Chemistry Professor Receives the 2014 Spiers Memorial Award

UC Santa Barbara’s Fred Wudl, a research professor in chemistry and materials engineering, has received the 2014 Spiers Memorial Award for his many innovative developments in the field of organic electroactive materials and plastic electronics.

The Spiers Memorial Award is presented in recognition of an individual who has made an outstanding contribution to the field of a Faraday Discussion. Produced by the Royal Society of Chemistry (RSC) for more than 100 years, Faraday Discussions are unique international discussion meetings that focus on rapidly developing areas of physical chemistry and its interfaces with other scientific disciplines. All attendees contribute to the discussion, including presenting their own relevant research.

“I am very grateful to the RSC for this recognition of our research that could not have been done without the many dedicated, outstanding collaborators who worked in our laboratories for close to 40 years,” Wudl said. “This award is, of course, also an acknowledgment of our campus and the UC system as a whole. Indeed, organic electronics is revolutionizing the electronics industry, and the Faraday Discussions will further this evolution in semiconductor physics, chemistry, materials science and engineering.”

Widely known for his work on organic conductors and superconductors, Wudl discovered the electronic conductivity of the precursor to the first organic metal and superconductor. His interest in electronically conducting polymers resulted in the
first transparent organic conductor and the first self-doped polymers, which have electrons removed or added to obtain high conductivity.

Wudl’s current work focuses on the optical and electro-optical properties of processable conjugated polymers, the organic chemistry of fullerenes — molecules composed entirely of carbon — and the design and preparation of self-mending and self-healing materials. His group also studies single-component re-mending polymers and performs research on plastic solar cells with the goal of developing new materials to improve their efficiency.

Wudl, who joined the faculty at UCSB in 1982, received his Bachelor of Science and doctoral degrees from UCLA, where his dissertation work was overseen by Nobel laureate Donald J. Cram. After postdoctoral research at Harvard with Nobel laureate Robert Burns Woodward, he joined the faculty of the State University of New York at Buffalo. He then moved to AT&T Bell Laboratories and subsequently to UC Santa Barbara. He taught at UCLA from 1997 to 2006 before returning to UC Santa Barbara.

Wudl has published more than 500 scholarly papers and is the recipient of numerous awards and honors, including the Southern California Section of the American Chemical Society’s Tolman Medal, UCLA’s Herbert Newby McCoy Award and the Italian Chemical Society’s Giulio Natta Medal. He is member of the American Academy of Arts and Sciences and a fellow of the American Association for the Advancement of Science.

The Spiers Memorial Award commemorates Frederick S. Spiers, best known for his work as secretary of the Faraday Society, which he helped found in 1902. The award winner receives £2000 ($3,375), a medal and a certificate. The certificate will be presented in September at the conference dinner of the Faraday Discussion in Glasgow at which Wudl will give a talk.

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About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we
draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.