2022 ENGINEERS WEEK

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2022 Delaware Valley Engineer of the Year

Anne Michelini, PE



Each year, one professional from the Philadelphia region is recognized by the area's engineering and technical societies as the Delaware Valley Engineer of the Year to serve as an ambassador and leader for the engineering profession. This honor is awarded to a local engineer who reflects the qualities and talents that define professional excellence, civic duty, societal leadership and community stewardship. This year, the Engineers' Club of Philadelphia, through its Delaware Valley Engineers Week (DVEW) Committee, is pleased to present Anne Michelini, PE, Vice President of International Projects at Covanta, as the 2022 Delaware Valley Engineer of the Year.

What do you believe led you on the path to becoming an engineer?

In ninth grade, my general science teacher, Mr. Greenwood, showed so much enthusiasm for science. He told the class that everyone should study physics, even girls. When it was time to start looking at colleges, there wasn't much guidance in high school about engineering, but a career guide said if you are good at math and science, engineering is a good career, and that's how I picked it. I still thank my ninth-grade teacher for saying that girls should study physics.

You earned a Bachelor of Science in Chemical Engineering from Bucknell University and a MBA from Widener University. Did you always know chemical engineering was what you wanted to study?

I heard chemical engineering was one of the most challenging disciplines, and I read that you learn a lot of methods to tackle big problems. I decided to try it and see if I liked it or not, and I just fell into it. I enjoyed the challenge and being able to understand how things work. This understanding makes life a little more interesting.

A first job is very formative in building a career. After completing your undergraduate education,

where did you start your career?

I started my career at Foster Wheeler Energy Corporation doing process design for oil refinery expansions. What was great about that job was seeing all these theoretical equations I learned in school put into practice.

Ultimately, I wasn't challenged enough at Foster Wheeler, and I ended up leaving to work for DuPont. DuPont had a multitude of opportunities within such a large corporation, which allowed me to flourish. The variety of challenges created the basis of my excitement within the engineering field. I worked on great projects with incredibly talented people, learned a lot and got to travel the world.

Now, you are VP of International Projects at Covanta. How did you get your start at Covanta and what does your current role entail?

I was recruited by Covanta back in 2016. Covanta was looking for a senior vice president to lead the Engineering and Capital Projects organization, better support North American facilities, get a new energy-from-waste facility completed in Dublin, Ireland and further develop and execute capability for project execution in the UK.

When 2020 rolled around, Covanta had four large projects being executed in the UK. It was clear that my role had grown. I asked if I could relinquish the domestic piece of my position to someone else and keep the international role. That is when the job split, and I became the vice president of international projects. On a personal level, that enabled me to relocate back to the Delaware Valley.

In my role, I take the technology learnings from the new projects in the UK back to our North America facilities and keep up with the construction overseas. Now, we have projects around the globe. In addition to the UK, we started and are now completing a facility in Northern China.

Thinking back on all the projects you've worked on, is there one that stands out in your memory as your favorite?

My favorite project was one in Taiwan where we developed a laboratory and clean rooms for DuPont's electronic business. This segment of the electronics business didn't have a presence in the country, so I traveled there to establish what they needed and to hire people to get the work done. I recently saw that they celebrated the 15th anniversary of being in Hsinchu, Taiwan, on LinkedIn. It reminded me of that project and what it was like to be there. It was my first time being so far away from home in a really different culture. I especially loved the people. They were incredibly great to work with, and it was just such a good experience because they were generous with their personal time and excited to share their culture with me

Your community engagement extends far and wide, with positions including a former board member and volunteer with the First State Robotics, a founding member of the Multicultural and Diversity Network at Covanta, a current executive sponsor of the Covanta women's network, RISE (Respect, Inspire, Support and Empower women) and more. How have your roles in industry organizations like these made a positive impact on your career?

These kinds of roles have had a very positive impact on my career. They teach you to embrace and cultivate diversity. We think better when working with people who have different ideas and backgrounds. Diversity isn't just male, women and skin color, it's also our experiences growing up, our education and our age. Diversity is important, and it's great to be in a position to give back.

One of my favorite organizations I volunteered with is First State Robotics. It gets junior high and high school kids interested in engineering from a young age. A team of kids come together every year to design and develop a robot that plays an active game, like tossing frisbees or sinking basketballs in different hoops. A lot of these kids end up studying engineering, and they mature into better co-workers as a result of their experiences. Seeing the excitement first-hand of what engineering can do for these young people is so gratifying.

It is great to hear about your youth engagement volunteer work. Why is introducing engineering to students important to you?

It's important because you have to catch them when they are young, so they know to study the right prerequisites if they want to become engineers. You want to harness all of this excitement before all of these stereotypes take over. Technology is constantly changing, and there are so many new engineering disciplines out there and many opportunities to make this world a better place. Since engineers know how to think and solve problems, their skill sets are attractive to a whole host of industries.

There are so many bright minds and diverse thinkers coming out of the next generation. We must leave them with this legacy that engineering is a wonderful career. It needs to be a part of our role as engineers to fill that pipeline with this new talent.

How does it feel to be recognized as the 2022 Delaware Valley Engineer of the Year?

It's funny, when I was in high school, and I

first said I was going to study engineering, I had an engineer neighbor who said that girls weren't smart enough to become engineers. That influenced me to work even harder and graduate as an engineer. As a woman today, people are often still surprised to hear me say I am an engineer. To get this recognition shows me how far we have come in the past 40 years.

It is very humbling to be recognized by my peers across the engineering discipline. It's also exciting. Since this was announced, I've heard from so many of my colleagues around the globe. It's been gratifying to have so much support from people I have worked with over the years.

