHIA WITH YCC'S FUN RUN!



**MONDAY 7:00AM
AUGUST 20, 2012**

Don't end up stuck inside the convention center for the whole conference! Come join us for some exercise, a tour of the city, and a great networking opportunity.

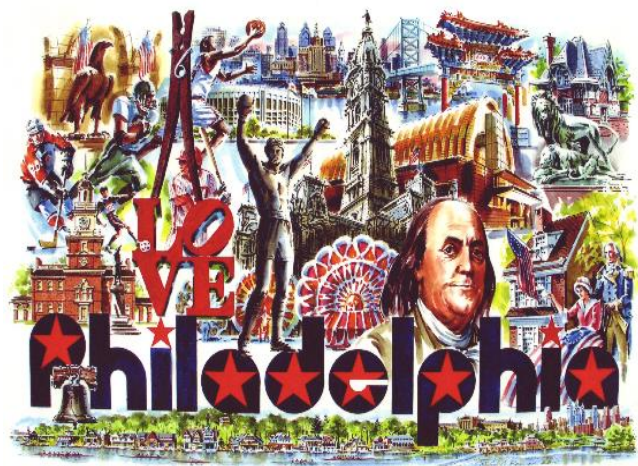
A professional guide will lead you on a 3.5 or 5 mile run through Philadelphia's tree-lined Fairmount neighborhood as you pass the Rodin Museum, the Barnes Museum and the famed Philadelphia Museum of Art. Run to the top of the "Rocky steps" and get a spectacular view of the city. Catch a glimpse of rowers gliding down the Schuylkill River and enjoy one of Philadelphia's most popular running trails. You'll also have a chance to run through downtown Philadelphia's most popular restaurant and shopping neighborhood.

Buy tickets through meeting registration or through <http://ycc.sites.acs.org>

Meeting place for the run: Convention Center.

Pick either 3 miles or 5 miles at
the running
pace that's right for you:
12-14 min/mile or 9-11
min/mile.

Cost: \$30
\$20 for first 20 students
includes guided run, water, and
souvenir bag



READY FOR A SHOPPING BREAK??

We have you covered!

- the nation's oldest continuously operating farmer's market
- the nation's oldest and largest working outdoor market
- the largest shopping complex on the East Coast
- a 1.6-million square foot enclosed outlet mall
- America's oldest Diamond District plus many trendy and high-end boutiques, vintage shops, and other one-of-a kind shops!

Farmer's and Outdoor Markets

Reading Terminal Market - *Celebrating their 120th Anniversary*— Experience over 80 unique merchants who sell fresh produce; Amish specialties; fresh meats, seafood, and poultry; unique, handmade pottery, jewelry and crafts from around the world. Located at 12th & Arch Sts., the nation's oldest continuously operating farmer's market is open Mon-Sat 8 AM - 6 PM, with some vendors open on Sun 9 AM - 5 PM. Note that Pennsylvania Dutch vendors have limited hours, Wed 8 AM - 3 PM, Thurs-Sat 8 AM - 5 PM only.

Italian Market — Dozens of street vendors can be found lining south 9th Street selling fresh vegetables, fish, meat, spices and produce from their stalls while gourmet shops and restaurants occupy the storefronts between the stalls. Located at S. 9th Street and Washington Avenue (along 9th Street between Wharton and Fitzwater), the nation's oldest and largest working outdoor market is open Tues-Sat 9 AM - 5 PM, Sun 9 AM - 2 PM.

Malls

King of Prussia Mall — The largest shopping complex on the East Coast boasts 7 department stores and over 400 shops and restaurants — there's something for everyone here! It's located just 15 miles west of Philadelphia on Route 202 at Mall Blvd, where I - 76 meets the Pennsylvania Turnpike. The mall is open Mon-Sat 10 AM - 9:30 PM, Sun 11 AM - 6 PM.

Franklin Mills Outlet Mall — This amazing outlet mall offers top designer names at up to 60% off!! There are over 140 stores, 2 food courts, several theme restaurants and a 14-screen AMC movie theater. It's located only 15 miles from Center City just off Interstate 95 at the intersection of Woodhaven Road (PA 63) and Knights Road. The mall is open Mon-Sat 10 AM - 9:30 PM, Sun 11 AM - 7 PM.

Gallery at Market East — If you're looking to shop within walking distance, check out this local mall located in the heart of Center City on Market Street between 8th and 12th Streets. The mall is open Mon – Thurs & Sat 10 AM - 7 PM; Fri 10 AM - 8 PM; Sunday Noon - 5 PM.

