

**Mikel Uribe, "Measurement of soil electrical parameters", 2012.**

*Abstract*

In EMC coupling and propagation studies involving above-ground and buried conductors, the soil should be well characterized. Some models have been proposed in the literature for estimating the soil electrical parameters, namely the effective permittivity and conductivity, as a function of frequency. The measurement of the soil electric parameters can be made by using the reflection and transmission properties of dielectric filled waveguides and/or coaxial probes.

In this project a fixture that will permit the measurement of the soil electrical parameters either in the time domain or in the frequency domain is designed and simulated.