What excites you about the future of engineering?

Engineering is so exciting because it is always at the forefront of innovation. We need to improve safety in our industrial facilities and work towards sustainability for our planet, and it will be engineers who make those changes. For example, take a look at the things we are doing with robotic technology. We are doing so much to reduce industrial accidents because we can send robots where we can't send people. It will be engineers that reduce the impact of climate change and improve safety in the industrial world and that is something I am looking forward to in this field.

Are you a Delaware Valley native?

I grew up on Long Island in New York, but I've lived in Pennsylvania since 1981. We live in the beautiful and historic Chester County. I do miss the saltwater quite a bit after growing up on Long Island, so we get our saltwater fix in Brigantine, New Jersey. And when I'm not working, you can find me in the kitchen. I'm a foodie - I love to cook for family and friends. I also enjoy being outside, particularly anything to do with water and the beach.

You are married to an engineer and the mother of four engineers. Did you influence your children's decisions to pursue careers in this industry?

Well, of course, I was going to encourage my kids to study engineering. My husband and I told our kids it's an excellent foundation for any career because you learn to think, solve problems and communicate. Ultimately, one can go in many directions with an engineering degree, making you an extremely employable candidate out of school. My oldest son went into the banking industry after his MBA, my oldest daughter's engineering undergrad helped her in med school. and now she is an anesthesiologist, my younger daughter is working as a program manager in the defense industry and my youngest son is a software engineer in the finance industry. That's the beauty of engineering and why I would encourage any young person to studv it.

2022 Delaware Valley Young Engineer of the Year



The Delaware Valley Young Engineer of the Year award recognizes an outstanding engineer who is age 35 or under. has demonstrated leadership capabilities and has made a recognized contribution to the engineering profession within the Philadelphia region. Beyond the field of engineering, the recipient must also have contributed to and participated in charitable, civic and technical affairs. This year, the Engineers' Club of Philadelphia, through its Delaware Valley Engineers Week (DVEW) Committee, has selected Timothy Kolody, PE, LEED AP BD+C, project engineer and mechanical discipline lead with Reminaton & Vernick Engineers. as the 2022 Delaware Valley Young Engineer of the Year.

What first sparked your interest in pursuing a career in engineering?

Since I was young, I've always enjoyed building things and was interested in science and physics. In middle school, I participated in Odyssey of the Mind where we built small structures and bridges and used creative problem solving for competitions. These experiences are what got me interested in engineering as a future career. Then in high school, my guidance counselor Beth Vernick invited me to attend a student day at Remington & Vernick Engineers. This was an eye opening experience for me because showed me how engineering could improve the quality of life for people in the community and ultimately inspired me to pursue a career in engineering.

You attended Cedarville University, where you earned your Bachelor of Science in Mechanical Engineering. What drew you to this discipline of engineering?

As I was visiting prospective colleges, I was always attracted to the different projects on display in the mechanical engineering departments. I was fascinated by the ability to design things on paper or on a computer, build them and test them in real life. Other disciplines, like electrical engineering, seemed too abstract to me at the time.

How did your internship experience at Remington & Vernick Engineers help land your full-time role at the firm following graduation?

Timothy Kolody, PE, LEED AP BD+C

My internship at Remington & Vernick Engineers was my first real exposure to engineering. When I started, I mainly worked on civil-related projects, and I enjoyed being able to drive by a local site and know that I was involved with the project, even though I had a very minimal role as an intern. But I still felt that in some way I was involved in helping to improve the local community, and that was very rewarding for me.

I interned at RVE all four years during college. Each summer, I was able to move to a different department, allowing me to understand what is involved in many different aspects of engineering projects. I also learned the fundamentals and basic engineering skills from a technical perspective. More importantly, I got to know people within the firm. It was a very smooth transition for me going from my internship to working full time after graduation, which I credit 100% to my internship experience.

Now, you serve as a project engineer and mechanical discipline lead with Remington & Vernick Engineers at the firm's headquarters in Cherry Hill, New Jersey. Can you tell me more about how your role works in the firm?

As a mechanical engineer and a mechanical discipline lead, I work as a project engineer and assist with the general oversite of the mechanical engineering staff. The mechanical department is responsible for mechanical/ HVAC, plumbing and fire protection engineering. At Remington & Vernick Engineers, a lot of our projects are for public clients, such as municipalities, school districts and public universities. We also do some private work as well, mostly for healthcare and higher education clients. Our projects range in size from a simple boiler replacement or bathroom renovation up to complete renovations or new construction of large commercial facilities

I also review the technical components of the mechanical, plumbing, and fire protection work, facilitate the sharing of technical information and resources among other mechanical staff and ensure that everyone is up-to-date on the latest design standards. I also continue to perform design work as a project engineer and assist with writing proposals and construction administration for projects under construction.

You also have a LEED certification and promote sustainable construction in each of your projects. In your opinion, why is sustainability important and how do you encourage sustainable practices in your job?

Everyone involved in building construction should strive to integrate sustainable best practices into their work. There are a lot of benefits from making sure your systems are energy efficient. Energy-efficient equipment saves our clients' money on utility bills, keeps us compliant with all energy codes, and often helps to conserve natural resources.

The LEED certifications also promote healthy building environments. It is very important to make sure that you have reviewed issues like outdoor-air ventilation, air distribution, acoustics and zone controls to make sure that you are creating a healthy and productive indoor environment.

What is one of your favorite projects that you've worked throughout your career?

