


OhioENGINEER

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2020



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LEADERSHIP VIEWS

by Rich Miller, P.E., President,
Engineers Foundation of Ohio



2020 – The year of 'The VID'

I wish I could take credit for my title, but for that I pay homage to one of our loyal and dedicated staffers, Holly. Early on during one of our conversations, she said this is the year of "The VID," and it stuck in my brain. That being said, this year has also shown the resilience and flexibility of OSPE, EFO and our members. We haven't missed a beat.

To quote a contractor friend from the 1980s, "There are no such things as challenges, only opportunities." To that end, I believe that we (the board, members and staff) have continued to operate effectively, meet our mission and grow. Through the use of technology and a willingness to be adaptable, we have accomplished a lot:

- We conducted a successful "All-Ohio Engineering Conference;" including 12.5 CPD hours, an awards lunch, the EFO and OSPE annual meetings and the induction of our officers.
- We held our regular board and committee meetings virtually to allow us to continue our operations.
- EFO conducted a successful virtual Fall CPD Conference (15.0 CPD hours) and two back-to-back December Seminar programs online (each worth 6.0 CPD hours). Meanwhile, OSPE ran a virtual Legislative Day program worth 2.0 CPD hours.
- We held our annual Leadership Retreat and Joint Societies Meeting virtually, too.
- We are moving forward with updates to "Imagine Engineering," including a new publication and virtual program for the students moving forward.
- Ohio MATHCOUNTS is also moving forward via an online competition in March 2021.

Reviewing the above list, many would think, "Wow, that was a good year!" And

it was no small feat – especially since we accomplished all of it in only six months.

Yet, our biggest challenges may lay ahead in 2021. The COVID-19 numbers are swelling and Ohio is implementing further health restrictions, as are states around the country. Winter may only exacerbate health concerns. An effective distribution of the vaccines will take us well into the second quarter of 2021 (or possibly beyond that) before a majority of the population will be immunized.

So again, the question we have to ask is; "What can we do to make sure OSPE/EFO continues to thrive and succeed in this environment?"

The answer isn't complicated; basically, do what you *always* have done as engineers. As you plan and design solutions to everyday problems, continue to hold paramount protecting the health and safety of the public. Continue to volunteer within your chapter and help with our programs so we can serve both our members and the future engineers of the world. Ask your co-workers and colleagues who aren't members what they're looking for from us. (It is especially important to gauge the interests of young professionals.) Finally, this is a great opportunity to continue growing your technology awareness, since you will be doing most things remotely!

In closing, thank you to Tim, Pam and Holly for all of their work in 2020; without them, our efforts as volunteers would be difficult. Next, thank you to the board and committee members for making our programs and fundraising the successes that they are and that they will continue to be. Last, but not least, I wish everyone a very happy, healthy and safe year.

My new year's resolution? Come up with a better name for 2021!

On the cover:

Crews install solar panels at Mission of Mary Farm in Dayton. University of Dayton students in the School of Engineering's Innovation Center and renewable and clean energy master's program assisted with the project's fundraising, design and development.

Photo credit: University of Dayton. See feature, page 6.



2020 AWARDS WINNERS

OSPE's 2020 awards were announced at the virtual All-Ohio Engineering Conference in June



Senator Theresa Gavarone (R-Bowling Green) is OSPE's Legislator of the Year for 2020. In the 133rd General Assembly she is vice chair of the Senate Higher Education Committee. She spoke at OSPE's 2019 Legislative Luncheon. >>>



< Tom Mosure, PE, was presented OSPE's 2020 Professional Engineering Management Award in recognition of his vision, leadership and organizational and management skills. President and CEO of ms consultants, Mosure has 40 years experience in business development, management of projects and personnel, technical knowledge and quality design.

Richard Smelker, PE, a past president of OSPE's Franklin County Chapter, was awarded the 2020 Meritorious Service Award for outstanding contributions to the engineering profession. He has served as chair of OSPE's Professional Engineers in Industry group. He has been a regular volunteer at the chapter regional and at the state level MATHCOUNTS competitions and also for State Science Day.

2020 E-Week Observance Award



OSPE's Toledo Chapter won the 2020 Engineers Week Observance Award! Toledo Chapter hosted its Engineer of the Year Award Luncheon, Engineer for a Day program, E-Week Banquet and MATHCOUNTS competition. In addition the Chapter provided support for University of Toledo E-Week events.

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Chett Siefing, PE, is OSPE's Uncommon Engineer for 2020. Siefing, who previously served in leadership with the Toledo Chapter is now the Northeast Ohio Chapter's OSPE director and EFO trustee. Whatever is needed, Siefing has become the "go-to guy." He has been entrusted with several important roles and tasks. Since moving to Northeast Ohio, Siefing has been actively working on developing the local chapter. He is the immediate past president of EFO and the president-elect of OSPE. In addition, he serves in numerous capacities including as a member of the Legislative and Government Affairs, PAC, Awards, Scholarship and Professional Education Committees.

