

AMERICAN SOCIETY OF CIVIL ENGINEERS 215 S. 16th Street, Suite 16, Philadelphia, PA 19102

Telephone/Reservations: (215) 985-5703

Web site: http://www.asce-philly.org

National ASCE Central Number 1-800-548-ASCE • Toll Free

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Our 101st Year

May 2014

...AND THANKS AGAIN TO **OUR SPONSORS!**

Vol. 86-9

As you have seen, the Section Sponsorship Program was once again popular this season, with 17 firms participating in it. We extend our special and collective THANKS to each sponsor for their financial commitment and support.

Sponsor logos have also been included in a special Sponsors section of our website, in addition to their business cards published in each edition of THE NEWS. This year, we provided direct links from the Section's website to the sponsors' to allow folks to visit these websites and review potential employment openings and positions.

Of course, the key to success is repetition (or something like that), so we'll be contacting current sponsors later this summer to see if they'll go again in the coming season. We hope the program will be as successful then as well.

If you have an interest in joining our sponsorship program, please contact Bob Wright at newseditor@asce-philly.org for more details.

PAST PRESIDENTS HONORED IN APRIL

It has become another in a series of Section traditions to honor our Past Section Presidents at our April meeting. Each April, we invite them to come out, be recognized, and enjoy a dinner courtesy of the Section (not necessarily in that order of priorities!) to cite their contributions to the Section. We are always happy to see them, and many of them are in attendance at Section meetings when their busy schedules permit.

This year, we were pleased to see 13 of them taking the time to be at the April meeting:

Robert Koerner, 1975-76; William Malarkey, 1983-84; J. Richard Weggel, 1989-90; Frank Depman, 1991-92; Klaus Fuelleborn, 1992-93; Robert Wright, 1993-94; William Thomsen, 1994-95; Faruq Siddiqui, 1999-2000; Thomas Branigan, 2000-01; Chris Rood, 2001-02; Ruben David, 2002-03; Ann Tomalavage, 2011-12; Jeremy Colello, 2012-13

Thanks to Kazi Hassan for contacting the Past Presidents and getting them to come out.



Menu Choices: Seared Alaskan Salmon, Grilled Breast of Chicken, Vegetarian (please note when making reservation)

Cost—\$70 per person \$40 for government employees and students

Continue the Celebration w/Section Members at the Rooftop Lounge following the event!



Add'l Event & Parking Info at: www.asce-philly.org

JENN'S LAST PRESIDENT'S MESSAGE!

On April 10, our Board gathered for the last time under my Presidency. I still can't believe this year has passed by so quickly. It seems like yesterday we were dancing with the Mummers at the 100th Anniversary Gala and now we've just completed the first year of the NEXT century of service to the ASCE, Phila. Section!

In my prior President's message, I took the opportunity to thank our Board and members for all they do in giving back to our organization. As I said, it takes everyone to make our Section successful!! So, for my very last President's message, I'd like to take this opportunity to tell

Continued on Page 2



PRESIDENT'S MESSAGE

Continued from Page 1

you about everything these same folks have accomplished this year. In July, we held a Board retreat to identify our strategic projects that we wanted to focus on this year and I wanted to just summarize all the things we've accomplished:

Continuing Ed PDHs – **Spencer Finch** and his committee have continued the process for signing in at meetings, distributing certificates and uploading sign-in sheets to the website, in case you are audited.

Constant Contact – **Cathy Farrell** and her committee has worked to convert our email system to the Constant Contact email system which provided more streamlined emails and allows us to organize and track everything better.

Technical Meetings – **Joe Platt** and his committee led the effort to put together interesting dinner meeting topics and coordinated with other societies to organize joint meetings and increased networking with our colleagues.

Speakers' Bureau – **Bob Wright** and his committee continue efforts to work with the Engineers' Club to identify speakers for various topics of Civil Engineering.

Infrastructure Outreach – **Ann Tomalavage** has worked diligently all year with her committee to develop the 2014 PA Infrastructure Report Card that will be unveiled later this Spring. This was a tremendous effort of great importance to our industry.

Increase Government Employee Participation/Attendance – **Bob Wright** and **Ruben David** have continued to work to increase government employee activity and meeting attendance by getting the word out through networking and by providing more reasonable costs for government employees.

Social Committee/Spring Social – **Troy Illig** and his committee have organized an exciting and fun Spring Social this year at the **Monaco Hotel** which will be the final highlight this year for the Section. Hope to see you on **May 8**!

Centennial Book – **Tom Brady** and his committee has been working very hard to create our Centennial Book which will memorialize the 100th Anniversary celebrations and highlight all the accomplishments of Civil Engineers in our Section over the past 100 years. The goal is to complete the book by the end of the summer.

Thank you again to everyone who contributed to the Section's success and I hope you will continue to stay involved. Although I'm saddened that my role this year has come to an end, I look forward to working with the Board as Past President for many more years. So, in closing, congratulations to our Section, our Board of Directors, and our many volunteers and sponsors for a successful year!

