



# LEADING FOR ALL THE RIGHT REASONS

*In Pennsylvania and other state societies, more women are taking on leadership roles.*

**BY JANE BORNHORST**

**A**n enthusiastic passion for professional engineering is something they all share.

The Pennsylvania Society of Professional Engineers' executive board members—the president, president-elect, and two vice presidents—are all women, making it somewhat of an outlier within the Society and other engineering organizations. NSPE Treasurer Susan Sprague, P.E., F.NSPE, is also from Pennsylvania. The five are a notable example of the profession's changing demographics.

But being female isn't the most important thing they have in common. Their dedication to the reputation of professional engineers and to innovating for the benefit of the public are what drives the PEs, for whom their gender is a second thought. Still, they do see a positive trend in the increasing numbers of women within the ranks of engineering leadership.



"Anyone who is serious and passionate about their profession will support efforts to promote related activities," says Marlene Troy, Ph.D., P.E., chair of the department of environmental engineering and earth sciences at Wilkes University and PSPE's northeast region vice president. "I believe PSPE is an important voice for engineers in Pennsylvania." That is why she stepped into her role.

She feels some progress has been made in moving toward gender parity within the profession, but that it continues to be an ongoing challenge.



PSPE President Susan Best, P.E., agrees. "Women are moving forward; they're not being held back as much as they once were," she says. "But there is still the

problem of men repeating what you've just said and getting the credit for it or talking over you," she says. However, Best says the female middle schoolers she sees at DiscoverE's Future City Competition are noticeably more confident than she remembers being at that age.

"There's work still to be done when it comes to women and girls being encouraged to go into the field, and it's distressing that young women are still experiencing some of the same problems I dealt with years ago," she says.

In 1960, women made up just 1% of engineers, according to the Institute of Education Sciences. By 2000, they accounted for 11%. The Society of Women Engineers reports that there was a 68% increase of the number of bachelor's

degrees in engineering and computer science awarded to women between 2011 and 2018, with more than 75,000 in 2018.

A survey by the Cambridge Occupational Analysts showed that, between 2007 and 2014, the number of women planning to major in STEM fields in college increased more than that of males. Additionally, more than 20% of females said they were considering studying engineering, representing a 16% increase during those seven years.



NSPE President Tricia Hatley, P.E., F.NSPE, says that when she heard about the number of women in key leadership positions in PSPE, it gave her hope that the profession is truly

beginning to see progress in gender diversity. "Having a woman at the table is great, but you don't really get the positive impact of diversification with just one," she says. "More than one facilitates true engagement of women in the decision making and strategy formation discussions."

Hatley is the fourth female NSPE president. The first was Teresa Helmlinger Ratcliff, P.E., F.NSPE, who served the Society in 2003–04.

Within NSPE and its state societies, women started rising to top positions in the mid-90s, but today it is more common, Hatley says, a fact she finds exciting. "My hope is that NSPE and our state societies can lead the way with gender diversity and demonstrate to firm leaders the value of female leadership in the profession," she says. "Also, having these women in highly visible leadership roles will help young girls see their path forward."



Nicole C. Wilson, P.E., is vice president of PSPE's southeast region. She has seen this shift firsthand. "Having women leaders in the profession provides great role models," she

says. Wilson is a chemical and environmental engineer and serves as technical manager of air quality services with the EARTHRES Group. She credits serving on PSPE's executive board with helping to build her professional skills, such as speaking knowledgeably about a topic on the fly and learning about different engineering disciplines and various regions of the country.

Wilson encourages anyone with an interest to serve in an executive board role within the Society. "It's been one of the best things I have done career-wise, other than getting my PE license and my job." She enjoys the social aspect of the position and advises that, contrary to what some believe, it is not an overwhelming time commitment.

Best agrees. She enjoys the camaraderie found in working with the other PSPE leaders to achieve goals that will benefit engineers in their state. "I feel it's important for PSPE to stay a strong and viable organization, which is why I stepped into a leadership role," Best says.



