

# Research for a cleaner environment

**D**onald L. Sparks, S. Hallock du Pont Chair of Agriculture and Natural Resources and chairperson of plant and soil sciences, has received a national award for his research in soil chemistry.

Sparks was presented the Sterling B. Hendricks Memorial Lectureship Award by the Agricultural Research Service at the U.S. Department of Agriculture (USDA). The award honors the memory of Hendricks, a scholar of many disciplines who worked for the USDA for more than 30 years, by annually recognizing others who have made outstanding contributions to the chemical science of agriculture.

"The lectureship award is a great honor to receive," Sparks says, "not only because it is named after a man distinguished in my field of soil chemistry, but also because he was so gifted in science."

Kim Kaplan, lecture coordinator for the Agricultural Research Service, says Sparks was chosen because he is an "internationally renowned soil chemist and a longtime leader in the field of soil physical chemistry." His techniques in determining soil

contaminant species have "revolutionized research in the soil and environmental sciences," Kaplan says.

As part of the award, Sparks will deliver a lecture on a policy, trend or scientific topic of his choice. He says he plans to speak about the advanced techniques UD Donald L. Sparks has been developing to better understand how contaminants interact with the environment, particularly with soils.

"We are trying to understand how metals and oxanions, like phosphates, react to soils and what happens to them over time—whether they stay in the soil or move into water—and how that impacts soil and water quality," he says. "We've been



DONALD SPARKS

Donald L. Sparks

using a lot of advanced techniques to understand, at a molecular level, what happens when these things are added to the soil. In a practical sense, this research will allow us to better determine how certain contaminated sites can be remediated."

Sparks came to the University in 1979 and has been department chairperson since 1989. Over the years, he has received numerous awards and has been the author, co-author or editor of more than 226 publications, including two widely adopted textbooks. He holds joint faculty appointments in the departments of Chemistry and Biochemistry, Civil and Environmental Engineering and the College of Marine Studies,

and he has mentored 41 graduate students and 20 postdoctoral fellows.

"My greatest success is the success of my students, and when it is all finished, I hope people will say I had some impact on their lives," Sparks says. "That would be the greatest legacy I could ever have."

In 2002, he and his wife, Joy, created the Donald L. and Joy G. Sparks Graduate Fellowship in Soil Science, donating \$25,000. Sparks says the fund is still growing, with contributions from former students and colleagues.

Looking back, he says, "Never in my wildest dreams did I think I'd come this far or have all these honors or this much satisfaction. It's probably better that way, because then you constantly have something to strive for.

"Over the years, we have taken a very unknown place in terms of soil science, going from something obscure to a program that is internationally recognized. It's been a wonderful ride, and I hope to be continually excited about what we are doing and to be surrounded by bright, creative people." ■

—Jaime Cherundolo, AS '03