I can't single out just one, but I find most school construction projects to be very rewarding because schools play such a central role in our communities. My role as a mechanical engineer is to design HVAC fire protection systems for both new schools, additions to existing schools and renovations. These projects often have strict schedules and very tight budgets, and from an engineering perspective can often have unique design parameters. We need to make sure that our design is complete in time for summer construction, and then do our part to make sure that the school is ready to open in the fall. It can be challenging at times, but I still find it rewarding

During the COVID pandemic you have been advising building managers throughout the region on the implementation of modern air sanitation and filtration technologies. Can you tell me a little bit more about how this project came to be?

When schools and other public buildings began to reopen last year after the COVID lockdowns, many facility managers wanted to ensure that their facilities were safe for occupants and followed all government requirements. We studied all guidelines that were published by government organizations at that time to properly advise our clients regarding the operation of HVAC systems during the pandemic to help reduce the spread of COVID-19.

When researching these guidelines, we found that we had already been implementing many of the new technologies that were being recommended. We didn't have much of a learning curve, and we were able to advise our clients from our own experience about these new technologies. A major benefit of these technologies is that they will continue to promote a healthy environment for students and other building occupants even after the pandemic.

Within your role at Remington & Vernick Engineers, you also serve as an active mentor to the younger engineers at the firm. How did the mentors throughout your career help shape you as a professional

and how does that translate into how you mentor young professionals today?

I wouldn't be where I am today without the help and guidance of the more experienced engineers who took their time to mentor me along the way.

It's important to not only provide technical guidance to younger engineers, but also to help them grow as professionals. From my experience, even a simple word of advice or encouragement can go a long way. It is a very worthwhile investment to take the time to mentor a younger engineer especially when they grow to become a valuable core member of your team.

In the coming years, what are some professional goals that you hope to accomplish?

I hope I never lose the desire to learn. I want to keep learning and stay up-todate on the latest industry trends and technologies. For the coming years, some of my goals include helping to grow our client base, taking on new types of projects and organically growing our mechanical team through mentoring younger engineers.

How does it feel to be recognized as the 2022 Delaware Valley Young Engineer of the Year?

It is very humbling to be selected for this recognition. The Engineers' Club of Philadelphia is a historical organization and plays an important role in promoting the excellence of the engineering profession. This award is an encouragement to me and those that follow to know that our hard work and contributions to the profession do not go unnoticed.

What advice would you give to students who are considering entering the engineering field?

There are many different areas of engineering, from civil, to mechanical, to electrical. I would recommend finding one that fits your unique interests and personality. Be prepared to put in the time because it is not always easy, but it is still a very rewarding profession. As a younger engineer, try to absorb as much as you can from more experienced engineers and be constantly learning new things related to your industry.

Are you a Delaware Valley native?

I was born and raised in Bellmawr, New Jersey, and I've stayed in the South Jersey area.

Outside of your engineering, what are your other interests?

I grew up playing a few instruments was a music minor in college for a semester, and I still enjoying playing the guitar in my free time. I also like to read and am involved in my local church.

Delaware Valley Engineering Hall Of Fame Inductee

Joseph P. Martin, PhD, PE



Martin, PhD, PE has been nominated for induction into the Delaware Valley Engineering Hall of Fame in 2022. Joe is an awardwinning instructor and teacher, a dedicated and

active member of professional societies and his community, and true Philadelphia Engineering hero. He recently achieved the title of Professor Emeritus at Drexel University with his retirement after 40 years of service as a faculty member in the University's Department of Civil, Architectural and Environmental Engineering.

Starting as an Assistant Professor in the Department in 1982, Joe rose to Associate Professor and Professor, and chaired the

Department from 1994 to 2002. He added the responsibilities of Associate Director of Engineering Management to his duties, handling this from 2004 to 2008. While his area of specialty is geotechnical engineering, he has instructed numerous courses in the Drexel program throughout his career.

Joe obtained his Bachelors degree in Civil Engineering from Tufts University, with a subsequent Masters degree from Northeastern University and his doctorate from Colorado State University. He began his career as a junior engineer with the New York State Department of Transportation, and after active military service in the US Army, returned to private engineering practice in Massachusetts before beginning his graduate studies at Colorado State University. During this time he served as a teaching and research assistant and an instructor.

Joe arrived at Drexel at the completion of his doctorate in 1982 and began a long and storied career in a program that produced many local engineers. His achievements at Drexel and within the

Philadelphia engineering community are telling of his character and dedication to his students. He was cited by the Philadelphia Section of the American Society of Civil Engineers (ASCE) as its Geotechnical Engineer of the Year in 1990 and as the Section's Philadelphia Civil Engineer of the Year in 2013. The Delaware County Chapter of the Pennsylvania Society of Professional Engineers recognized him as its Delaware County Engineer of the Year in 2012. He has received several prestigious national awards from ASCE as well. Drexel's College of Engineering has recognized his talents and abilities as an instructor with several awards over the course of his career.

Joe's commitment to his students and their success, combined with his awardwinning teaching abilities, is exemplary. He served as the Faculty Advisor for the Drexel ASCE Student Chapter for over 35 years and oversaw its efforts for the annual concrete canoe and steel beam competitions. He helped keep the Student Chapter strong, vibrant,

and active. He has often been asked to comment on engineering issues and situations by the local media as a civil engineering expert and served as the lead public relations contact for the College of Engineering. He has been an active member of the Philadelphia Section ASCE and the Engineers' Club throughout his career.

Despite being busy with his professional duties, Joe managed to find the time to be active as a resident of Haverford Township as a member of the Township's School Board and the Environmental Advisory Committee. He additionally was a Boy Scout Troup Leader and on the District Eagle Board.,

We are proud to cite Joe for his dedication to the engineering profession and his community over the years. He proudly recalls Dean Richard Woodring advising him upon his appointment to the Drexel faculty that "I'm not hiring you to teach engineering, I'm hiring you to teach the students to be engineers." He has certainly and successfully done just that.