2020 OSPE Star Chapter Awards

The Dayton & Franklin County Chapters of OSPE have each earned 5 stars – the highest possible attainment for excellence – for fiscal year 2020!

The "Star Chapter Recognition" program is not a competition, but these chapters should be proud of their five-star status because it means they are providing excellent service to their members!



< Nick Kissoff, PE, PhD, was named the 2020 Outstanding Engineering Educator of the Year in recognition of his teaching and professional expertise, his service to promoting excellence in engineering education and his dedication to his students. Dr. Kissoff is an associate professor and the undergraduate director for the Construction Engineering Technology Program at the University of Toledo.

Jennifer Abney was presented OSPE's 2020 Outstanding Engineering Student Award. An electrical engineering major at the University of Toledo, Abney served as student chapter president and as the student representative for the chapter and the OSPE Board of Directors. Abney, a long-time volunteer for the Engineers Foundation of Ohio, has co-oped with Matrix Technologies, Inc.



Trent Hathaway, PE, is OSPE's Young Engineer of the Year (2020). "It is a huge honor," he said, "and it means so much to me!" Treasurer of the Toledo Chapter, Hathaway has also served as chapter golf chair, a member of the local E-Week committee, a member of the 2019 All-Ohio Engineering Conference committee and a MATHCOUNTS volunteer.



Aurea Rivera, PE, PMP, PMI-ACP, was recognized for outstanding leadership as the 2020 All-Ohio Engineering Conference & Annual Meeting Chair. Rivera worked many months to put together educational programs and secure sponsorships for the June Conference. Also, as COVID-19 began closing businesses and severely curtailing person-to-person contact in late March, Rivera was an instrumental member of the team that moved quickly to transition what had been planned as the traditional in-person conference to a newly imagined virtual program.



2020 AWARDS WINNERS

EFO awards winners further the Foundation's goals & objectives, represent the brightest of Ohio's youth

At the virtual All-Ohio Engineering Conference in June, Engineers Foundation of Ohio (EFO) President Chett Siefing, PE, presented the President's Award to the American Electric Power Foundation, a significant supporter of EFO programs. The AEP Foundation was represented by Chairman, President and Chief Executive Officer Nicholas K. Akins.

During the awards program, Siefing announced the 2020-2021 scholarship winners – the future faces of engineering! Please refer to the FOCUS newsletter insert for the scholarship winners' names and photos. Siefing also recognized the winners of the statewide Imagine Engineering program and Ohio MATHCOUNTS, who were all pictured in the last issue of OhioENGINEER magazine.



*Nicholas K. Akins
Chairman, President & CEO
AEP Foundation*

EFO scholarship program inspires gratitude

Every year, the Engineers Foundation of Ohio (EFO) receives thank you notes and remarks from students, universities and donors – all conveying what EFO scholarship grants mean to them. A glimpse at some recent remarks will leave readers with the sense that the EFO scholarship program is helping students get an education, pursue their engineering aspirations and, ultimately, work to make the world a better place.

"... thank you for awarding me with the Peter Peterson Scholarship," said Evan Roebke, a freshman at the University of Toledo. "I hope that in the future I can work on 3D printed organs. Thanks to you, I have the opportunity to focus purely on my academics."

"With the help of EFO," said Sean Kilbane, who received a renewal of the Lloyd A. Chacey, PE – OSPE – Memorial Scholarship, "I am able to continue education without the worry of immense student loan debt."

Retha Niedecken remotely attended the 2020 virtual awards lunch in June to congratulate the recipients of the inaugural **Joe Niedecken, PE – "Pay It Forward" – University of Cincinnati – Memorial Scholarship**. She said: "This is a time of extraordinary potential for innovation and exploration in a post-pandemic world – especially for engineers. All of you are going to be contributing to the ability for society to adapt. So thank you to the Engineers Foundation of Ohio for making it possible for Joe to participate in a small way."



Retha Niedecken



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OSPE & EFO leaders hold retreat to develop plans for the organizations

Leaders of the Ohio Society of Professional Engineers, its chapters and the Engineers Foundation of Ohio attended the Leadership Retreat held last summer via Zoom video conferencing.

The annual Retreat allows leaders to idea share and network as they gain important insights and data pertaining to their individual leadership roles for the fiscal year. It is an important opportunity to reflect, discuss direction and discuss how to best serve members with relevant programs. In past years, the Retreat brought to light several chapter initiatives that had proven beneficial to local members, which led other chapters to duplicate the efforts for the benefit of their own members.

Discussion topics for the 2020 program included: "Who We Are and What We Do," "Energizing Your Membership," "Managing Your Chapter for Success," "Running Effective Meetings," and "Reporting Your Chapter's Success."

A legislative update was presented by OSPE lobbyist Matt Whitehead, vice president of Governmental Policy Group. Participants earned 1.0 CPD hour for this educational program highlighting OSPE's efforts on several bills that impact engineers and their work.