Jennifer Nolan-Kremm, P.E., transportation hydraulics lead for her region for HDR, is the PSPE president-elect. She decided to serve on the executive board because

she enjoyed being involved with her local chapter and board, and she was impressed by PSPE and NSPE's mission. "Protecting our professional licensure while protecting the safety and health of the public is something I believe strongly in," she says. "I thought taking on this challenge of helping lead PSPE would align closely with my beliefs."

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Nolan-Kremm credits the higher number of women who earned engineering degrees in the early 2000s as the impetus behind the growth in female leadership. "I think the reason we are seeing more women engineers in these positions is because my generation and others are at the level of experience needed to lead teams of engineers and grow our business lines," she says.

When Nolan-Kremm started out in the field, most top-ranking engineers were men, many of whom she is quick to credit with having been her invaluable mentors. "Over the last several years, this has drastically changed as initiatives have been put in place to bring more women into the engineering field," she says.

She has enjoyed witnessing the changing demographics within the engineering profession over her 15-year career. "Working with many talented engineers no matter what their gender, ethnicity, or sexual orientation," she says, "is something I enjoy every day in this line of work."

## Join the Campaign

DiscoverE needs you! On February 25, the profession comes together to celebrate the 20th annual Introduce A Girl To Engineering Day. And the worldwide campaign to engage girls in engineering is looking for volunteers.

The day will involve thousands of people—engineers, educators, and others—acting as (Virtual) Role Models, facilitating engineering activities, and educating girls about how engineers change our world.

Get all the details and sign up at [www.discovere.org/our-programs/girl-day](http://www.discovere.org/our-programs/girl-day).



## Presidential Presence

Since the late 1990s, women have been rising to the top leadership position in state societies, not to mention countless other leadership roles. Here are the 89 times *PE* magazine has identified when women have served as state and national society presidents.

### Alabama Society of Professional Engineers

Shunna Cannon, P.E.	2020-21
Courtney Norris, P.E.	2015-16
Sharon Kimbrough, P.E.	2011-12
Connie Gipson, P.E.	2001-02

### Alaska Society of Professional Engineers

Jeanne Marie Bowie, Ph.D., P.E.	2018-19
Leora Houtary, P.E.	2017-18

### Arizona Society of Professional Engineers

Kimberly Carroll, P.E.	2020-21
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### Connecticut Society of Professional Engineers

Anne Proctor, P.E.	2016-18
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### Delaware Engineering Society

Stacy B. Ziegler, P.E.	2006-08
Judith Bedard, P.E.	circa 2002
Leslie A. Benmark, P.E.	1987-90

### DC Society of Professional Engineers

Dares Charoenphol, P.E.	2013-14
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### Georgia Society of Professional Engineers

Tammy L. Griffin, P.E.	2000-01
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### Guam Society of Professional Engineers

Julianne Duwel (Trowbridge LaRock), P.E.	1997-00
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### Hawaii Society of Professional Engineers

Sara Tomiko Doi, P.E.	2020-21
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### Idaho Society of Professional Engineers

Angela Comstock, P.E.	2016-17
Lynn Olson, P.E.	2009-10
Karen Doherty, P.E.	2003-04
Sharon Parkinson, P.E.	2001-02

### Illinois Society of Professional Engineers

Kristin Timmons, P.E.	2018-19
Joy Rexshell, P.E.	2012-13
Dawn Edgell, P.E., FNSPE	2010-11
Kathryn Gray, P.E., FNSPE	1994-95

### Indiana Society of Professional Engineers

Amy Barrett, P.E.	2015-16
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### Kansas Society of Professional Engineers

Jessica J. Rhein, P.E.	2019-20
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### Kentucky Society of Professional Engineers

Kristen Crumpton, P.E.	2019-20
Angela Akridge, P.E.	2013-14
Charlene Palmer, P.E.	1996-97

### Louisiana Engineering Society

Heather Klingman, P.E.	2015-16
Susan Richard, P.E.	2010-11

### Maryland Society of Professional Engineers

Victoria Marie Ballesterio, P.E.	2020-21
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### Massachusetts Society of Professional Engineers