Delaware Valley Engineering Hall Of Fame

- Carl A. Baumert, Jr., PE, Renowned structural engineer
- Samuel S. Baxter, Municipal engineer extraordinaire
- Benjamin Franklin Bridge, Permitting efficient travel across the Delaware River
- Joseph Bordogna, PhD, International authority on science and engineering education and research
- **Center City** [Philadelphia] Commuter Tunnel, Connecting Suburban Station and Market East Station
- City Plan of Philadelphia, Conceived by William Penn in 17th Century, model for city planning and development throughout colonial North America
- Discovery of Electricity, By Benjamin Franklin
- ENIAC, The first electronic digital computer

- Fairmount Waterworks, At one time the most advanced municipal system in the world and initial portion of Fairmount Park
- Frankford Avenue (The King's Road) Bridge, City of Philadelphia, Critical connection for colonial America, stone-arch bridge built in 1697 and still in continuous use
- Golden Age Engineers of GE **Aerospace and Lockheed** Martin, Innovators of re-entry vehicles, spacecraft and related products beginning in 1956
- Robert M. Koerner, PhD, PE, Internationally-recognized expert in aeosynthetics
- Ralph Modjeski, Civil engineering pioneer
- C. R. "Chuck" Pennoni, PE, Exemplary civil engineer and businessman
- Pennsylvania Railroad, At one time the "Standard Railroad of the World" and one of the largest

- Philadelphia City Hall, The nation's largest municipal building and the largest and tallest Masonry Building in the world
- Frank Piasecki, Pioneer of the United States' helicopter industry
- Hilliard W. Page, Aerospace pioneer
- Constantine Papadakis, PhD, PE, Engineer and educator
- **PSFS Building**, Landmark in modern high-rise air conditioning
- RCA Victor, Camden, For the development of Victrola Recordings
- Reading Terminal Train Shed, Last surviving single-span arched train shed in the United States, repurposed for use as part of the Pennsylvania Convention Center
- Removal of the "Chinese Wall", Elevated rail line between 30th Street and Suburban Stations; divided Philadelphia at Market Street

- Schuylkill Expressway, The first limited access roadway in the area, predating the Interstate Highway System
- Leo Steg, PhD, PE, Innovator in re-entry systems and director of GE's Space Systems Laboratory
- J. Edgar Thomson, First chief engineer of the Pennsylvania Railroad
- Vukan R. Vuchic, PhD, Internationally-recognized authority in transportation engineering
- Walnut Lane Memorial Bridge, Bridge over Lincoln Drive, first precast, prestressed concrete girder bridge in the United States
- Roy F. Weston, PhD (Hon), PE, DEE, Renowned environmental engineer

2022 Delaware Valley Engineers Week Awards

One of the purposes of Engineers Week is to cultivate interest in math, science, and engineering among the nation's youth – tomorrow's work force. A key component of that is the recognition of outstanding students and teachers. With the support of the Philadelphia Engineering Foundation, we proudly recognize the following secondary school students and teachers and undergraduate college students.

Future City Competition Award

DOWNINGTOWN MIDDLE SCHOOL Downingtown, PA

Delaware Valley Engineers Week Undergraduate Scholarships

EMILY SIMKOVICH, Drexel University

Delaware Valley Engineers Week/ASCE Undergraduate Scholarship

Sponsored by American Society of Civil Engineers, Philadelphia Section CAROLINE MERRILL, Temple University

Lewis A. Caccese Scholarship ANASTASIA VIKULOVA, Temple University

Pennoni/John Morrison Memorial Scholarship

ANDREW KLINE, Villanova University

Undergraduate Student Paper Awards

Brayden Carr, Deborah Onibuore, Meghan Sparks, Anthony Carr and Boramy Virya, Rowan University

•Laboratory Scale Investigation on Thermal Cracking of Asphalt Mixtures Prepared with Warm Mix Additives for Use in Cold Regions

Christopher Malone, Lauren Blaze, Marc Gernhardt, Kyla Rollo and Moira Smith, Rowan University

•Developing a Hydrodynamic Model and Improving Simulation Accuracy for Barnegat Bay, New Jersey

Kaniz Roksana, Kayla King, Sarah Herchenroder, Daniel Horner, Nicolas Zugaib, Husain Ali and Jacob Christy, Rowan University

•Remediation of Soil Desiccation Cracking by Bioremediation Techniques Kelly Anne Ryan, Drexel University •Damage and Restoration Analysis of Hurricane Sandy Along New Jersey's Southern Coast

Mohammed Karimul Absar Chowdhury, Liron Derguti, Peter Argerakis, Sean Smithson, Brandon Jones, Lisa Bianco, Luis Rodriguez and John Weber, Rowan University

•Real-Time Monitoring of Community Opioid Use Through Wastewater-Based Epidemiology

Oluwayinka M. Adedeji, Jason Russack, Luke Molnar, Matthew Price, Matthew Pacewicz, Jenna Sparduto and Shane Flanzbaum, Rowan University

•Evaluating the Co-Hydrothermal Liquefaction of Sewage Sludge and Brewery Waste for Bio-Energy Production

* The Delaware Valley Engineers Week/American Society of Civil Engineers Scholarship is funded by the Philadelphia Section ASCE. The remaining scholarships and student paper awards are financed by contributions from the engineering community or endowments administered by the Philadelphia Engineering Foundation.