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

Sincerely, Jennifer K. Walsh, P.E., PTP President, ASCE Philadelphia Section

...AND WE'RE OUT

We wrap up another successful season and our "sleep mode" time is almost here. Thus, the publication of THE NEWS is completed. As has become our custom, the busy and dedicated staff of THE NEWS (do we know these people?!) will take the summer off and put our pens, blue pencils (editors use these) and keyboards down (and pick up the garden tools) as we proceed outside to enjoy the warm weather (thanks to our long and difficult winter, we have little recollection of anything before the polar vortex). Some of you may ask why we need a break or from what do we need such break, but suffice it to say THE NEWS doesn't write itself, so you can draw your own conclusions. (Or you can sign on to join the staff of THE NEWS and put your writing talents to work — and we've always been looking for another cartoonist...).

In short (something we don't do so well, we're told!), this is our last full edition of *THE NEWS* until we start up again in the fall.

In the past, we've usually been rustled from our "sabbatical" (sounds better than "lazing

around") to crank out an abbreviated summer edition, so keep an eye out for this sometime in late June/early July, or whenever the spirit moves us. We hope our legions of fans will be able to bear with (or without?) us until then. (Of course, there's always the archives on our website, if you want to look through old editions of *THE NEWS* that you might have missed...)

We hope you enjoy your summer and see you again in the Fall!

I've made an odd discovery.

Every time I talk to a savant
I feel quite sure that happiness
is no longer a possibility.
Yet when I talk with my gardener,
I'm convinced of the opposite.

- Bertrand Russell

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION—2013-14 SEASON

PRESIDENT

Jennifer K. Walsh, McMahon Associates, Inc.

PRESIDENT ELECT

Joseph Platt, Traffic Planning & Design, Inc.

VICE PRESIDENT

AnnMarie L. Vigilante, Langan Engineering & Environmental Services

SECRETARY

Cathy G. Farrell, Michael Baker, Jr., Inc.

ASSISTANT SECRETARY

Troy Illig, Parsons Brinckerhoff

TREASURER

Guy DiMartino, Traffic Planning and Design, Inc.

MEMBERSHIP SECRETARY

Kazi Hassan, Pennoni Associates, Inc.

DIRECTORS

Andrew Bechtel, College of New Jersey ('13-'15)

Spencer Finch, Langan Engineering &
Environmental Sciences ('12-'14)

M. Ali Khan, Ali Khan & Associates ('12-'14)

Ara Mouradian, Gannett Fleming ('13-'15)

Marc Preim, STV ('12-'14)

Keith Yamatani, DiGioia, Gray & Associates ('13-'15)

PAST PRESIDENTS

Jeremy D. Colello, Pennoni Associates, Inc. Ann M. Tomalavage,* Malarkey Consulting, Inc. Thomas W. Brady,* RK & K Engineers

PRESIDENT, READING BRANCH

E. J. Walsh, McCarthy Engineering

*Our Constitution recognizes only the immediate Past President as a part of our Board but, following tradition, we list the immediate three Past Presidents to acknowledge their service.

President—Jennifer K. Walsh, P.E.

Senior Project Manager McMahon Associates 425 Commerce Drive, Suite 200 Fort Washington, PA 19034 (215) 283-9444 jwalsh@mcmahonassociates.com

Secretary—Cathy G. Farrell, P.E.

Project Manager – Transportation Michael Baker, Jr. Inc 201 Gibraltar Road, Suite 120 Horsham, PA 19044 (215) 442-5316 cfarrell@mbakercorp.com

PUBLICATIONS COMMITTEE

Editor of *THE NEWS* Robert Wright

Staff Writers

James Markham Joe Syrnick

SEND COPY TO:

ASCE, c/o Engineers' Club of Philadelphia 215 S. 16th Street, Suite 16 Philadelphia, PA 19102

> COPY DEADLINE FOR SUMMER 2014 ISSUE JUNE 27, 2014

YOUNGER MEMBER FORUM NEWS

Amanda Kessler, P.E., Forum Editor Chris Gray, P.E., Forum President 2013–14 TimHaahs 550 Township Line Road, Suite 100 Blue Bell, PA 19422 484-342-0200 cgray@timhaahs.com

CIVIL ENGINEERING CLUB™

The Civil Engineering Club™ at Chester A. Arthur School in Philadelphia has had a successful second year. Sixth through eighth grade students met bi-weekly from February through May to learn about all aspects of Civil Engineering including transportation, urban planning, geotechnical engineering, construction, water resources, and bridge design. These after school sessions were run by teacher Michael Franklin as well as volunteers from the YMF and Civil Engineering community.

The club, recognized by ASCE as one of only 13 Civil Engineering Clubs nationally, gave students the opportunity to participate in educational Civil Engineering-based activities that they would not otherwise have the opportunity to do during the regular school year. The program is a major step in the on-going goal of promoting the Civil Engineering profession to young students. We would like to thank our sponsors-including ASCE National, our ASCE, Philadelphia Section, Drexel University Noyce Program, National Science Foundation, and YMF-for their donations, as well as all the volunteers for committing their time and enthusiasm. We were very fortunate to also receive financial assistance from the Humphrey Fund, which allowed the club to grow to include field trips and new activities. This year's program will culminate with an awards ceremony in mid-May.

For more information, please contact Jesse Gormley (jgormley@pennoni.com) or Kazi Hassan (kazihassan@pennoni.com).