Specialty Shops

Jewelers Row — America's oldest Diamond District! Dozens of independent jewelry stores await you here, offering a virtually unlimited selection of fine jewelry at greatly discounted prices! Located a short walk from the Philadelphia Convention Center on Sansom Street between 7th & 8th Streets and on 8th Street between Chestnut and Walnut Streets, many shops are open seven days a week.

Antique Row — A local favorite spot to search for that antique book, stained glass, or furniture you've been after! It's located just six blocks from the Convention Center along Pine Street between 9th & 13th Streets. Hours vary by store.

High End Boutiques, Vintage Shops and One-of-a Kind Shops

Rittenhouse Row — Located from the Avenue of the Arts (also known as Broad Street) to 21st St. and from Spruce to Market Streets, it features international upscale retailers as well as trendy, independent specialty shops. Hours vary by store.

Main Street in Manayunk — With over 50 shops, trendy boutiques and galleries, you're sure to find that one-of-a-kind item you're looking for here! It's located just minutes from Center City along Main Street (4300 Main Street). Hours vary by store.

Old City — Visit the "liveliest urban neighborhood between Soho in New York and SoBe (South Beach) in Miami," according to *National Geographic* magazine. Offering over 100 vintage and high end fashion boutiques and home furnishings, it's located along the 2nd & 3rd Street corridors of Old City. Hours vary.

South Street — Stop by Philadelphia's famous street to check out an eclectic lineup of shops, many independently owned. The shops are located on South Street, between Front & 8th Streets. Hours vary.

—Kendra Luther

CHEMIST WANTED

Chemist wanted with FDA agency experience

This is a part-time consulting arrangement
Work from your own home or office
No travel required

Charles S. Wilcox, PhD

please contact me at

Brainurd@gmail.com

August Historical Events In Chemistry

by Leopold May

- August 13, 1912 One hundred years ago on this date, Salvador Luria was born. He was a researcher on microbial genetics and shared the Nobel Prize in Physiology or Medicine in 1969 with Max Delbrück and Alfred D. Hershey for their discoveries concerning the replication mechanism and the genetic structure of viruses.
- August 23, 1887 One hundred and twenty-five years ago, Bradley Dewey was born on this date. He acted as the “Czar” of synthetic rubber production in World War II.
- August 25, 1812 Two hundred years ago, Nicolai N. Zinin was born on this date. He discovered reduction of aromatic nitro compounds to amines in 1842 and benzidine rearrangement. He founded and was first president of Russian Chemical Society, 1868-77.
- August 25, 1918 Seventy-five years ago, Hans A. Krebs discovered the citric acid cycle or Krebs cycle. He also described the urea cycle, 1932 and the glyoxylate cycle, 1957. He was awarded the Nobel Prize in Physiology or Medicine in 1953 for his discovery of the citric acid cycle with Fritz Albert Lipmann for his discovery of co-enzyme A and its importance for intermediary metabolism. He was born on this date.
- August 31, 1887 One hundred and twenty-five years ago on this date, Frederick A. Paneth was born. He was a researcher on age of rocks by measuring the helium formed.

Additional historical events can be found at Dr. May's website:

<http://faculty.cua.edu/may/Chemistrycalendar.htm>

DIRECTORY OF SERVICES



www.ils-automation.com

**Your experts in custom, reliable,
and affordable laboratory and pilot-
plant automation: reactors,
bioreactors, fermentors, and more!**

If you need a new automation system or
want to retrofit and upgrade an older
existing system with modern electrical
controls and user-friendly SCADA software,
please contact ILS.

We can integrate many different
instruments and devices, accurately control
them, record data into a database, and
provide reporting tools to display results.

Temperatures, pressures, air/liquid flows,
dissolved oxygen, pH, CO₂, mass-spec, on-
line analyzers, pumps, valves, motors,
scales, and more!

Please contact Bob Freedman at ILS:

Email: bfreedman@ils-automation.com

Telephone: (732) 715-2359

TELL OUR ADVERTISERS

Membership surveys show that you want
more articles in our newsletter. If you tell
our advertisers that you saw their ad here,
they will provide more financial support and
this will allow us to add more articles.