*Matt Whitehead,
VP, Governmental
Policy Group*

OSPE gives members free CPD hours at 2020 Legislative Day

To alleviate the ongoing health and financial concerns presented by the COVID-19 pandemic, the Ohio Society of Professional Engineers (OSPE) offered its 2020 Legislative Day program virtually and at no cost to members in November.

"The loyalty of OSPE members is best repaid with a return of interest on their investment," said Vice President of Legislative & Government Affairs Joe Warino, PE, PS, F.NSPE. "Thanks to our leadership team for working to give members this continuing education on timely engineering practice topics for free."

"While OSPE members always get a 30 percent discount on CPD," said OSPE President Kevin Ernst, PE, "it has been an unprecedented and uncertain time. It was important to offer this particular program at no cost in 2020."

"The loyalty of OSPE members is best repaid with a return of interest on their investment."

– Joe Warino, PE, PS, F.NSPE

The online event, cosponsored by American Society of Civil Engineers' Ohio Council of Local Sections and IEEE Columbus Section, was worth 2.0 CPD hours. It was facilitated by OSPE lobbyist Matt Whitehead, vice president of Governmental Policy Group, who kicked off the program by recapping the known 2020 general election results. Whitehead followed this with a detailed analysis of Ohio bills that affect engineering practice. He also provided advocacy training.

A regulatory update was provided by John Greenhalge, MBA, executive director of the State Board of Registration for Professional Engineers and Surveyors. Greenhalge provided an update on



Matt Whitehead



John Greenhalge

decoupling the licensure requirements of experience and examination, the Ohio certificate of authorization and correspondence courses for CPD credit. He also covered the PE's perennial favorite, "How to avoid an investigation."

This was followed by a report from Jeffrey Westhoven, chief of program services for Ohio Facilities Construction Commission. Westhoven gave an update on the Capital Budget Bill and capital spending, school construction changes and the changing dynamic concerning needing new/renovated buildings – especially schools. He also highlighted the challenges of working remotely.



Jeff Westhoven

The program also included legislator interviews featuring State Senators Louis W. Blessing, III, PE, (District 8) and Kristina Roegner (District 27) as well as State Representative Mark Romanchuk (District 2) – all of whom have engineering backgrounds.



Senator Louis W. Blessing, III, PE

The legislators discussed their priorities for both the lame duck session (following the 2020 general election) and the 134th Ohio General Assembly starting in January 2021. They also provided their perceptions on whether there is a difference between occupational licensure and professional licensure.



Senator Kristina Roegner

The conversation concluded with the legislators' insights as to the best ways to communicate and work with them on complex policy issues. The legislators also shared with participants some lessons they had learned through the challenges of 2020.



Representative Mark Romanchuk

Thank you, Past President Jeff Kennedy, PE, for representing OSPE on licensure reciprocity bill



In the 133rd Ohio General Assembly, OSPE Past President Jeff Kennedy, PE, testified twice on behalf of the Society in the Senate General Government & Agency Review Committee hearings on Senate Bill 246 (license reciprocity legislation). At these hearings, Kennedy provided OSPE's perspective, including the critical reasons for maintaining the Ohio PE licensure standards for out-of-state applicants. In November, Kennedy shared OSPE's recommendation to add education and exam as requirements in the bill for out-of-state people seeking reciprocity in Ohio. The Senate Committee captured OSPE's suggestion in a bill amendment, but the legislation ultimately stalled (for unrelated reasons) in the lame duck session. OSPE watches for the bill to be reintroduced in the 134th Ohio General Assembly.

Scholarship deadline is extended to February 28

Due to COVID-19 and the resurgence of the virus, EFO is extending the scholarship application deadline to February 28, 2021, to give students every opportunity to apply.

Any student who has already applied does not need to apply again, but if you have additional information you would like to add to your current application, please do so by the extended deadline.

Applications and support materials may be mailed to Engineers Foundation of Ohio, 400 S. Fifth Street, Suite 300, Columbus, Ohio 43215. Or you may email efo@ohioengineer.com.



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Ohio engineering schools combat COVID-19 & offer immersive learning experiences for real-world applications

Cedarville University opens new Civil Engineering Center for hands-on learning

Cedarville University's new Civil Engineering Center, dedicated last October, was built to provide the best education for students.

"The best way to produce an engineer is to get someone to engineer," said Dr. Stephen Ayers, Cedarville professor of civil engineering. "All engineers are problem-solvers. For civil engineers, those problems often involve tangible things we can touch and see and feel. Finding solutions means we need to interact with a physical context, and this new facility creates the type of environment where we can do just that."

The center has nine labs, two classrooms and six faculty offices to provide students with a hands-on, kinesthetic-learning environment that is ideal for civil engineering studies.

Ohio University researchers win grant to study treatment for possible fatal complications of COVID-19

Faculty researchers from Ohio University's Heritage College of Osteopathic Medicine and Russ College of Engineering and Technology have received a \$100,000 grant from Emergent Ventures to research treatments to mitigate the severity of COVID-19.