CANSTRUCTION – REQUEST FOR DONATIONS

On May 9, the YMF CANstruction team will be at The Shops at Liberty Place in Center City, constructing their structure made solely of cans of food. This year's theme, "Hauling Away Hunger", ties together both Civil Engineering and the everpresent issue of hunger in our community. The display will be up for one week and all are encouraged to stop by to view the structure.

To help raise funds, we are asking our members to consider making a small personal donation (\$5-\$20). A link has been set up via PayPal on the following webpage: www.ymfphilly.org/canstruction.htm. For more information and updates please visit our website. Feel free to share this with colleagues, friends and family. All proceeds benefit local food banks and support a great cause. Thank you!

WISSAHICKON ORANGE TRAIL RESTORATION

Spring is finally here! Dust off your work boots and come join the YMF for a fun day of trail restoration in **Wissahickon Park** on **May 10** from 10 AM to 2 PM. We will be restoring the corridor from Kitchen's Lane to the Mt. Airy

2014 SECTION AWARDS TO BE PRESENTED AT SPRING SOCIAL

As mentioned last month, our Awards Program is back after taking last year off to concentrate on our 100th Anniversary year celebrations. The Awards will be presented at our **Annual Spring Social and Dinner Dance** on **May 8** at the **Hotel Monaco**. More information and details on the Social will be included in the May edition of *THE NEWS*.

A total of six Award recipients have been nominated for these honors and approved by our Section Board of Directors. The honorees are:

- **Ruben David** Philadelphia Civil Engineer of the Year
- Kazi Hassan, Pennoni Associates –
 Philadelphia Young Civil Engineer of the Year
- **Bill Petersen**, Schnabel Engineering Geotechnical Engineer of the Year
- **Chris Gubeno**, Urban Engineers Engineering Manager of the Year
- AnnMarie Vigilante, Langan Engineering Transportation Engineer of the Year
- Jesse Gormley, Pennoni Associates Community Outreach and Service Award

We hope you will join us at the Social to honor our Awardees for this year.

When we return in the 2014-15 season, in the October edition of *THE NEWS*, we will present more information on the awardees as well as a detailed report on the Social. (Or you could just attend the Social and not have to wait until October...!)

Bridge. We will meet at the Kitchen's Lane Parking Lot on Kitchen's Lane just off Wissahickon Avenue. Necessary tools will be provided. For more information and to sign up, please contact **Zachary Suralik** at **Zachary. Suralik**@gmail.com or 215-832-3577 by May 7.

ELECTION HAPPY HOUR

The YMF will be hosting the annual **Election Happy Hour** at **Tavern on Broad** on **May 22** from 5:30 PM to 7:30 PM. This happy hour is a great opportunity to meet the current board members, vote for the 2014-15 Executive Board, and find out how you can become involved with our fantastic group of Young Civil Engineers. For RSVP and more info, please visit our website.

ANNUAL PHILLIES GAME

The Phillies are off to a decent start and that means the YMF is already looking forward to the annual tailgate and Phillies game. The YMF, along with the Delaware YMF, will be heading to South Philly on **Thursday**, **August 7** at 7:05 PM when the Phillies take on the Houston Astros. Tickets will be sold for \$24 per person. This price includes a ticket for a seat in Section 305 and tailgate food. Friends and family are welcome to attend this event. Tickets are limited. For more information and to RSVP, please visit the Events page on our website or contact **Mike Zettlemoyer**, **MZettlemoyer@PowellTrachtman.com** or **Nha Truong**, **Nha.Truong@phila.gov**.

SECTION OFFICERS AND BOARD OF DIRECTION — 2014-15 SEASON

At our upcoming Spring Social (May 8 – see the flyer on page 1 of this issue for more information), our Section's officers and Board members for the coming season will be officially installed. This slate was recommended by our Nominating Committee and adopted by our Board. They are as follows:

PRESIDENT: Joseph Platt, Traffic Planning & Design, Inc.

PRESIDENT ELECT: AnnMarie L. Vigilante, Langan Engineering & Environmental Sciences

VICE PRESIDENT: Guy DiMartino, Traffic Planning & Design, Inc.

SECRETARY: Cathy G. Farrell, Michael Baker, Jr., Inc.*

TREASURER: Marc B. Preim, STV

MEMBERSHIP SECRETARY: Kazi Hassan, Pennoni Associates Inc.

DIRECTORS: Andrew Bechtel, College of New Jersey *

Spencer Finch, Langan Engineering & Environmental Services

Don Gusic, Pennoni Associates Inc.

Trov Illig, PB

Ara Mouradian, Gannett Fleming *

Keith Yamatani, Kleinfelder *

PAST PRESIDENTS:

Jennifer K. Walsh, McMahon Associates Inc. Jeremy D. Colello, Pennoni Associates, Inc. ** Ann M. Tomalavage, Malarkey Consulting ** PRESIDENT, READING BRANCH: E. J.

Walsh, McCarthy Engineering

* These positions have one year remaining to serve in their current terms.

** In accordance with our Constitution and Bylaws, only the immediate Past President will serve on the Board, and only for a one-year term. We show the most recent three Past Presidents as has become our tradition.

We will also be welcoming these non-voting Assistant positions – **Angelo Waters**, Assistant Secretary, and **Jennifer Reigle**, Assistant Treasurer.

We wish these brave and generous folks our collective good luck for the coming season.

