



Studies on dielectric behaviour of *Myrtaceae* and *Mimosoideae* family Indian wood species

M.vasubabu^{1*}, C.Suresh babu², R.Jeevan Kumar²

¹Dept of Applied Sciences, St. Ann's College of Engineering and Technology, Chirala, India

²Dept of Physics, Sri Krishnadevaraya University, Anantapur, India

Abstract: The measurement of dielectric properties of materials is critical to understanding the electromagnetic field distribution in the materials. Apart from those, wood is a complex biomaterial has basic properties and significantly different even in the same tree. Therefore it would be affected the function in its use. The present investigation explores dielectric properties such that dielectric constant, dielectric loss and ac electric conductivity were measured at low frequency range (100Hz-1MHz) for eight *Myrtaceae* and *Mimosoideae* family tree wood species at room temperature 308K. The variations in their dielectric properties observed from one species to other. The relaxation time behaviour is also analyzed for each species and analyzed their structures critically.

Key wards: Dielectric constant, dielectric loss, electrical conductivity, relaxation time, *Myrtaceae* and *Mimosoideae* family wood species.

M.vasubabu *et al* /Int.J. ChemTech Res. 2016,9(2),pp 80-84.
