

Ralf Birken ([r.birken@wittentech.com](mailto:r.birken@wittentech.com)) is currently Chief Scientist, Vice-President, and a Director of Witten Technologies Inc. ([www.wittentech.com](http://www.wittentech.com)) and leading their Boston-based R&D group.

He received the Diploma degree (M.S. equivalent) in geophysics from the University of Cologne, Germany in 1992 and his Ph.D. degree in geophysical and geological engineering from the University of Arizona in 1997. He spent 3 years with the Lamont-Doherty Earth Observatory of Columbia University as a postdoctoral research scientist working on acquisition, processing and visualization of 4D radar data sets, before joining Witten Technologies in May 2000.

Dr. Birken has over 10 years of research experience in near-surface geophysical mapping focusing on the development of efficient non-invasive electromagnetic (GPR and EMI) subsurface imaging array systems and their applications.

His general research interests are in engineering and environmental geophysics focusing on the design of new geophysical measurement array systems for accurate non-invasive subsurface imaging. Those arrays of sensors are geared towards surveying large areas very efficiently and producing high-resolution images, which are used to locate environmental and civil engineering targets, e.g. buried steel and plastic pipelines, or leaks.