ENGINEERING MANAGEMENT TECHNICAL GROUP DINNER MEETING

WEDNESDAY, JUNE 18

SUBJECT: To Be Announced

SPEAKER: Matt Burns, P.E., President/CEO,

The Burns Group *TIME:* 5:00 PM-7:00 PM

LOCATION: Greater Philadelphia Chamber of

Commerce; DiBona Conference Room; 200 S. Broad Street, Suite 700, Center City

More information and details will be provided in an upcoming e-mail blast.

MARCH DINNER MEETING

March 13, 2014

Loews Hotel, Center City

Raise the Bar – A New Future for Engineering Licensure

by Robert Wright, Editor

For our sixth meeting of the current season, we were back in Center City for an evening meeting, the first time since back in late Fall, before we knew what a "polar vortex" was and when maybe we could have done something to escape the snow that would seemingly never end. Fortunately, Daylight Savings Time allowed us to get to the meeting before dark, but a cold snap (after a few days of warmth) reminded us that March came in like an ornery lion and was growling once again.

The weather has been a topic of discussion, and as roughly 50 of us gathered at the Loews and commiserated about it over drinks (which, in some ways, both commiserating and drinking made it at least seem a little easier to endure), we eagerly awaited the presentation on "Raise the Bar". Ironically, many of us were at a bar, and knowing the bar that would be raised in the meeting would not involve alcohol, did some "extra credit" work before the meeting to learn all we could about the bar (at least the one with the bartender). Some wondered if still another educational requirement would push them to drink, but, as we would find out, maybe not immediately.

Once the crowd was corralled into the meeting room and no longer raising a bar that had a bartender at it, Vice President AnnMarie Vigilante, filling in for President Jenn Walsh, welcomed attendees and gave the podium to Past President Ruben David for one of his always-inspirational invocations. After dinner, Vice President Vigilante returned to front and center for several announcements, then brought up Scholarship Chair Ernie Hanna to award one of our Section Scholarships to Cameron Connors, a sophomore at Widener University and our guest for the evening.

Vice President Vigilante then returned to the "helm" and introduced Eric Flicker, who began the presentation and brought up our featured speakers, Anthony Puntin and Megan Peal. Mr. Flicker noted that the Raise the Bar effort is not new and has been around for quite a while, getting started during Past National (and Past Section) President Chuck Pennoni's term in 1991. He added that three generations were represented at the dais, and they would be affected by the policy in different but similar ways.

Mr. Puntin began by adding to Mr. Flicker's characterization and noting that the Raise the Bar effort started out as Policy 465 and later morphed into the Competency Strategy before getting the Raise the Bar moniker. What it is is an initiative to increase the educational requirements for professional Engineering licensure. It is based on the accepted body of knowledge (BOK) that is required for Engineers. It will help the development of technical excellence at a time during which the number of credit hours being required by colleges and universities for Engineering degrees continues to decrease and the number of required Engineering

courses for graduation is similarly shrinking. The concern of ASCE and others is that this continued reduction of "core" technical courses has acted to diminish the BOK of Engineers receiving Bachelor's degrees.

Since much of the "product" of Civil Engineers is infrastructure used by the public, Mr. Puntin emphasized that our ability and competency must be there to protect the public, one of the very reasons that state certification began over 100 years ago. Similarly, it is critical to the future of the Engineering industry and needs to reflect the increased complexity and expectations of our field.

Mr. Puntin referenced the current NCEES model law, which requires an accredited Bachelor's degree. To pursue professional registration, most jurisdictions require 3-4 years of experience and passage of the FE (formerly EIT) exam to allow a candidate to sit for the PE exam. A Master's degree or additional 30 credithours (known as "plus 30") can often be considered as part of the experience requirements for this. However, many specialty areas, such as structures and geotechnical, already are seeking candidates for employment with a Master's degree at a minimum, since the Bachelor's degree programs in many institutions cannot cover the required material for these specialties.

As to the "why" this effort is needed, Mr. Puntin noted that Engineering has become more complex. Sustainability requirements, increased information on codes and standards, newly introduced materials and methods, alternate project delivery methods, and legislative/policy involvement have resulted in areas that are generally not covered in Bachelor's degree programs but are necessary to cover the greater overall responsibilities that Engineers are expected to handle. He showed a video that illustrated the complexities of the future and how Engineers will need to be able to address these. He provided a comparison of various professional occupations and their educational requirements throughout the 20th century – for Engineering, this has "flatlined" at a 4-year degree for over 100 years, while many other professions have greatly increased in the number of credit hours needed for a basic degree.

On the "when" part, Mr. Puntin explained that there is likely an 8-year transition period that will be necessary to implement changes, and used the example of his daughter, a junior in high school, who could graduate with a Bachelor's degree in Engineering and still not face the new requirements. Any change would not apply to current PE license holders and any incoming PE's who get their licenses before the effective date of the changes. It is hoped that the new requirements would apply across disciplines that current require licensure.

Ms. Peal stepped in and reminded that the National Academy of Engineering acknowledges

that the BOK cannot be covered in a 4-year degree program at present, and related her own experience in which many firms are looking for Master's degree holders for Structural Engineering positions, her own specialty. She added that the benefits of the program and the value of it to the individual are a more complete education, a competitive advantage, and a financial incentive, as a Master's degree has been determined to be able to command a 20-30% higher earning potential compared to someone having a Bachelor's degree.

