

# Drexel Women in Engineering Celebrate 50 Years of Accomplishment

"In November, 1946, some 20 women engineering students at Drexel organized a society to promote friendship and to help each other with problems."

With these words, *The Lexel* announced the formation of the Drexel chapter of the Society of Women Engineers (SWE).

On November 15, 1996, the University will commemorate the 50th anniversary of the formation of the Drexel chapter with an all-day celebration.

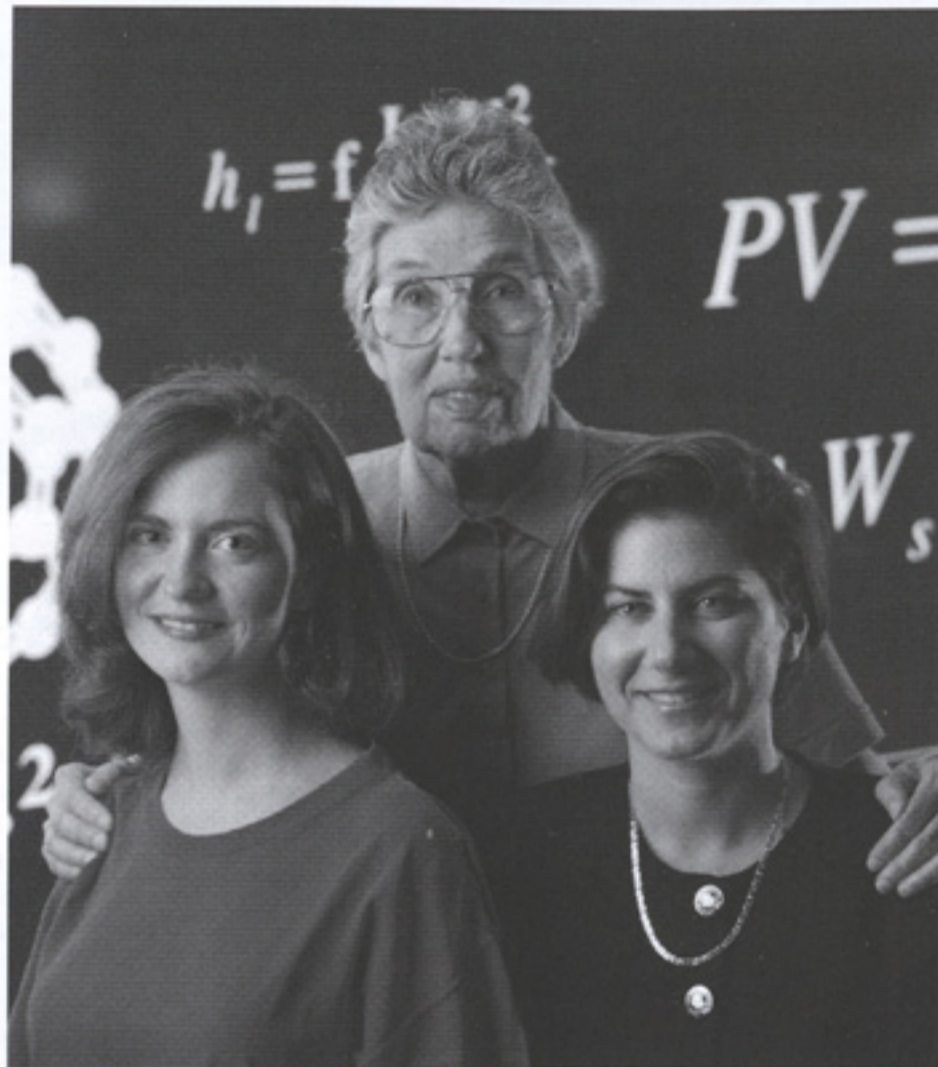
Fifty years ago when Doris McNulty '57, a founding member of the Drexel chapter and now a retired Raytheon engineer, began her electrical engineering studies at Drexel, it was wartime. The majority of college-age men were in the armed services; Rosie the Riveter proclaimed her patriotism and industry in thousands of posters; and society was just beginning to appreciate that women could be successful at careers that had been all-male.