Douglas Goetz, PhD, a Russ College professor in chemical and biomolecular engineering, and Kelly McCall, PhD, a professor in the Heritage College and an investigator with OU's Diabetes Institute, will measure how effective a number of different chemical compounds are at preventing "cytokine storms," a sometimes-fatal complication that can stem from COVID-19 infections and severely damage organs.

WSU hand-washing station is slowing the spread of COVID-19 in Uganda

A hand-washing station designed by Wright State University (WSU) engineering students for a village school in Uganda proved so beneficial that community members credited it with helping slow the COVID-19 pandemic.

In March 2019, three WSU students traveled with Engineers Without Borders to St. Bakhita Secondary School in Uganda. They discovered that 300 schoolchildren were unable to wash their hands after using pit latrines.

The WSU students designed a hand-washing station, oversaw its construction and worked with the local community on a maintenance plan. Months later, the WSU students learned their idea had been reproduced in several locations in the area near the school.

Miami offers robotic engineering degree & biomedical research opportunity

Miami University will soon offer a bachelor of science degree in robotic engineering. The first class starts in the autumn of 2021. Using the Regionally Aligned Priorities in Delivering Skills (RAPIDS) award from the Ohio Department of Higher Education, Miami has enhanced its mechanical, manufacturing and electrical engineering and computer science curricula to prepare students for a career in robotics and automation enterprises.

Are you more interested in biomedical engineering? Miami students have the opportunity to work alongside Dr. Andrew Jones and his 15-person team as they research the biosynthesis of an array of psychedelic compounds with therapeutic properties supported by a \$1 million grant from PsyBio Therapeutic Inc.



Ohio's first public bachelor of science in robotics engineering will be available at Miami University. Photo credit: Miami University.

Thanks to UT program, mechanical student lands dream co-ops & job

While a mechanical engineering student at the University of Toledo, Sean Dunphy was able to work in two of his dream industries, thanks to the College of Engineering's integrated cooperative education program. Dunphy worked at Disney World on a design and engineering co-op. His undergraduate research experience working with Dr. Brian Trease led to a recommendation for a NASA Jet Propulsion Laboratory (JPL) co-op. Dunphy worked at NASA's JPL on three technology development projects creating prototypes for new space hardware. Dunphy's new title, following his December 2020 graduation, is "starship build engineer" with SpaceX in Brownsville, Texas.

YSU works to grow the number of digital design engineers in microelectronics

Kicking off this academic year, the Microelectronics Workforce Development Program, led by the Air Force, provides YSU with \$2.2 million to increase the number of digital design engineers with expertise in microelectronics – an initiative aimed at increasing the security and reliability of microelectronics systems used by the military. YSU plans to increase the pipeline for this field via high school summer camps, competitions and workshops, as well as college scholarships, internships and co-ops. The initiative also includes creating a 3D printing microelectronics HUB that will use additive manufacturing to produce flexible, rigid, wearable and multifunctional electronic hardware.

Building lasting relationships at ONU

Relationships are central to the engineering experience at Ohio Northern University (onu.edu/engineering). Learning expands outside the classroom as students and professors collaborate, discover and innovate together. ONU's James Lehr Kennedy Engineering Building provides optimal project workspace and labs for nurturing faculty-student relationships. Full-time, tenure-track professors advise award-winning competition teams and student organizations. They encourage students to



Wright State University students designed this hand-washing station in Uganda and it is credited with slowing the spread of COVID-19.
Photo credit: Wright State University.

tackle local engineering-based service projects. They also engage students in research projects, providing opportunities to co-author papers and present at regional and national conferences. By making teaching a top priority, ONU engineering and computer science professors ensure that students graduate well-rounded engineers.

AFIT has education opportunities for military & civilians

The Air Force Institute of Technology (www.afit.edu) at Wright-Patterson Air Force Base, Ohio, is the Air Force's leader for advanced, multi-disciplinary education. AFIT's Graduate School of Engineering and Management provides a personalized experience with a student-to-faculty ratio of 4:1, defense-related academic programs and research on high-priority defense problems.

AFIT is not just for the military! High school students are encouraged to research the SMART Scholarship program (www.smartscholarship.org) as an opportunity to pursue a technical undergraduate or graduate degree in STEM disciplines. Recipients receive a full scholarship with guaranteed civilian employment within the U.S. Department of Defense upon degree completion.

UD helps Mission of Mary Cooperative become Dayton's first net-zero energy organization

University of Dayton engineering students helped Mission of Mary Cooperative, a Dayton-based urban farming operation, become the city's first net-zero energy organization. The cooperative produced 52,000 pounds of food in 2019 on its two-acre campus, all while operating on 100 percent renewable energy.

UD students in the Innovation Center and renewable and clean energy master's program (plus others serving as solar ambassadors through a national nonprofit that helps finance solar projects) assisted with fundraising, designing solar energy storage, and data analysis and prediction. Visit udayton.edu/engineering for more information about the School of Engineering.

