

Dr. Donald A. Shockey Jr.

Class of 1963

Donald Shockey, director of SRI International's Center for Fracture Physics, is an internationally recognized expert in fracture of materials and structures. He joined SRI in 1971 after completing a three-year post-doctoral appointment at the Ernst-Mach-Institut in Freiburg, Germany.

In his 43 years at SRI he directed more than 350 research projects for government and industry. These projects included developing transparent materials and structural designs for weight-efficient windows on military vehicles and spacecraft; tear-resistant astronaut gloves; stents for coronary and peripheral arteries; and advanced fractographic methods for diagnosing failures and predicting the remaining useful life of aging aircraft, bridges and pipelines.

He has published more than 150 technical articles, holds several patents and serves on the NASA panel of Materials Experts and a National Academy of Sciences committee. He is an Institute Fellow, a Fellow of ASM International, the Year 2000 recipient of the John S. Rinehart award for pioneering work in the field of dynamic fracture, and the 2006 recipient of the Murray Medal for excellence in experimental mechanics.

Still working full time at SRI, Shockey is developing explosive separation systems for NASA that release the upper stage from the launch vehicle, enabling a spacecraft to achieve orbit. He is also investigating snowpack microstructure and mechanics with the goal of improving avalanche prediction. He won a best journal article award in 2012.

Additional degrees: M.S. and Ph.D., Carnegie Mellon University

