

Sonya Davydycheva short bio

Dr. Sofia (Sonya) Davydycheva is Manager 3D modeling for KMS-KJT. She also is President of 3DEM Holding, founded in Jan. 2010 in Houston. In that she started as consultant to KMS Technologies. She specializes in electromagnetic modeling and inversion for land, marine and borehole applications. Sonya led research and development of new electromagnetic tools and fast interpretation methods for both resistivity logging, marine and land electromagnetics while working for various oil service companies: the Central Geophysical Expedition (CGE, Moscow, 1989-2001), Schlumberger (2002-2008, Houston), EMGS Americas (2008, Houston), Pathfinder (2009-2013, Houston) and SingularEM (2013-2014, Houston).

Sonya holds Diploma degree (M.Sc. equivalent) in physics and Ph.D. in applied mathematics, both from the Lomonosov Moscow State University.

She published over 30 open-literature papers on modeling & inversion of resistivity well logging, over 20 papers on modeling marine and land EM surveys, and was credited with over 800 citations of her works in open literature. She authored and co-authored 18 international patents, and received prestigious academic awards, including: The Log Analyst Best Paper Award of SPWLA in 1999 and two Best Paper Awards (Honorable Mention) by Geophysics of SEG in 2003 and 2011. Sonya's paper "Triaxial induction tool with electrode sleeve: FD modeling in 3D geometries" (2009) was selected as one of the "Top-50 most cited articles published in the Journal of Applied Geophysics in 2006-2011". Her 3D EM modeling software package has been used by major oil service companies.