UC students design ventilators to help during the pandemic

University of Cincinnati engineering students helped design and create a low-cost ventilator for use in countries with little access to the life-saving equipment. UC professors and researchers also shared their expertise to assist Venti-Now, a Cincinnati-based nonprofit that launched to solve shortages during the pandemic. Biomedical engineering students worked at the company through UC's cooperative education program that is integrated into the curriculum. Co-op enables every engineering student to explore different jobs and graduate with five semesters of real-world, paid work experience on their résumé.

CWRU chemical engineering student wins first prize at Ideal Labs

Case Western Reserve University chemical engineering student Sonia Velu won first prize at Ideal Labs 2020, a competition in which students develop and pitch entrepreneurial ideas. For the first time ever, the event was held virtually last October. Open to all majors, the competition included students from 10 Entrepreneurship Education Consortium institutions, including CWRU.

Combining her interests in engineering and sciences, Velu pitched "Assess-V," an enterprise that allows medical device design teams to use a design

database software program with a focus on quality control. Velu endeavored to invent a meaningful tool that would assist medical professionals.

Cleveland State's Washkewicz Hall earns LEED Gold certification

Cleveland State University's Washkewicz Hall, home to the College of Engineering, was recently awarded LEED Gold certification by the United States Green Building Council (USGBC). Washkewicz Hall, completed in 2017, is now the sixth building on CSU's campus to receive LEED certification, the most widely used green building rating system in the world, and the second to receive Gold.

"Washkewicz Hall's LEED certification demonstrates tremendous green building leadership," said Mahesh Ramanujam, president and CEO, USGBC. "Cleveland State's most recent certification is a prime example of how the innovative work of project teams can create local solutions that contribute to making a global difference."

See "Ohio schools," page 8



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UA engineering students often receive job offers ahead of graduation

Hard-working students in the University of Akron's College of Engineering and Polymer Science receive an exceptional education – both in and outside the classroom – as they design solutions to real-world problems. UA students can earn bachelor of science

degrees in aerospace systems engineering, biomedical engineering, chemical engineering, civil engineering, computer engineering, corrosion engineering, electrical engineering and mechanical engineering. UA also has a minor in polymer science and polymer engineering. Dedicated engineering students gain the skills to quickly land jobs that pay off. UA students get hired and many receive job offers ahead of graduation – proving that UA's academic and co-op programs prepare students for future success.

Central State manufacturing engineering grads have gone on to exciting careers & graduate studies

Undergraduate students studying manufacturing engineering at Central State University benefit from state-of-the-art laboratory resources (including an integrated manufacturing cell) that support research and instruction as well as a sophisticated research program that provides practical experience. In addition, CSU manufacturing engineering students enjoy access to a strong network with corporations, government research agencies and graduate schools. Past graduates have found challenging positions with Caterpillar, Harley-Davidson, Goodyear, Kraft Food, Frito-Lay,

Boeing, Proctor & Gamble and Duracell. Some have enjoyed international assignments. Graduates pursuing further studies have received fellowships from prestigious programs at MIT, Princeton, Michigan State, Rensselaer Polytech, Virginia Tech, Howard University, etc.

OSU finds the engineering solution to COVID-19 PPE challenge

As COVID-19 depleted supplies of personal protective equipment for healthcare professionals nationwide, Ohio State University hematologist Dr. Karilyn Larkin turned to OSU engineers for help in 3D printing face shields to cover her colleagues' shortage. With state-of-the-art equipment and help from OSU experts in prototyping and manufacturing, Mechanical and Aerospace Engineering Professor Carlos Castro created a design and manufacturing task force. Larkin, Castro and OSU Wexner Medical Center's supply chain process engineer provided guidance to begin printing plastic visor prototypes and attaching clear face shield material. The task force received positive feedback on the initial shields. It took mere days to make a couple of design modifications and recruit other departments with 3D printers to increase production capacity.

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Ohio Society of Professional Engineers (OSPE) Member,

The complete text of the OSPE Constitution is shown in this issue of *OhioENGINEER*.

The OSPE Board of Directors proposes and recommends your approval of changes as marked within. Any recommended deletion will be shown as a strikethrough, and any new language will be shown in bold capitals.

Voting Instructions

Please study these changes and return this original ballot so it is received at OSPE, 400 South Fifth Street, Suite 300, Columbus, OH 43215-5430, no later than **Wednesday, March 17, 2021, 5:00 p.m.**

Mark your vote below and provide your name, signature, member number, address and chapter. Your signature and member number are necessary to validate your vote.

Ballot

The OSPE Board of Directors recommends votes of "Yes" to accept the changes to the OSPE Constitution as proposed.

Article 6, Section B

- ☐ **Yes**, I vote in the affirmative for the changes in the OSPE Constitution, Article 6, Section B, as proposed by the Board of Directors.
- ☐ **No**, I vote in the negative for the changes in the OSPE Constitution, Article 6, Section B, as proposed by the Board of Directors.

