

Harald Rose Distinguished Lecture 2019

The “Harald Rose Distinguished Lecture” is an award dedicated for honoring scientists, who are actively working on electron microscopy methods, in the field of particle and wave optics, image formation, and/or energy filtering in both research and teaching. The award is sponsored by the CEOS Company and can be granted every two years by the German Society for Electron Microscopy.

The “Harald Rose Distinguished Lecture” 2019 was awarded to **Prof. David Smith** (Arizona State University, Tempe) for his experimental and theoretical work on high-resolution electron microscopy. The prize was presented during the Microscopy Conference MC2019 in Berlin.

Prof. David Smith is well known as being one of the foremost practitioners of high-resolution electron microscopy and is one of the most highly respected experts in the field. His long and successful career started in Melbourne, where he studied physics and received his PhD in 1978. He then joined the 600 kV high-resolution TEM-project in Cambridge as a director, which he led to highest resolution available in those years. In 1984 he moved to Arizona State University in Tempe, where he was one of the few key persons to establish the world-wide reputation of the Center for High-Resolution Microscopy that was led by him between 1991 and 2006. He has applied high-resolution TEM across a broad range of materials to gain a comprehensive understanding of structure-property relationships. In addition, his important contributions include his early work on surface structure and reconstruction and, more recently, on electrostatic and magnetic field distributions by electron holography. Going through his impressive list of about 600 publications, several in *Nature* and *Science*, one likewise finds also topics of instrumentation and methods like, e.g. building and applying an UHV TEM.

Besides research, Prof. David Smith serves our scientific community as editor of books and journals, furthering electron microscopy also in committees and commissions. He was awarded numerous prestigious awards, such as the Distinguished Physical Scientist Award of the *Microscopy Society of America* and the Charles Vernon Boyce Prize of the Institute of Physics. He is Elected Fellow of many scientific societies and has been strongly engaged in teaching students. He organized the famous Winter Schools in Tempe, where hundreds of young scientists were educated to skillfully apply electron microscopy methods on the ground of thorough understanding.

Dagmar Gerthsen / Vice President of the DGE