

Biography

Francis D. Hansen (Frank)

Dr. Hansen holds a B.S. and M.S. in Civil Engineering and a Ph.D. in Geology/Tectonophysics. He has nearly 40 years of experience in repository sciences and has contributed significant original research in rock mechanics to the Waste Isolation Pilot Plant, helping reduce uncertainty in performance assessment with practical engineering and providing the bridge from science to compliance. His team developed the shaft seal system design and analysis. He provided leadership in engineering and rock mechanics, developed specialty materials such as salt-based concrete and reconsolidated salt, designed panel closure systems, characterized rock properties of the disturbed rock zone, measured material properties, and presented and defended these works in a rigorous regulatory environment. He developed the performance confirmation programs at WIPP and the Yucca Mountain Project. He has been awarded the U.S. Rock Mechanics Applied Research Award and is currently a Senior Scientist at Sandia at Sandia National Laboratories. He has published over 150 citable research papers and technical reports, is a registered professional engineer and an ASCE Fellow.