Print Name _____

Signature _____

OSPE Chapter _____

NSPE Member Number _____

Address _____

City, State, Zip _____

Ohio Society of Professional Engineers Constitution

Preamble

Recognizing that service to the public, to the state, and to the profession is a fundamental obligation of the professional engineer, the Ohio Society of Professional Engineers does hereby dedicate itself to the promotion and protection of the profession of engineering as a social and economic influence vital to the health, safety and welfare of the community and all mankind.

Professional surveying is as equally significant in importance and hereinafter is considered of equal stature with engineering. ("Surveyor" and "surveying" are included by reference in "engineer" and "engineering" as used hereinafter, except where they obviously do not apply, such as "professional engineer" or "engineer-in-training.")

Article 1 Name

- A. The name of this organization shall be the "Ohio Society of Professional Engineers", hereinafter called OSPE.
- B. OSPE shall be incorporated as a non-profit organization under the laws of the State of Ohio.
- C. OSPE shall be a member state society of the National Society of Professional Engineers, hereinafter called NSPE, and hereby accepts the provisions of the Constitution and Bylaws of said NSPE.
- D. OSPE subscribes to and supports the Code of Ethics of NSPE.

Article 2 Objectives

- A. The objectives of OSPE shall be:
1. Advancement and promotion of the public health, safety and welfare.
 2. Encouragement of all qualified engineers to seek legal status through registration.
 3. Stimulation and development of professional concepts among all engineers.
 4. Uniting of all qualified engineers of the state in one organization.
 5. Advancement of the professional, social and economic interests of the professional engineer.
 6. Promotion of high standards of the engineering profession in governmental matters.
 7. Representation for the engineering profession in governmental matters.
 8. Cultivation of public appreciation for the work of the professional engineer through improved public relations.
 9. Development of a civic consciousness by members of the engineering profession.
 10. Establishment and preservation of high standards of ethical conduct in all professional matters.

Article 3 Chapters

- A. Engineers
1. The membership of OSPE may be organized into chapters. The Board of Directors, defined in Article VI and hereinafter called Board, may authorize and charter such chapters defining geographical boundaries as may best serve the members of OSPE. Each chapter thus formed shall have a minimum of twenty-five voting members, which are defined as persons meeting membership requirements as set forth in Article IV, except students, and shall not be delinquent in dues payment to OSPE or NSPE. All members of each chapter shall be members of OSPE and NSPE.
 2. The Board shall make rules and regulations for chartering, combining or dissolving chapters. (These rules shall be expressed in the

Bylaws.)

3. Each chapter chartered by OSPE shall adopt such Constitution and Bylaws for its operation as it may deem proper; provided that nothing contained therein shall conflict with or contravene the Constitution and Bylaws of OSPE. Such Constitution and Bylaws and any changes thereto are subject to approval of the Board.

4. Chapters shall engage only in such activities as are consistent with professional ideas and ethics. Such activities shall be restricted to the area for which the chapter is chartered, except as the Board may authorize.

5. In all matters of local concern not covered by this Constitution and Bylaws, chapters shall retain full autonomy, but may call upon OSPE and NSPE for advice, counsel and assistance.

6. Each chapter shall be represented on the Board of OSPE as provided in the Constitution and Bylaws of OSPE.

7. No chapter in any way can contract any debt or obligation on behalf of OSPE unless expressly authorized by the Board.

8. The fiscal and administrative years of the chapters should be concurrent with those of OSPE.

B. Students

1. Student Members in engineering colleges and universities may be organized into student chapters as provided by the Bylaws.

Article 4 Membership

A. The membership shall consist of various membership grades as defined by NSPE and as outlined in the Bylaws.

B. Any person becoming a member of OSPE shall agree to abide by the Constitution, Bylaws and the Code of Ethics of OSPE and NSPE. All members are subject to election, suspension, discipline or termination of membership.

C. Any applicant who has been refused membership shall have the right of appeal to NSPE in cases of tiered (NSPE, OSPE) membership applications and the OSPE Executive Committee in cases of associate (state-only) membership applications.

D. All OSPE members shall have voting privileges in OSPE. Only licensed members may hold elected offices in OSPE.

E. All members of OSPE's chapters shall be members of OSPE.

Article 5 Dues

A. The dues of OSPE shall be determined by the Board and stated in the Bylaws. Dues for the various grades of membership shall be in addition to NSPE dues as prescribed in the Constitution and Bylaws of NSPE.

B. The procedure for billing and collecting all dues shall be determined by the Board and stated in the Bylaws, but shall be consistent with requirements of NSPE.

C. The schedule and conditions for dues payment, delinquency, dropping from membership and reinstatement shall be determined by the Board and stated in the Bylaws, but shall be consistent with requirements of NSPE.