"My family believed in education for its women to make them self-sufficient. I liked math, and I wanted to follow in my father's footsteps, who was a Navy engineer," McNulty says.

She never experienced any discouragement or discrimination in high school or at Drexel as she pursued her engineering studies. Still, only some 15 to 18 women, by McNulty's estimate, studied engineering with her throughout the years she attended day and evening classes at the University.

After earning her Drexel degree, McNulty worked for United Engineers for 34 years during which she says she experienced "steady upward movement in salary and responsibility." When she retired from the firm in 1992, she was a consulting electrical engineer for the power industry.

For Karen Jehanian '82, vice president at Urban Engineers, her experiences as a woman engineer are strikingly similar. Her father is a contractor, and as a young girl she and her



(L to R): Maria Pologruto '94, Doris McNulty '57, and Karen Jehanian '82 are representative of Drexel's 50 years of educating successful women engineers.

mother would often lunch with her uncle, then an engineer at Urban Engineers. She liked math and science and by seventh grade was already leaning toward a career in architecture or civil engineering.

"I applied to Drexel and Widener, but the co-op program decided me on Drexel. My parents were very happy because co-op paid for all my expenses, and the professional experience helped me get a job after graduation and at a higher salary than graduates from other colleges."

At Drexel and as a professional engineer, Jehanian has never experienced difficulties because of her gender. At Drexel, there were seven women among the 67 civil engineering students.

"The guys actually looked out for us," she remembers, "but of course, we were helping them with their homework."

Jehanian believes women may be particularly well-suited for a career in her field—traffic and transportation engineering—because it demands excellent communication skills and the ability to make public presentations. Although analytical abilities are extremely important, written and verbal skills figure prominently, areas in which women typically excel.

Maria Pologruto '94, an environmental engineer at Pennoni Associates, Inc., chose engineering as a career because, "I wanted to make a difference by doing something both challenging and rewarding."

Her father is an electrician, and as a child, Pologruto admired his ability to repair and design things.

"Once I decided I wanted to be an engineer, I knew I would go to Drexel. It has a great reputation; it was the first university to incorporate

computers into the curriculum; and the co-op program provides a strong practical background."

Pologruto's desire to make a difference led her to civil engineering and eventually to a concentration in environmental and water resources engineering. As a Drexel co-op she worked for a New Jersey consulting engineering firm and later for a drilling contractor.

"Being a woman never held me back. I often assisted the drillers on-site," she says.

At Pennoni Associates, Pologruto focuses on three areas: soil and ground water investigations; hydrologic and hydraulic studies; and environmental permitting.

As the experiences of these three women engineers demonstrate, the desire to enter engineering as a career is most often founded on an early interest in math and science.

Alyson Valentine, Drexel's Women in Engineering Coordinator, stresses the importance of offering young girls opportunities in science and engineering early in their academic careers to reinforce their interests.

"Only eight percent of the nation's engineers are women. Drexel hopes to increase that number by introducing middle and high school girls to careers in science and engineering through several programs," Valentine says.

Drexel's Women in Engineering provides three types of opportunities to young women. The GOES (Girls' Opportunities in Engineering and Science) project, funded by a grant from the National Science Foundation, introduces middle school girls to science and engineering with in-school hands-on experiments conducted with Drexel women engineering faculty and students. Career Days bring high school girls to campus for activities in the University's laboratories; and SEED (Summer Engineering Experiences at Drexel) provides a week-long on-campus program for high school girls with hands-

