

## **Microwave dielectric characterization of tumeric.**

### **ABSTRACT**

Dielectric properties of turmeric were measured at frequencies 0.2 to 20 GHz and temperature 26°C using the HP-85070B open-ended coaxial line probe coupled with a computer controlled Automated Network Analyzer (ANA). For all samples the dielectric constant decrease with increasing frequency. There is a sudden drop in the dielectric loss factor at 0.2 GHz due to ionic losses. At 1.5 GHz, the loss factor increases gradually to a constant value. The penetration depth is dependent on the evaporated moisture in the low frequency region.

**Keyword:** Dielectric properties; Tumeric.