Article 6 Board of Directors

A. OSPE shall be administered by a Board of Directors which shall determine all questions of policy and shall administer the affairs of OSPE under this Constitution and the general provisions of the law under which it is incorporated.

B. The following shall comprise the voting members of the Board of Directors:

Executive Committee

one director from each currently chartered chapter

the chair from each practice division
the national director
young engineer (1)

OSPE-PAC Chairman (1)

INVESTMENT COMMITTEE CHAIRMAN CONSTITUTION & BYLAWS CHAIRMAN

The following shall comprise the nonvoting members of the Board of Directors:

Chair of the State Auxiliary (1)

President of the State Student Council (1)

The "National Director" is the designated OSPE representative to the NSPE House of Delegates (HOD).

C. All voting members of the Board of Directors shall be members in good standing of the Ohio Society of Professional Engineers and the National Society of Professional Engineers.

D. Any person who is authorized to represent more than one capacity which is entitled to Board representation under this section shall be entitled to vote in single capacity and only in the capacity of the highest office to which he/she has been elected.

E. The Board shall direct the investment and care of funds for OSPE, shall adopt an annual budget, and shall make appropriations for specific purposes. The Board shall be empowered to invest and reinvest such funds as may be available for the creation of a reserve fund. Expenditures from the reserve fund other than for investment or reinvestment shall require an affirmative vote of three-fourths of the Board of Directors present and voting.

F. The Board is authorized to appoint an executive director, when the financial and other conditions warrant, to fix the compensation, and to define the duties. (See Bylaws)

G. No officer of OSPE shall receive a salary or compensation, except for expenses incurred in behalf of OSPE as approved by the Board.

H. Within the provisions of the Constitution and Bylaws, the Executive Committee shall act for the Board between Board meetings. All action of the Executive Committee shall be reported to the Board and approved or disapproved or modified by said Board.

Article 7 Officers & Executive Committee

A. The officers of OSPE shall comprise the Executive Committee, members of which shall be determined by the Board and outlined in the Bylaws.

1. The duties of the officers shall be defined in the Bylaws.

2. All officers shall be installed at the annual meeting or convention and take office (seated) July 1 (administrative year) and hold office until their successors have been duly elected, installed and seated.

3. Should a vacancy occur in the office of president, the president-elect shall assume the office. Other vacancies among the elected officers occurring during the year shall be filled from the unexpired term by election by the Board. Vacancies in state chapter directors on the Board shall be filled by the affected chapter. Vacancies in the representative of each practice division shall be filled by the affected practice division. Vacancies in a national director position on the board shall be filled by the Board of Directors in accord with the Bylaws.

4. Each practice division shall be chaired by a chairman who shall be elected by the practice division for a term of office determined by that practice division.

Article 8 Nomination and Election of Officers

A. All officers, chapter directors and nonvoting members shall be nominated by the Nomi-

nating Committee and elected by the voting members of OSPE, except in the case of practice divisions, in which the members of each practice division shall elect their own officers.

Article 9 Meetings

A. OSPE shall hold an annual meeting at such time and place as may be selected by the Board, which meeting shall be open to all members and their guests.

B. Special meetings of the voting members of OSPE shall be called by the president on two-thirds vote of the Board, or upon petition by 50 voting members of OSPE, or by 10 percent of the membership, whichever is the smaller number.

C. The Board shall meet in accordance with the requirements in the Bylaws.

Article 10 Headquarters

A. The location of the headquarters of OSPE shall be determined by the Board.

Article 11 Committees

A. Such committees as may be desirable shall be established in accordance with the provisions set forth in the Bylaws.

B. The duties of all committees shall be defined by the Board in the Bylaws.

Article 12 Practice Divisions

A. To further the objectives of OSPE, establishment of practice divisions is authorized.

B. The Board may sanction the creation or order the dissolution of practice divisions according to provisions defined in the Bylaws.

Article 13 Amendments

A. Amendments to this Constitution may be proposed by a majority of the Board, or by a petition signed by not less than 10 percent of the voting members of OSPE. Constitutional amendments submitted by petition shall be reviewed by the Board before being submitted to the secretary for ballot. The findings of this review may be transmitted to the members at the discretion of the Board.

B. Proposed amendments to the Constitution, together with a ballot, shall be transmitted by the Ohio Engineer to each voting member, and members shall be provided with thirty (30) days, from the date of the transmission, to vote on said amendment.

C. A Constitutional amendment shall become effective, as prescribed in Article XV, upon the affirmative vote of two-thirds of the votes cast by the voting members.

Article 14 Bylaws

A. The Board shall prepare and adopt a series of Bylaws which shall govern all procedures under this Constitution, including those of the Board and of the committees.

B. The Bylaws may be amended by an affirmative vote of two-thirds of the Board of Directors, or two-thirds of a weighted ballot (if used); provided that the text of the proposed amended Bylaw shall be mailed or electronically transmitted (as directed by the member) to each director at least 20 days before the meeting at which a vote on the amended Bylaw will be taken. Amended Bylaws become effective immediately upon approval.

