

## **28. TEMPERATURE DEPENDENT DIELECTRIC STUDY OF PENTENENITRILE WITH 1,2 DICHLOROETHANE AT 45<sup>0</sup>C**

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### **ABSTRACT**

The dielectric relaxation study of 2-Pentenenitrile(PN) with 1,2 Dichloroethane(DCE) mixture has been carried out at temperature 45<sup>0</sup>C in the frequency range of 10 MHz to 20 GHz using time domain reflectometry (TDR) for 11 different concentrations of the system. The static dielectric constants for the mixtures have been fitted with the modified Bruggeman model. The investigation shows that there is stronger molecular interaction between the constituent molecules

**KEYWORDS:** Bruggman factor, Nitrile group, chlorine group, Time Domain Reflectometer.