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Architecture, Interiors & Planning MEP & HVAC Engineering Fire & Life Safety Process & Automation Sustainable Design







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Delaware Valley Engineers Week Events

Thursday, February 17 Opening Ceremony Doubletree at Hilton Hotel, Center City

2022 Engineers Week in the Delaware Valley starts off with the Opening Ceremony, which will be conducted at the Doubletree Hotel. A social/networking hour will begin at 5:00 PM, and attendees can interact and network with each other as well as our award recipients, which will include Student Paper teams, Scholarship winners, Outstanding High School Students, and Delaware Valley Science Fairs awardees. The Future City Competition regional winners will be featured along with their working model. Participating Affiliate Societies will also be available to feature their awards and special events from the past season.

After the networking session, dinner will begin at approximately 6:00 PM, with the formal activities of the evening following. The Engineer of the Year and the Young Engineer of the Year will be introduced and make brief remarks to kick off the celebration of Engineers Week in the Delaware Valley. All Engineers Week awardees will be formally recognized as well.



Past Delaware Valley Engineers of the Year

$_{2^{\circ}_{0}}$ Tuesday, February 22 | Young Engineers Social | Ladder 15, Center City

The Young Engineers Social is a mid-week networking type event where young engineers (and those young at heart!) will have an opportunity to meet engineers of all disciplines from around the region. The event will begin at 6:00 PM with drinks and finger foods to allow for networking and interaction. As the evening winds down the Delaware Valley Young Engineer of the Year will be recognized and make brief remarks.



Whether your practice needs legal representation in a professional liability or construction claim, advice concerning contracts, or assistance in a contractual dispute with a client, our highly-experienced team is well equipped to help protect and defend your company and its reputation. With attorneys that have dual professional backgrounds, we have an understanding as to how your business works. On the legal side, we work with you to develop practical resolution strategies that are result oriented and economically sound.

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Congratulations to our Timothy Kolody, PE, LEED AP BD+C for being named Delaware Valley Young Engineer of the Year.



Past Delaware Valley Engineers of the Year

The Delaware Valley Engineer of the Year award was initiated in 1953 by the Philadelphia Chapter of the Pennsylvania Society of Professional Engineers (PSPE). Within a few years, the other regional chapters of PSPE joined the Philadelphia Chapter in this selection and in the celebration of Engineers Week. Since the early 1970's, the other regional engineering and technical societies have been part of both the selection of the EOY and the celebration. The Delaware Valley EOY award is bestowed upon a colleague who reflects the qualities and talents that define professional excellence, civic duty, and community stewardship. The following is a listing of the distinguished individuals who have been so recognized.

1953	Nevin E. Funk, PE	1972	James L. Everett III, PE
1954	Walter A. Kruger, Jr.	1973	Louis T. Klauder, PE
1955	Harry A. Kuljian	1974	Lewis A. Caccese, PE
1956	Francis S. Friel, PE	1975	John L. Rumpf, PE, PhD
1957	Lester M. Goldsmith, PE	1977	John Lotz, PE
1958	Kilshaw M. Irwin	1978	H. Robert Sharbaugh
1959	Samuel S. Baxter, PE	1070	Vincent S. Bover DF
1960	Hilliard W. Page	1979	
1961	I. Melville Stein	1980	W. Spencer Bloor, PE
1962	James M. Harlow, PE	1981	Robert M. Koerner, PE, PhD
1963	Leroy A. Brothers, PhD	1982	Walter F. Spiegel, PE
1964	Henry M. Chance, II, PE	1983	August D. Pistilli, PE
1965	Leo Steg, PE	100 (
1966	Carl C. Chambers, PE, PhD	1984	Joseph Bordogna, PhD
1967	Frank N. Piasecki, PE	1985	C. R. Pennoni, PE
1968	Nathan Cohn, PE	1986	John S. Kemper, PE
1969	Allen F. Clark, Jr., PE	1987	Richard E. Woodring, PE, PhD
1970	William H. Haggerty, PhD	1988	Gunnar E. Sarsten, PE
1971	Samuel T. Hudson, PE	1989	Gerald E. Speitel, PE

1990	E. Ross Forman, PE	2007	Joseph J. Viscuso, PE, PLS
1991	Mark Z. Hanlon, PE	2008	Dianne Dorland, PE, PhD
1992	Joseph V. Mullin, PE, PhD	2009	David D. Lowdermilk, PE
1993	Stephen B. Lester, PE	2010	Selçuk Güçeri, PhD
1994	John E. Kampmeyer, PE	2011	Douglas W. Kriebel, PE
1995	Harry M. Perks, PE	2012	Timothy Hyungrock Haahs, PE AIA
1996	Edward E. Gilvey, PE	2013	Charles A. Clerecuzio, PE, CPIF
1997	Joseph R. Syrnick, PE, PLS	2014	Suzette M. Schultz
1998	Thomas G. McWilliams, Jr, PhD	2015	Adam K. Fontecchio, PhD, PE
1999	Lawrence M. Moy, PE	2016	Kevin L. Johnson, PE
2000	Bruce A. Eisenstein, PE, PhD	2017	John A. Nawn, PE
2001	Pasquale A. Dougherty, PE,PLS	2018	Deborah L. Grubbe, PE
2002	Edward M. D'Alba, PE	2019	John J. Peirce, Jr., PE
2003	Robert M. Rodgers, PE	2020	Stephen M. Hall, PE
2004	Matthew J. Burns, PE	2021	William T. Thomsen, PE
2005	Donald D. Dalessandro		
2006	Eric L. Flicker. PE		

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Past Delaware Valley Young Engineers Of The Year