Article 15 Effective Date

A. This Constitution shall become effective upon its adoption by the voting members of OSPE.

B. Any amendment to this Constitution, adopted according to the procedure specified herein, shall become effective 30 days after deadline for the receipt of the ballot.

LEGISLATIVE & GOVERNMENT AFFAIRS

by Joseph V. Warino, P.E., P.S., F.NSPE, Vice President,
Legislative & Government Affairs, Ohio Society of Professional Engineers

In preserving history, PEs also safeguard the public health & safety

My wife Linda and I took a road trip on our 45th wedding anniversary in October. While heading north on State Route 11 from Mahoning County to Ashtabula County, we encountered a highway sign that directed us to a covered bridge.

Having no set plan or agenda we said, "Why not?" And, thus, we followed the signage for about one-and-a-half miles from State Route 11.

To our amazement, the Smolen-Gulf Bridge was adjacent to a park with an ample lot, a scenic view of the bridge and a pavilion with some great information. We learned that the structure was the longest covered bridge in the United States and the fourth longest in the world. We also learned that the project planning began in 1995 when the annual bridge inspection showed severe deterioration of the existing structure. John Smolen PE, PS, then Ashtabula County Engineer, led the design team and made it his mission to preserve the historic bridge. Partial funding for the bridge was awarded by the Ohio Public Works Commission. (As a footnote, this commission was created by legislation that was supported by the Ohio Society of Professional Engineers – your OSPE! The Commission's purpose is to facilitate the administration of capital for many kinds of local, public works projects, including roads, bridges, waste water facilities, water supply systems, storm water and sanitary systems and more!)

The pavilion also provided a map showing the locations of 16 additional covered bridges located in Ashtabula County! Needless to say, the rest of Linda's and my date was now planned.

After touring a few more covered bridges, we settled down to an early dinner along the Ashtabula Harbor. While savoring our meal, we were entertained by another engineering feat – a steel truss drawbridge in operation. We delighted in seeing the drawbridge yawn wide to allow sailboats with 20-foot masts to pass safely.

It turned out to be quite an enjoyable day! Linda and I marveled at the beautiful and intricate bridges that *had to be* designed by PEs so that they can safely withstand the tests of use and time. If you are near Northeast Ohio and have any time, I strongly recommend a detour through Ashtabula County.



Joe & Linda Warino, October 12, 2020.

As PEs, I believe, our ethical responsibilities include protecting professional engineering practice through advocacy. Think of it this way: If we protect the profession from those who would see it eroded, we safeguard the public from unqualified practitioners. We PEs need to continue to advocate for the protection and progress of our profession. This can best be accomplished through *active* membership in OSPE. Members have the Society squarely behind them as they help legislators understand the countless reasons PE work is *critical* to preserving the health and safety of the public.

Are you new to advocacy? Start small and simply. Just introduce yourself to your newly-sworn-in legislators! It takes only a few minutes. OSPE is happy to help you reach out. Email OSPE@OhioEngineer.com to request assistance.

In Memoriam

EFO Past President Jack Ritter, ME, PE, F.NSPE

Engineers Foundation of Ohio (EFO) Past President John "Jack" F. Ritter, ME, PE (Ret.), F.NSPE, passed away at home in Boardman surrounded by his family on January 13, 2021.

Born in Youngstown in 1940, Ritter was a son of Gottlieb and Emma. He graduated from Rayen High School and earned his bachelor's and master's degrees in civil engineering from Youngstown College and Carnegie Mellon University respectively.

Ritter began his career as a civil engineering professor at Youngstown State University (YSU) in 1963. He was honored with YSU's Distinguished Professorship Award for excellence in teaching in 1989. Retiring from YSU in 1996, Ritter continued to teach for many more years. He was also vice president of engineering for Interlock Steel Company of Hermitage from 1965 to 1991 and he was on the Mahoning County Justice Center building commission and was its chair from 1993 to 1996.

A longtime leader of the Mahoning Valley Society of Professional Engineers,



Jack Ritter, ME, PE

Ritter served as a trustee and the local MATHCOUNTS coordinator for more than 30 years. He was EFO president in 1991 and, in 2008, he received the EFO President's Award for his work as an outstanding volunteer fundraiser. An Ohio Society of Professional Engineers' member, he earned the organization's Outstanding Engineering Educator award in 1990. Ritter was also named Civil Engineer of the Year by the American Society of Civil Engineers, Youngstown Branch.

Ritter was a lifelong and active member of Martin Luther Lutheran Church. He was the 1996 Protestant Family Services' Man of the Year and a board member for the ministry. Ritter was also a lay preacher serving several area congregations. He worked with various ministries, retirement services and a church association.

Preceded in death by his parents and siblings, Ritter is survived by his wife of 55 years, Mardell Miller; children David (Paula) Ritter, PE, Tim (Kim) Ritter and Cindy (Eric) Ericson; five grandchildren and extended family in Germany.

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