As far as support, Ms. Peal outlined the endorsement of the program by NCEES (through its model law), NSPE, ASCE, and many leaders of business and industry. She added that, while the additional educational requirements will translate into a higher cost of obtaining a degree, the required number of credit hours cannot arbitrarily be increased, and colleges/universities do not seem to be willing to want to increase these requirements, as this increases their own costs of educating students. Similarly, the recognition of the value of on-the-job training is that it is at least as important as education in the production of a well-rounded Professional Engineer.

A very lively question and answer period followed. Vice President Vigilante had the unenviable task of having to cut it short, in the interests of time, but individual discussions ensued after the close of the meeting on this very "hot" topic.

Vice President Vigilante thanked the speakers and gave them each tokens of the Section's appreciation for their presentation.

"CLASS OF 2014" LIFE MEMBERS HONORED IN APRIL

Life Membership in ASCE is a major milestone in a member's tenure. To achieve Life Membership, one must:

- have reached the age of 65,
- have paid dues for a minimum of 30 years, and
- have had 10 years continuous membership immediately preceding the attainment of Life Membership

Life Members are exempt from dues and need only pay a small service fee to receive ASCE News and Civil Engineering magazine.

This year, we are proud to have welcomed a total of 15 newly-minted Life Members to our ranks:

John Bedford Dixon Blystone
Edward Buchak Ralph Carey
Frank Costanzo David Erali
Eric Flicker David Fleisher
Frank Hochmuth Daniel Lutz
Edward Lutz Ibrahim Onaral
Carl Rentschler Richard Stoneback

William Strause

We were pleased to be able to have Messrs. **Flicker, Fleisher, Hochmuth** and **E. Lutz** join us at our April Section meeting as our guests for their citation and congratulations.

RICHARD F. HILL

Dick Hill passed away on February 18. He recently retired from Urban Engineers where he had served in the firm's Project Management Oversight and Transit/Passenger Rail groups. He was a long-time employee with Amtrak before moving to Urban.

Donations in Dick's memory can be made to St. Francis Inn, 2441 Kensington Avenue, Philadelphia, PA 19125.

ENVIRONMENTAL AND WATER RESOURCES TECH GROUP DINNER MEETING

THURSDAY, MAY 15 (Rescheduled from March 20)

SUBJECT: Prioritization of Water Main Replacement Methods

SPEAKERS: Jerry Snyder, P.E., Snyder Environmental Engineering Associates, and Rajan Ray, Innovyze, Inc.

TIME: 5:30 PM Registration; 6:00 PM Dinner and Presentation

LOCATION: Michael's Restaurant and Delicatessen, 130 Town Center Rd., King of Prussia, PA 19406 (http://www.michaelsdeli.com/directions.asp)

COST: \$30 per member (\$20 per full-time student)

Buried assets such as water mains have a finite useful life and must eventually be replaced or rehabilitated. Water utility managers must develop water main replacement plans that are efficient and cost effective. The key question for water managers is which pipes should be replaced first. This technical seminar will present two methods for prioritizing water mains for replacement. The topic will be of interest to water system personnel involved in buried asset management programs.

Mr. Snyder, Principal of Snyder Environmental Engineering Associates, specializes in hydrologic and hydraulic modeling simulations and analysis and has authored nine Water Research Foundation (WRF) Reports.

Mr. Ray, Product Sector Lead/Client Service Manager for Innovyze, has extensive experience in advanced hydraulic modeling applications, GIS integration, and water system modeling, and supports some of the nation's largest utilities and consulting firms.

Attendees are eligible for one (1) Professional Development Hour (PDH) for attending this presentation.

RSVP's are due by **Tuesday**, **May 13**. Reservations should be posted to the website, **www.asce-philly.org**. Payment by PayPal can be done from the reservation website. Payment by check or cash can be provided at the meeting. Checks should be made payable to "Philadelphia Section ASCE."

Reservation cancellations must be made 48 hours in advance or you will be charged for the meeting.

Contact Eve D'Onofrio at 610-630-1660 or Jerry Snyder at 610-631-5241 if you have any questions on this.

DELAWARE VALLEY SCIENCE FAIRS — PROJECTS JUDGED, WINNERS RECOGNIZED



Science Fairs Judge Chris Rood presents our Section awards to Dennis Newcomb and Victoria Glenn at the Fairs' awards ceremony on April 3.

Having done this going on 21 years at this point, our Section once again sent judges to evaluate projects for our Special Awards at the Delaware Valley Science Fairs at the Greater Philadelphia Expo Center in Oaks on April 2. Our intent was, as usual, to review the efforts of local students who have competed in science fairs at school district and local levels and whose projects have made it to this regional competition. We then are able to cite those hopefully (!) future Engineers who we believe are deserving of special recognition. Our contingent of intrepid, esteemed and knowledgeable judges spent the day at the Fairs and reviewed most of the close-to 1100 individual student efforts to find those with Engineering potential.

The judges often find that they must review the projects outside of what are classified in the Engineering category in the project competition. Frequently, submissions that are related to Civil Engineering are hidden in other areas such as Environmental, Physics, Mathematics and even Behavioral Sciences. The quality of many of the entries makes the decision even that much more difficult as well.

