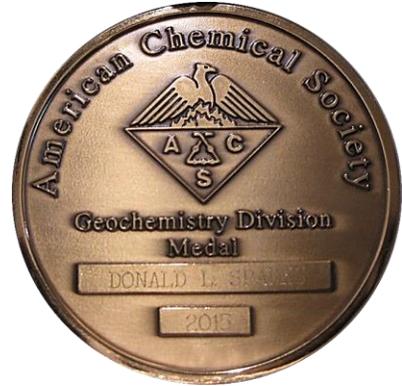


2015 Geochemistry Medal Awarded to Dr. Donald L. Sparks

The Geochemistry medal is awarded biennially to an individual for outstanding accomplishment in any field of Geochemistry. The eighth Geochemistry Division Medal was awarded to Dr. Donald L. Sparks for his far-reaching contributions to understanding aqueous and solid-phase speciation of metals and metalloids in the poorly ordered, dynamic materials that comprise the critical zone.



Left: Dr. Lee Penn, division Councilor and one of the awards committee members, presenting Dr. Donald Sparks with the Geochemistry Medal.

Below: Dr. Douglas Kent, the awards committee chair and organizer of the symposium in Dr. Sparks' honor



Left: Dr. Andrew Stack, past division chair, announcing the presentation of the medal to Dr. Sparks.



Left: Dr. Scott Fendorf, one of Dr. Sparks' former PhD students and the primary nominator of Dr. Sparks, giving a talk on (bio)chemical and physical processes in defining metal dynamics within soils.

Dr. Sparks is well known for his mentorship of students and early career scientists. As an educator and mentor, he has inspired a new generation of soil and environmental geochemists.



Right: Dr. Michael Hochella, a supporting nominee, giving a talk on incidental nanomaterials in the environment.

Below: Dr. Alexandra Navrotsky giving a talk on the energetics of CO₂ confinement, including the importance of amorphous carbonates, layered double hydroxides, and metal organic frameworks on CO₂ confinement.



Below: Dr. William Casey giving a talk on geochemical reaction kinetics using nanometer-sized metal-hydroxide and -oxide ions.





Right and left: Dr. Sparks giving a talk on the kinetics and mechanisms of geochemical processes.



In this talk, Dr. Sparks discussed his pioneering research in the application of relaxation methods to determine rates of surface complexation reactions; his development and application of state-of-the-art spectroscopic methods to understanding structure and bonding of metals and metalloids at mineral-water interfaces in soils, sediments, and synthetic- and specimen-mineral analogues; and his elucidation of a series of reactions that can occur following surface complexation that lead to incorporation of metal ions into clay minerals.

After the talk, Dr. Douglas Kent organized a special dinner in Dr. Sparks' honor with his former students and colleagues.