1990	K. Jim Jem
1990	Susan L. Best, PE
1991	William K. Grauer, PE
1992	Stanley Yuen, PhD, PE
1993	James M. Matthews, PhD, PE
1994	Sandra Joyce May
1995	Phillip W. Wursta, PE
1996	Lisa M. Walton, PE
1997	Carol M. Reich, PE
1998	Elaine Elbich, PE
1999	Lucia Chan
1999	Thomas K. Cassidy
2000	John Zarsky, PE
2001	Christopher John (CJ) Sabol, PE
2002	Casey A. Moore, PE
2002	Carol C. Martsolf, PE
2003	Christopher J. Menna, PE
2004	Michael J. McAtee, PE
2005	Thomas Brady, PE

2005	James P. Markham, PE
2006	David Thatcher, PE
2007	Jeremy D. Colello, PE
2007	Keith S. Yamatani, PE
2008	Rajeev K. Arora, PE
2009	Joesph A. Platt, Jr., PE
2010	Michael Witkowski, PE, LEED AP
2011	Angela Fante, PE, LEED AP
2012	Catherine Golata Farrell, PE
2013	Alan S. Levy, PE
2013 2014	Alan S. Levy, PE Philip M. Gonski, PE
2013 2014 2015	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE
2013 2014 2015 2016	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo
2013 2014 2015 2016 2017	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo Kazi M. Hassan, PE
2013 2014 2015 2016 2017 2018	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo Kazi M. Hassan, PE Alexa Egan Harper, PE
2013 2014 2015 2016 2017 2018 2019	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo Kazi M. Hassan, PE Alexa Egan Harper, PE Eleanor F. Small, PhD
2013 2014 2015 2016 2017 2018 2019 2020	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo Kazi M. Hassan, PE Alexa Egan Harper, PE Eleanor F. Small, PhD Jesse T. Gormley, PE
2013 2014 2015 2016 2017 2018 2019 2020 2021	Alan S. Levy, PE Philip M. Gonski, PE Brian Mark Crokston, PhD, PE Daniel Sujo Kazi M. Hassan, PE Alexa Egan Harper, PE Eleanor F. Small, PhD Jesse T. Gormley, PE Kevin Brown, PE

2022 Delaware Valley Engineers Week Committee

The Delaware Valley Engineers Week Committee of the Engineers' Club of Philadelphia sponsors Delaware Valley Engineers Week on behalf of the Engineering and Technical Societies. The events are supported by area corporations, universities, individuals and, participating societies. The Committee members are volunteers, several having volunteered their time for many years, supported by Club staff and consultants. We thank all the members and their employers for their support of the program.

The Key Leadership of the 2022 Delaware Valley Engineers Week Committee includes:

Chair

- Robert Wright, PE
- Advisory Committee Chair
- Suzette Schultz
- Director, Awards
- AnnMarie Vigilante, PE
- **Director**, Events
- Christopher Menna, PE

Director, Fund Development

- Jennifer Walsh, PE
- **Director, Outreach**
- Robert Wright, PE

Deputy Directors

- Briana Pampuch, PE Awards
- Mark Kinnee, PE Awards
- Christopher Gray, PE Awards

- Erica Antoine, PE Events
- Kevin Brown, PE Events
- Dennis Wilson, PE Events
- Ruben David, PE Fund Development
- Chris Rood, PE Fund Development
- Michael Grantner, PE Fund Development
- Helene Brennan, PE Administration/ Website
- Alexa Egan Harper, PE Administration/ Outreach

Engineers' Club Presidents

- Christopher Menna, PE (2020-22)
- **Committee Members and Award Assistance**
- Anthony Cirillo, PE
- T. James Cokonis, PE
- Assunta Daprano
- Danielle Eisenstock



- Abbey Gancz, PE
- Ernest Hanna, PE
- Andrew Hartmann, PE
- Tyler Ladd, PE
- Helen Lam, PE
- Casey A. Moore, PE
- Carol C. Martsolf, PE

Support Staff and Consultants

- Jocelyn Craighead
- Alyssa Zinar
- Emma McClain

We are always looking for more people to provide ideas and help plan for the celebration of engineering during Engineers Week. If you are interested in getting involved, or simply want to provide input on next year's events, email engineersclubofphiladelphia@gmail.com or call (267) 639-1234 and indicate your interests and time availability.

Outstanding Service To Engineering Award

The Delaware Valley Engineers Week Committee of the Engineers' Club of Philadelphia is proud to recognize two individuals for this award.

Vito A. Genua, PE

Vito A. Genua, PE, has been cited for his Outstanding Service to Engineering. Vito is a Special Projects Manager at Gannett Fleming in its Valley Forge office. He is responsible for supporting marketing and business development efforts, staffing, and project development for the firm's transportation practices. He oversees all aspects of project design and maintains project schedules and budgets. Prior to his service at Gannett Fleming, which has spanned the last 17 years, he held various positions at the Pennsylvania Department of Transportation over a 33-year career at the District 6 office in King of Prussia, starting as a Civil Engineer and rising to Assistant District Executive for Design.

Over his combined and impressive 50 years of engineering service, Vito has been involved in numerous notable and regionally-significant projects that have addressed the growing transportation needs of the Delaware Valley, including the US 202 Corridor, I-95 Revitalization, and the I-95/I-276 Pennsylvania Turnpike connection. He has also provided needed coordination among the District's five counties (which includes the City of Philadelphia), municipalities, SEPTA, and other state and federal agencies in the implementation and delivery of critical projects.