After a lot of reviewing (involving a good deal of walking around the expanse of the Expo Center), our judges managed to sort through a number of well-prepared projects and come up with two winners in each of the categories of Grades 6-8 and Grades 9-12.

The winning students and their projects were:

GRADES 6-8 FIRST PLACE

Victoria Glenn; 7th Grade; Toms River Intermediate East School, Toms River, NJ; "Would the Shape of a Structure Affect its Ability to Resist Destruction During a Natural Disaster?"

GRADES 6-8 SECOND PLACE

Dennis Newcomb; 6th Grade; Edgarton Academy, Elmer, NJ; "Which Soil Withstands a Simulated Earthquake with a Building on It?"

GRADES 9-12 FIRST PLACE

Leah Goldsberry; 12th Grade; Marine Academy of Technology/Environmental Science, Manahawkin, NJ; "Effects of Corrosion on the Adhesive Properties of All-Weather Fasteners"

GRADES 9-12 SECOND PLACE

Jessica Olsen; 9th Grade; Marine Academy of Technology/Environmental Science, Manahawkin, NJ; "What are the Effects of Acid Rain on Concrete With Varying Ratios of Portland Cement, Sand and Gravel?"

Past President and "chief judge" Chris Rood, the Section's long-time coordinator of the judging for the Fairs, attended the award ceremony on April 3 and presented commemorative plaques and checks to the winning students (\$100 for each First Place and \$75 for each Second Place winner). The First Place winners were invited to attend the Spring Social, as we usually do, and we hope they will be able to attend so the rest of us can see the Engineers of the future and allow them to display their winning efforts.

If you've followed this to any extent in the past, you may be wondering where the truss bridge is, as that is always a popular topic. Apparently, not so this year, as disasters and corrosion seemed to prevail.

Thanks to the students and to those who participated in this event, including Section Judges Chris Rood, Ruben David and Bob Wright, with assistance from Chris Menna.

More information on the Fairs can be found at www.drexel.edu/dvsf.

CENTENNIAL BOOK UPDATE

To memorialize our 100th Anniversary season and cite the many local landmarks, facilities and efforts that have been brought "to life" by members of our Section over that time, we are creating a keepsake commemorative **Centennial Book**, which we anticipate having ready for our upcoming Spring Social. To help offset the cost of printing, sponsorship opportunities are available for individuals and companies. All sponsors will be listed in the book. Two levels of sponsorship are available – Engineer (\$100) and Patron (\$50). If you are interested in sponsoring the book, please contact President **Jennifer Walsh** at **jwalsh@mcmahonassociates.com**.

Additionally, we are making a general call for information, particularly photos. If you have information to contribute, please contact **Tom Brady** at **tbrady@rkk.com**. Sponsorship and materials for use in the Book must be received by **April 30**.

APRIL DINNER MEETING

April 10, 2014

Villanova Conference Center, Radnor, PA

Breakout Sessions

by Robert Wright, Editor

For the first time in too long a while, the sun was out, birds were singing, the weather was nice, and all these things happened on a Section meeting day. As we have continued what has become a tradition of sorts (five years now), our April meeting takes us to the "country" at the Villanova Conference Center. A good-size crowd of roughly 80 attendees came in from the nice weather to, at least for a little while, enjoy a drink outdoors (or in the mansion at the Center), have dinner, and then attend one of three breakout sessions:

Evaluation of Unknown Bridge Foundations Using Borehole Ultrasound and Other Non-Destructive Methods, presented by Joseph Thomas Coe, Ph.D, Assistant Professor, Department of Civil and Environmental Engineering, Temple University (sponsored by the Structural Engineering Institute)

Performance Evaluation of LRFD Designed Steel Girder Bridges, presented by Gergis William, Ph.D., Research Associate Professor, Department of Civil and Environmental Engineering, West Virginia University (sponsored by the Delaware Valley Geo-Institute)

Engineering Ethics Seminar, presented by Frederick Brehm, Esq. and Michael Zettlemoyer, Esq., Powell Trachtman Logan Carrle & Lombardo (sponsored by the Younger Member Forum)

ASCE, Philadelphia Section President Jenn Walsh welcomed everyone and opened the meeting, bringing Past President Ruben David to the podium for one of his always inspirational blessings of the meal. Attendees were then dispatched to the usual nice buffet dinner that the Center provides, and as an added bonus, some of us witnessed a demonstration of tricks with china and bowls at the buffet by Past President Bill Thomsen

As dinner wound down, President Walsh welcomed Membership Secretary **Kazi Hassan** to "front and center" to welcome and honor the newest "class" of Life Members to this esteemed

level of membership. Those in attendance were presented with their Life Member certificates. (Please see the separate article on this.)

As has become a custom at our April meeting, Past Presidents were invited to attend as guests of our Section and a number of them (13 to be exact) took advantage of the opportunity of a free meal to be there. President Walsh called them to the front to be cited. (Please see the separate article on this.)

Scholarship Chair Ernie Hanna was introduced by President Walsh to cite our Engineers Week Scholarship recipient, George Zimmer of (conveniently) Villanova University. Mr. Zimmer was unable to attend our March meeting to be thusly cited, so we took advantage of this meeting and his availability to do so.