Patricia L. Jackson, P.E.	1996-97
Karen Pedersen, P.E., FNSPE	1992-93

### Michigan Society of Professional Engineers

Martha Thompson, P.E.	2012-14
Leanne Panduren, P.E.	2003-04
Joellen Thompson, P.E.	1999-00

### Minnesota Society of Professional Engineers

Kathryn Sarnecki, P.E.	2015-16
Kerri Bruggemann, P.E.	2012-13
Kodi Church (Verhalen), P.E., FNSPE, Esq.	2010-11

### Mississippi Engineering Society

Jocelyn P. Pritchett, P.E.	2011-12
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### Montana Engineering Society

Cammy Dooley, P.E.	2017-18
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### Nebraska Society of Professional Engineers

Karen Stelling, P.E.	2017-18
Jennifer Klein, P.E.	2008-09
Sharon Kuska, P.E.	2005-06

### New Hampshire Society of Professional Engineers

Judith Houston, P.E.	2000-01
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### New Jersey Society of Professional Engineers

Kevin Becica, P.E.	2010-11
Gloria Holt, P.E.	1999-00

### New York State Society of Professional Engineers

Laura Pellizzi, P.E.	2017-18
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### Professional Engineers of North Carolina

Jennifer Bell, P.E.	2020-21
Susan Habina Woolard, P.E.	2015-16
Pamela Townsend, P.E.	2009-10
Teresa Helmingier Ratcliff, P.E., FNSPE	1993-94
Deborah Shive, P.E.	1992-93

### Ohio Society of Professional Engineers

Devon Seal, P.E.	2019-20
Angela Newland, P.E., FNSPE	1999-20

### Oregon Society of Professional Engineers

Tamara Johnson-Pittman, P.E.	2009-10
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### Pennsylvania Society of Professional Engineers

Susan Best, P.E.	2020-21
Susan Sprague, P.E., FNSPE	2013-14
Karen Davis, P.E.	2002-03
Lisa Catania, P.E., FNSPE	1997-98

### Rhode Island Society of Professional Engineers

Tristyne J. Youngbluth, P.E.	2006-07
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### South Carolina Society of Professional Engineers

Tracey Turner, P.E.	2019-20
Angela Musselwhite, P.E., FNSPE	2016-17
Marguerite McClam, P.E., FNSPE	2014-15
Susan Kozemko, P.E.	2006-07
Theresa H. Hodge, P.E.	2004-05

### South Dakota Engineering Society

Stacy A Froelich, P.E.	2015-16
Laurie Schultz, P.E.	2007-08
Jackie Lanning, P.E.	2005-06
Jeanne Goodman, P.E.	1995-96

### Texas Society of Professional Engineers

Nancy Blackwell, P.E.	2015-16
Trish Hatley, P.E.	2013-14
Julia Harrod, P.E.	2011-12
Roxanne Pillar, P.E.	2000-01

### Tennessee Society of Professional Engineers

Janey Camp, P.E.	2016-17
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### Virginia Society of Professional Engineers

Betsy E. Dulin, P.E.	2018-19
Rebecca L. Golden, P.E.	2017-18, 2016-17
Erin K. Trimyer, P.E.	2013-14

### Washington Society of Professional Engineers

Jocelyn Gray, P.E.	2016-17
Beth Fifield Hodgson, P.E.	2008-09

### West Virginia Society of Professional Engineers

Carol A. Costello, P.E.	2000-01
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### Wisconsin Society of Professional Engineers

Angela Hanz, P.E.	2016-17
Pam Mazur, P.E.	2014-15
Rosalie Morgan, P.E.	1999-00
Christine M. Sloat, P.E.	1994-95

### National Society of Professional Engineers

Tricia Hatley, P.E., FNSPE	2020-21
Kodi Verhalen, P.E., FNSPE, Esq.	2016-17
Kathryn Gray, P.E., FNSPE	2005-06
Teresa Helmlinger, Ph.D., P.E., FNSPE	2003-04