Vito received his Bachelors degree in Civil Engineering from Villanova University in 1972 and is a registered professional engineer. He is a member of the American Society of Highway Engineers and the Transportation Management Association of Chester County, where he is a past member of the Board of Directors. He and his family live in Chester County.

Susan L. Best, PE

Susan L. Best, PE, is being recognized for her Outstanding Service to the Engineering Community. Susan has made ongoing and significant contributions to numerous engineering societies, organizations, and committees at the local and national levels. These include her current service with National and Pennsylvania Society of Professional Engineers, the Institute of Transportation Engineers, and Future City Philadelphia.

Throughout her over 45-year career, Susan has balanced professional service at several local engineering consulting firms as a traffic and transportation engineer with her intense volunteer efforts. She has been a part of several local significant projects during her career. On the professional society side, in addition to the groups mentioned above, she has been active with the Engineers' Club of Philadelphia, the Society of Women Engineers, and was instrumental in the Engineers Week Council/Committee for many years as the group's Chair. She additionally served as the Executive Director of the Engineers' Club for six years. She is also a Life member of the American Society of Civil Engineers and was a member of the American Society of Highway Engineers for many years.

Susan obtained her Bachelors degree in Civil Engineering from the University of Delaware in 1976 and her Masters degree, also in Civil Engineering, from the University of California. She has also been an active participant in local Boy Scout councils and national events. She and her husband live in West Philadelphia.

Congratulations Anne Michelini!

Covanta VP of International Projects and Delaware Valley Engineer of the Year

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Affiliate Award Recognition Program

To help us celebrate engineering in the Delaware Valley, the Engineers' Club undertook an effort to recognize the many and various projects and individuals cited by the engineering and technical societies in our region. This illustrates the varied fields and specialties covered by these groups and the notable contributions made in these specialty areas by engineers.

We have listed below the various projects and individuals submitted to the Engineers Week Committee by the noted engineering related technical societies. We greatly appreciate these people and efforts that have had positive effects on life in the Delaware Valley for the benefit of all of us.

American Society of Civil Engineers, Philadelphia Section

• **Philadelphia Civil Engineer of the Year** Archie Filshill, PE, Aero Aggregates

• Young Civil Engineer of the Year Timothy Abel, Pennoni

• Geotechnical Engineer of the Year Frederick Brinker, PE, Pennoni

• **Structural Engineer of the Year** Richard Martino, *PE*, Modjeski & Masters

• **Construction Engineer of the Year** Mohamed Elghawy, PE, Traffic Planning & Design, Inc.

• Engineering Manager of the Year Donald Gusic, PE, CDM Smith

• Young Government Engineer of the Year Lindsay Chateauvert, Amtrak

• Educator of the Year Andrew Bechtel, PhD, PE, The College of New Jersey

• **Government Service Award** Elizabeth Baldwin, City of Philadelphia Department of Licenses & Inspections

• **Community Outreach and Service Award** Sean McCreesh, Pennoni

American Society of Highway Engineers, Delaware Valley Section

2020 Project of the Year (over \$10 million)

SR 422 Section SRB, US 422 Schuylkill River Crossing Bridge Replacement

Pennsylvania Department of Transportation (owner), Urban Engineers (designer), JBC Associates (construction manager), J. D. Eckman (contractor)

2020 Project of the Year (\$10 million and under)

Lafayette Street Extension (Section MGN)

Montgomery County (owner), Gannett Fleming (designer), Pennoni/JBC Associates (construction manager), Allan Myers (contractor)

Pennsylvania Society of Professional Engineers, Delaware County Chapter

• **Engineer of the Year** Fredric Pondo, PE, Cirilli Associates

• Young Engineer of the Year Eric Johnson, PE, Pennoni

• **Outstanding Project Award** SR 322 Conchester Highway, Alfred Benesch & Company

Women's Transportation Seminar, Philadelphia Chapter

• **Woman of the Year** Yassmin Gramian, PE, Pennsylvania Department of Transportation

• Member of the Year Jaclyn Whelan, Conrail

• Diversity Awards City of Philadelphia,

Department of Commerce, Division of Aviation

Carol Martsolf, PE, Urban Engineers

• Employer of the Year Michael Baker International

• Innovative Transportation Solution Award Rack 'Em Up, Philadelphia Parking Authority, City of Philadelphia Office of Transportation and Infrastructure Sustainability, City of Philadelphia Fire Department, City of Philadelphia Office of Emergency Management, DVRPC, WTS Philadelphia

• **Secretary Ray LaHood Award** Carlton Williams, City of Philadelphia Department of Streets

• **Philadelphia Award** C. R. (Chuck) Pennoni, PE, Pennoni

Regional Student Outreach

The Philadelphia Regional Future City Competition is an educational outreach program of DiscoverE. This year's regional competition was held on January 22, 2022, virtually, featured teams of 6th, 7th and 8th graders from over 40 middle schools located in Pennsylvania, New Jersey and Delaware. Philadelphia is one of 39 regional programs conducted throughout the country with the goal to introduce middle school students to the engineering profession.

Students form teams and work with a teacher and an engineer mentor from September to January to design and lay out a city of the future using SimCity computer software, build a table-top model using recycled materials that illustrates one section of the city, write an essay on a specific topic related to their city, and present their model and city to a team of judges on competition day in January. The winner of the competition goes on to compete

at the Annual Future City National Finals in Washington, DC during Engineers Week.

For more information on the Philadelphia Regional Future City Competition please visit www. futurecityphilly.org.