President Walsh then closed the business part of the meeting by personally thanking everyone for their assistance in the operation of the Section and giving her the opportunity to serve as President, an opportunity which she noted was occasionally challenging but was always enjoyable and fruitful. With that, she closed the main portion of the meeting and dispersed attendees to the three breakout sessions.

MEMBERS IN THE NEWS FLEISHER RECOGNIZED BY PSPE PHILADELPHIA

We belatedly note that **Dave Fleisher** was cited by the Philadelphia Chapter of the Pennsylvania Society of Professional Engineers (PSPE) as the recipient of its **Distinguished Service Award**. This was presented to Dave at the Chapter's National Engineers Week Banquet, conducted at the Springfield Country Club on February 22. Congratulations to Dave on this well-deserved honor.

CONTINUING EDUCATION SEMINARS

National ASCE offers numerous continuing education seminars which will help you obtain your professional development hours (PDH's) needed to maintain and renew your professional licensure. Please visit www.asce.org/knowledge-learning/continuing-education for a list of all currently-offered courses and locations.

Two such courses will be offered in our area in the coming months:

Seismic Design of Highway Bridges

May 22-23

Embassy Suites Hotel

1776 Ben Franklin Parkway, Center City

HEC-HMS Computer Workshop

June 26-27

Embassy Suites Hotel

1776 Ben Franklin Parkway, Center City

More details, price and registration information are provided at the above website.

HISTORICAL PERSPECTIVE — CLOSING OUT "YEAR 101"

As we have done each edition this season, we look back to provide opening dates of significant local Civil Engineering projects and achievements for your reference and knowledge (and whatever other extracurricular activity for which these may provide a benefit...). We wrap up our trip down memory lane for Season 101 with these last entries.

April 15, 1926 – we managed to miss this sportsrelated one last month... (how'd that happen?) Philadelphia Municipal Stadium opens as part of the Sesquicentennial International Exhibition. The horseshoe-shaped facility had a capacity of over 100,000 and was known as Sesquicentennial Stadium until it was renamed after the closing of the Exhibition. The Stadium has hosted a number of events and has been home to several teams over the years, including professional football organizations such as the Philadelphia Quakers and Frankford Yellow Jackets in addition to the Eagles and the Bell. The Army-Navy game was played there between 1936 and 1979. It hosted the Liberty Bowl (now played in Memphis) for its first four years, 1959-63, the first coldweather-location college bowl game. It was renamed to honor President Kennedy in 1964. In 1967 it was joined by its new neighbor, the Spectrum, and in 1971 by Veterans Stadium, to become part of the new Stadium Complex. It was shuttered because of disrepair in the late 1980's after hosting several "mega-concerts" and demolished in 1992 to make way for Spectrum II (now the Wells Fargo Center – see below).

May 16, 1957 – the Walt Whitman Bridge opens to traffic, the third vehicular bridge to cross the Delaware River from Philadelphia to New Jersey (following the Ben Franklin (1926) and the

Tacony-Palmyra (1929)). It would soon become the busiest of the three crossings.

June 6, 2008 – the **Comcast Tower** opens, becoming the new tallest building in Philadelphia, surpassing the previous one, Liberty Place, which held the title since 1987.

July 1, 1926 – the **Delaware River Bridge** (now the Ben Franklin Bridge) opens to traffic, the first vehicular bridge across the Delaware south of Trenton. Prior to this, the cross-river traffic was the domain of ferries operated by the Pennsylvania Railroad and the Reading Company, the last of which ended service in 1952.

July 1822 — the City's Water Works begins operation at the foot of Fair Mount, pumping and treating Schuylkill River water for distribution to Philadelphia residents and providing fire protection service. Water is pumped to a reservoir at the top of Fair Mount (the present-day location of the Museum of Art) to flow via gravity from there to the city.

August 3, 2003 – **Lincoln Financial Field** opens, replacing worn-out Veterans Stadium as the home of the Eagles. Its first function is a soccer game between Manchester United and FC Barcelona.

August 12, 1996 – the **Spectrum II** opens (with the official name of the CoreStates Center), becoming the new home venue for the Flyers and Sixers. After renamings to the First Union Center and the Wachovia Center, reflecting purchases of its sponsor firm, it assumed its current title as the Wells Fargo Center in 2010.

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Director Keith Yamatani will be coordinating the activities of the Groups. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the appropriate Group Chair.

CONSTRUCTION

Dennis MacBride **SEPTA** 1234 Market Street, 12th Floor Philadelphia, PA 19107-3780 215-580-3404 dmacbride@septa.org

DELAWARE VALLEY GEO-INSTITUTE (DVGI)

Robert M. Sabanas GAI Consultants, Inc. 1055 Westlakes Drive, Suite 200 Berwyn, PA 19312 610-640-7456 r.sabanas@gaiconsultants.com

ENGINEERING MANAGEMENT

Ehsan Minaie Intelligent Infrastrucutre Systems One Drexel Plaza 3001 Market Street, Suite 200 Philadelphia, PA 19104 215-254-7740 eminaie@iisengineering.com

ENVIRONMENTAL AND WATER RESOURCES

Eve D'Onofrio E S Design LLC 128 Regency Dr Norristown, PA 19403-1755 610-630-1660 edonofrio@esdesignllc.com

STRUCTURAL ENGINEERING INSTITUTE (SEI)

Khalid Shaikh InVision Engineers, PC 16 Manley Road Pennington, NJ 08534 215-896-6264 info@invisionEngineers.com

TRANSPORTATION AND URBAN DEVELOPMENT

William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 215-922-8080 wtthomsen@urbanEngineers.com











JBC ASSOCIATES, INC. Construction Management

120 S. Warner Road, Suite 100 King of Prussia, PA 19406 610.992.9090

Fax 610.992.9099

www.jbcassociates.com

"Success is in the details. We handle them for you."













