
John N. Russell, Jr., Ph.D.



Superintendent, Chemistry Division U.S. Naval Research Laboratory

Dr. John N. Russell, Jr. is the Superintendent of the Chemistry Division at the U. S. Naval Research Laboratory (NRL). As a member of the Senior Executive Service (SES), he provides executive and technical leadership to approximately 250 government scientists and engineers, military officers, contractors, postdoctoral associates, and students engaged in a materials chemistry program comprised of basic research, applied research, development, and evaluation, which leads to the creation, adoption, and application of new concepts, principles, methods, and techniques that meet the materials and analytical needs of the Navy.

The research portfolio encompasses a broad spectrum of chemical areas, including: chemical dynamics and diagnostics; materials synthesis and characterization; corrosion science and engineering, surface/interfacial chemistry and physics; chemical energy generation, harvesting, storage, and release; nanoscience and nanotechnology; chemical and biological sensing and sense making; theoretical and quantum chemistry; and fire safety and survivability.

Russell earned a Bachelor of Science (cum laude) in chemistry in 1981 from Dickinson College, and a doctorate in physical chemistry from the University of Pittsburgh in 1987. After a postdoctoral fellowship at the Corporate Research Laboratory of Exxon Research and Engineering Company, he joined the research staff at NRL in 1989. Since 1999, he has held successive roles of greater scope, leading the Functional Materials Section until 2005, the Surface Chemistry Branch from 2005 to 2018; Russell was selected to the SES and his current position leading the Chemistry Division in June 2018.

As a researcher, he has authored more than 80 peer-reviewed scientific research papers, which have been cited more than 4,600 times, and holds one U.S. patent. He has given numerous invited and plenary presentations at universities, and international conferences, and from 2013-15 he was detailed part-time to the Chemical and Biological Defense Department (J9CB) of the Defense Threat Reduction Agency where he developed programs within the chemical defense portfolio focused on *in operando* surface science and plasmonically-assisted photo-catalysis.

Dr. Russell was recognized in 2010 as a fellow of the American Chemical Society (ACS), and is a member of the editorial board of Chemical and Engineering News and the Encyclopedia of Colloid and Surface Chemistry. He also serves on the ACS Joint-Board Council Committee on Publications, which oversees all ACS journals and editors. He also was selected in 2006 as a fellow of the American Vacuum Society (AVS). Russell was served as AVS president in 2008, and is a recipient of the AVS Honorary Membership Award, the society's highest honor. As a member of the NRL research staff, Dr. Russell received the Navy Meritorious Unit Commendation Award in 1996 and 2006, and an NRL Research Publication (Berman) Award in 1997.