Special Interest

Local Engineering Achievement - 100 Years Ago, The Frankford Elevated

The Frankford Elevated was opened for service on November 5, 1922, after its official dedication the day before. The El. as it was known, extended rapid transit from a connection with the Market Street Subway at its portal at Front and Arch Streets, via Front Street, Kensington Avenue and Frankford Avenue to Bridge Street in the Frankford section of lower Northeast Philadelphia. The line was 6.4 miles in total length with 12 intermediate stations between 2nd Street on the Market Street Subway and Bridge Street, and effectively doubled the length of the Subway. The Subway had two branches as a result on its eastern end, the existing elevated line that ran along Delaware Avenue to serve the ferries to Camden, and the new Frankford service. Trains from the western terminus at 69th Street in Upper Darby operated alternately to Frankford and the Ferries until the latter branch was closed in 1939.

Construction of the El started in September 1915, financed and managed by the City's Department of City Transit. and was the first publicly-funded transit project in the City. The Subway had been built with private funding and investment by the Philadelphia Rapid Transit Company, which operated the vast majority of the city's trolley lines.

After several work slowdowns, some related to material shortages experienced during the First World War and some resulting from administrative and political issues, the El was completed in early 1922. A fleet of 100 rapid transit cars was purchased from local car builder J. G. Brill for the extension, which would augment the Subway's existing 215 cars. (These two groups would continue in service until their replacement by the Budd-built M-3's in 1960.) The total cost of the El project, including construction and the new fleet, was nearly \$16 million.

As part of the El effort, the City also constructed a feeder trolley route from the Margaret-Orthodox station





of the El to the Bustleton community in far Northeast Philadelphia and this began service simultaneously with the El's opening. Five small single-truck trolley cars were procured to provide service on this new line, which was operated by PRT under contract with the City and designated as Route 59. The line quickly became popular despite operating through what was then sparsely populated and primarily rural areas, to the extent that the small trolleys proved to be inadequate and PRT substituted its own larger cars for this operation.

The El succeeded in helping to spark vast residential and real estate development in Northeast Philadelphia and this grew even more in the years following World War II as it provided a quick link between the Northeast and Center City. The line remained unchanged for many years, until the 1960's when the alignment of I-95 was established through Old City and would require the relocation of the El and its portal. A temporary structure was provided for the El in this area to allow demolition and highway construction, and the El was moved off Front Street to a new portal with a smoother curve into the Market Street Subway and a new alignment in the median of I-95 in the late 1970's. A new station at Spring Garden Street replaced the former stop at Fairmount Avenue as part of this work.

In the early 1980's SEPTA, the current

operator of the El following its takeover of the private Philadelphia Transportation Company in 1968 (which itself was reorganized from PRT in 1940), began to consider a major rehabilitation of the nearly 60-yearold structure, which had begun to show its age. The concrete deck of the structure was replaced using the existing column supports, and new track was provided with a modern direct fixation method to the deck in place of the typical ballasted rail-on-tie construction. This work extended from the connection to the I-95 median alignment south of the Girard Avenue station to just south of the Bridge-Pratt Streets Terminal. which was being redesignated as the Frankford Transportation Center. This work was started in 1988 and completed in 2000 with a price tag of just under \$500 million.

The Frankford Transportation Center itself, a major transfer point to over a dozen bus routes, was completely rebuilt starting in 2003 and the El alignment moved slightly to the west to directly enter the Center, opening several blocks of Frankford Avenue to daylight for the first time in over eighty years. The new Transportation Center complex was completed in 2005 representing a total investment of \$160 million.

After a century of service, the El remains the City's busiest transit line and a vital service to the region.

Philadelphia Engineering **Foundation** Golf Outing

Our 22nd Annual Golf Outing, also known as the Mulford Classic, was conducted on October 11. with over 80 participants, and, as usual. it was all for a good cause. With social distancing and other measures in effect, things were certainly different, but the outing was able to go off successfully. The proceeds of the outing will go toward Delaware Valley Engineers Week scholarships. activities and programs supported by PFF

The winner of the prized Mulford Prism, awarded to the low scoring team in the Outing, was the Brehm Nofer & McCarter squad, taking home the Prism for the fifth vear in a row.

Thanks to all who participated and sponsored as well as our diligent volunteers and Golf Committee for making the Outing a success once again.

Outing Sponsors: Platinum: Pennoni Gold: Brehm, Nofer & McCarter

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In the third annual Affiliate Cup Challenge, there were eight teams participating, representing local technical societies which entered foursomes to compete. The Society of American Military Engineers (SAME) team won these honors for the second vear in a row.

Our 23rd annual Golf Outing is scheduled for Monday, October 10. Please mark your calendar and plan to attend. More details will be provided this Summer.

About This Supplement

This Engineers Week Supplement to the Philadelphia Business Journal has been prepared by the Delaware Valley Engineers Week (DVEW) Committee of the Engineers' Club of Philadelphia. The Club is pleased to sponsor DVEW on behalf of the affiliated engineeringrelated societies and supported by those organizations that have advertised in the supplement.

The Engineers' Club of Philadelphia was founded in 1877. The Club works to maintain and expand a strong connection with affiliated engineering-related societies that has existed since its earliest days. By organizing and delivering Engineers Week, the Club is working toward this goal by strengthening its resources and allowing

Engineers Week organizers to plan strategically for improved celebrations and greater visibility.

The Engineers' Club offers individual, student, and corporate memberships to further the goals of relationship building and networking among technical professionals, communication and collaboration among engineers, raising the awareness of engineering in our society, and the professional development of its members. The Philadelphia Engineering Foundation, a 501(c)3 organization, is the charitable arm of the Club to support its student outreach efforts.

Please visit the Club's website at www.enarclub.org for more information.

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For more information about sponsorship and registration, contact Christine Fiori: Cmf356@drexel.edu

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