ELEMENTAL ANALYSIS

◆ C,H,N,O,S,P ◆ Halogens
◆ Ash ◆ Metals ◆ TOC ◆ TOX
◆ BTU ◆ ICP ◆ ICP/MS ◆ IC

Custom Analysis ◆ Problem Solving

HUFFMAN

Laboratories, Inc
Quality Analytical Services Since 1936

4630 Indiana Street Golden, CO 80403
Fon: 303-278-4455 Fax: 303-278-7012

Chemistry@huffmanlabs.com
www.huffmanlabs.com

NMRService 500MHz

***Mass**

***Elemental Analysis**

NuMega Resonance Labs

numegalabs.com P- 858-793-6057

VOLUNTEER

Committees seeking team members

- ✓ Career Services
- ✓ Chemical Health & Safety
- ✓ Diversity
- ✓ Industrial Relations
- ✓ Legislative Liaison
- ✓ Membership
- ✓ Planning
- ✓ Public Relations
- ✓ Social
- ✓ Student Affiliate Mentor
- ✓ Awards
- ✓ Continuing Education
- ✓ National Chemistry Week
- ✓ Program
- ✓ Communications
- ✓ Tellers
- ✓ Web Page
- ✓ Younger Chemists
- ✓ Women Chemists

Contact the Section Office at

PhilaACS@aol.com or

(215) 382-1589

Put "Volunteer" in the subject line
or leave a message including con-
tact information.



Robertson Microlit Laboratories

Where speed and accuracy are elemental

Elemental CHN, S, X, Analysis (same day service)

Metals by ICP-OES, ICP-MS, A/A

FTIR, UV/VIS Spectroscopy

Ion Chromatography

Bioavailability

Polarimetry

DSC, TGA, melting point

KF Aquametry, Titrimetry

1705 U.S. Highway 46 • Suite 1D • Ledgewood, NJ 07852 • 973.966.6668 • F 973.966.0136

www.robertson-microlit.com • email: results@robertson-microlit.com

Rapid Results • Quality • Accuracy • Competitive Pricing



Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION
MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA

Registered with FDA • DEA GMP/GLP Compliant

3815 Lancaster Pike Wilmington DE. 19805

E-Mail micronanalytical@compuserve.com

Voice 302-998-1184, Fax 302-998-1836

Web Page: www.micronanalytical.com

ADVERTISING INDEX

ACS	161, 167, 168
Brandtech Scientific	162
The Cecon Group Inc.	138
Chemical Consultants Network	169
Huffman Laboratories	167
ILS Automation	167
Mass-Vac, Inc.	162
Micron Inc.	167
NuMega Resonance Labs, Inc.	167
Organomed Corporation	168
Pharmacology Research Inst.	165
Robertson Microlit Labs	167
Vacuubrand Inc.	153

Advertising: Vince Gale, MBO Ser-
vices, P.O. Box 1150, Marshfield,
MA 02050; phone: (781) 837-0424
email: vincegale@mboservices.net

DIRECTORY OF SERVICES

Organomed Corporation

Specialists in Custom Synthesis

Organic, Medicinal & Biological Products

www.organomed.com
info@organomed.com
Tel: 401-826-7240 Fax: 401-826-7315

Custom Synthesis

- Small Molecule Organic Compounds
- Milligram to Kilogram scale
- Custom protocols, developing new procedures
- Single contract basis and FTE basis

Drug Discovery

- Anticancer compounds
- Anti-inflammatory compounds, analgesics

Natural Products

- Turmeric extracts, curcumin, turmeric oil
- Sesquiterpenes-turmerones, curcumenes, sesqui-phellandrenes

Essential oils

Nutritional Supplements

- Turmeric, Ginger and Curcumin- novel formulations, capsules
- Visit: www.rhizeinternational.com

RECRUITING WEB SITE LISTING DIRECT TO YOUR SITE

There are two important ways to recruit through our services. One is to place a print ad in the Catalyst. The other is to place a web site ad reaching out to 40,000 ACS members. We recommend using both low cost methods.

You can view both of these opportunities by going to the link below.

Who uses these options?

- Companies for lab, management and sales personnel
- University & College teaching positions
- Hospitals for technical and research personnel

We provide more qualified resumes because of the highly targeted technical audience.

info -- www.mboservices.net



Department of Professional Education

Vital Training from a Trusted Source

Don't fall behind. Take an ACS Short Course to stay on top of your career training and goals. Taught by expert instructors, our courses are a great way to gain the training you need to succeed in a short amount of time.

2012 Short Course Circuit Schedule

Kansas City, MO (FACSS): September 29 - 30
Chicago, IL: October 2 - 4
San Francisco, CA: November 5 - 8
Raleigh, NC: November 14
Houston, TX: December 2-6

Visit www.ProEd.acs.org for a full list of course offerings!

2013 Short Course Schedule is coming soon!

American Chemical Society



www.ProEd.acs.org

CHEMICAL CONSULTANTS NETWORK



CCN

www.chemconsultants.org

TOPICAL GROUP OF PHILA ACS

**The best Companies use us...
Consultants join us**

QUALIFIED EXPERTS. WE ARE DEDICATED TO SUCCESS