(funding available for full-time study) Sustainable Engineering Structural Engineering

Geotechnical/Geosynthetics Engineering
Architectural Engineering
Architectural Engineering
Water Resources **Environmental Engineering**

Air Quality Dr. Mira Olson

Dr. Charles Haas Head, Civil, Architectural & Environmental Engineering haascn@drexel.edu Graduate Advisor (215) 895-2987 mira.s.olson@drexel.edu





UNDERGROUND SERVICES, INC.

Subsurface Utility Engineers

800-545-1531

DIRECT LINE: 610-617-6267 CELL: 610-761-1303 EMAIL: rhorenburger@softdig.com

24 Hagerty Blvd., Unit 11 West Chester, PA 19382

Ann M. Tomalavage, P.E., PMP

Offices in PA, NJ, NY, MD and TX



Malarkey Consulting, Inc.

Project Management Consulting Environmental Consulting

1429 Shaner Drive Pottstown, PA 19465

(610) 326-0205 fax: (610) 326-0530 ann@malarkey.us www.malarkev.us





N-ASCE*

SRIRACHA HOT SAUCE OFFICIALLY DECLARED A PUBLIC NUISANCE IN CALIFORNIA

If you're a fan of hot sauce, you're likely aware of an ongoing saga involving Sriracha, that bright red sauce in the clear plastic bottle with the rooster on it. In the latest installment of this story, officials in California have declared the production of Sriracha hot chili sauce a public nuisance and are threatening to shut it down forever. The announcement was a long time coming — back in October, residents of Irwindale, the California town where sriracha is produced, were complaining of irritated eyes, headaches and sore throats, due to emissions from the factory. In November, the Irwindale City Council ordered the Huy Fong Foods plant, the company that makes the iconic sauce, to shut down.

After a unanimous vote in early April, the City Council issued an ultimatum to Huy Fong – reduce the wafting smell of the beloved spicy condiment, or someone else will do it. Huy Fong's attorney told the hearing that lingering smell will be under control by June and the



company will have an "action plan" ready within 10 days of the City Council's warning.

Reigning in the smell is especially timesensitive. Chili grinding season, the time of year that creates the strongest smells, starts in August. Thus, there is no immediate risk of shutdown, but the company is clearly feeling the heat, so to speak. Time is running out, but there's no "srirachapocalypse" just yet.

Thanks to the *Atlantic Cities* for this information.

WHY UPS TRUCKS DON'T TURN LEFT

In 2004, UPS announced a new policy for its drivers. The right way to get to any destination was to avoid left-hand turns. Even if that means following seemingly circuitous and out-of-the-way routes, left turns were pretty much "verboten."

When better tracking systems emerged in 2001, the package delivery service took a closer look at how trucks performed when delivering packages. As a logistics company with some 96,000 trucks and several hundred aircraft, much of UPS's business boils down to a series of optimization problems around reducing the amount of fuel used, saving time, and using space more efficiently. (Trucks in UPS facilities park just a few inches apart with their side mirrors overlapping to save space.)

UPS Engineers found that left-hand turns were a major drag on efficiency. Turning against traffic resulted in long waits in left-hand turn lanes that wasted time and fuel, and it also led to a disproportionate number of accidents.

By mapping out routes that involved "a series of right-hand loops," UPS improved profits and safety while touting their catchy, environmentally friendly policy.

As of 2012, the right turn rule combined with other improvements saved around 10 million gallons of gas and reduced emissions by the equivalent of taking 5,300 cars of the road for a year.

Describing the policy in a speech, the CEO of UPS told his audience, "I can see a few of you smiling out there, and I know what you may be thinking. But it really works."

The popular cable TV series "Mythbusters" took the challenge to see if this really worked and sent a truck out to deliver packages following a normal route and a left turn hating UPS route. They found the UPS approach saved gas but took a bit longer. Mythbusters likely failed to save time on the route by following the rule even more stringently than UPS. While the no left turn rule has an appealingly simple and algorithmic quality to it, you will see UPS drivers take left turns on occasion, especially in residential neighborhoods without much oncoming traffic.

Since UPS uses software to map out routes, it can send drivers on right turn heavy routes while making exceptions when a left turn is easier and faster.

Thanks to *Priceconomics* for this report.

*N-ASCE - Not always something concerning Engineering...

WHEN YOU ARE GOING THROUGH HELL, KEEP GOING.

- Winston Churchill



AMERICAN SOCIETY OF CIVIL ENGINEERS

Telephone/Reservations: (215) 985-5703

Web site: http://www.asce-philly.org

National ASCE Central Number Toll Free 1-800-548-ASCE

215 S. 16th Street, Suite 16, Philadelphia, PA 19102