## A Sampling of the College of Engineering's Outstanding Alumnae

**Dr. Linda M. Abriola** '76  
Associate Professor,  
University of Michigan

**Dr. Lucile Adams-Campbell** '77  
Associate Professor,  
Howard University

**Joyce M. Albinson** '81  
Senior Data Analyst,  
SmithKline Beecham Corp.

**Geraldine Cox** '66,'67,'70  
Chairman, Ampotech

**Meredith Earley** '81  
Crude Oil Trader,  
Sun Refining & Marketing

**Alma Kuppinger Forman** '49  
Director Computer Services,  
Temple University (retired)

**Christine T. Hunt** '89  
President,  
Hunt Engineering Company

**Dr. Geraldine J. Knowles** '82  
Principal Industrial Hygienist,  
Solar Turbines Inc.

**Susan Kohlman** '85  
Senior Materials Engineer,  
Raytheon

**Dolores Klinko Lenci** '81  
Senior Mechanical Designer,  
Unisys Corporation

**Joanna E. McErlean** '81  
President, Legend Industries, Inc.

**Ann M. McNally** '67  
Vice President, FCC National Bank

**Pamela C. Meitner** '73  
Environmental Attorney,  
E.I. DuPont de Nemours

**Patricia C. Mitchell** '82  
Owner, The Structures Group

**Mary Lou Mooney** '81  
Manager, Cordes Corporation

**Dr. Theresa K. Reilly, M.D.** '73  
Ophthalmologist

**Debra Shapiro-Ross** '77  
Manager, Site Master  
Planning, BASF

**Anne L. Stevens** '80  
Plant Manager,  
Ford Motor Company

**Lisa Walton** '94  
Engineers Club 1996 Young  
Engineer of the Year,  
Raytheon Engineers

**Arnnise M. Yurga** '81  
Manager, Hughes Aircraft

on lab work and visits to industry sites.

Dr. Banu Onaral, professor of electrical and computer engineering, views these programs as a way to make young women aware of opportunities in engineering and science and to encourage them to take college-track math and science courses.

"Today, for women engineers opportunities seem within reach. With sufficient predisposition, exposure, preparation, self-confidence and motivation, plus a fair amount of luck, women engineers can afford to have regular goals and aspirations as women and still enter and hold onto a fulfilling engineering career," Onaral says.

"The majority of us, however, recognize with respect and gratitude the perseverance, resourcefulness, patience, and at times, sweat and tears of the women scientists and engineers of the pre-1960s in paving the way for us."

The Drexel-led Gateway Coalition of 10 universities, sponsored by the National Science Foundation, is also involved in activities to encourage women to enter engineering.

Dr. Y.T. Shah, Dean of the College of Engineering, says the University is firmly committed to increasing the number of women engineering students.

"Nationally, Drexel ranks among the top 15 percent of universities in the number of engineering and science degrees awarded to women. Since 1975, we have graduated some 1,360 women engineers and currently enroll another 351 women students. We are actively



The University's Women in Engineering Program actively recruits young women for studies in engineering and provides a variety of support for Drexel women engineering students.



## 50 Years of the Society of Women Engineers

Anne Stevens '80, the first woman to be appointed a plant manager in the Ford Motor Company's European operations, will be the keynote speaker at a luncheon to celebrate the 50th anniversary of the founding of the Drexel chapter of the Society of Women Engineers. The luncheon will be held on November 15 in conjunction with a special engineering workshop for middle and high school girls and a symposium on "Women in Engineering."

involved, and will continue to be, in programs to encourage young women to pursue engineering as a career."

Dr. Margaret Wheatley, chair of the University's 50th anniversary Society of Women Engineers celebration, believes the occasion offers an important opportunity to evaluate the history of women in engineering and to plan for the future. For more information about the 50th Anniversary Celebration of the Society of Women Engineers at Drexel, November 15, contact Alyson Valentine, Women in Engineering Coordinator, 215-895-1322. ♦

## Celebrate the 50th Anniversary of SWE

Yes. I want to attend Drexel's 50th Anniversary SWE Celebration on November 15. Please send me registration materials.

I'd like to volunteer to help with the celebration.

I'd like to volunteer for Drexel programs designed to attract women to engineering and science.

I'd like to support Drexel's Women in Engineering programs with the enclosed tax-deductible contribution in the amount of \$\_\_\_\_\_.

My contribution will be matched by my employer:

Please charge my gift of \$\_\_\_\_\_ to the following credit card:

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Card Number

Exp. Date

Signature

Name

Address

Telephone

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