

## LIST OF PARAMETERS DETERMINED USING ULTRASONIC INTERFEROMETER

(MFD. BY MITTAL ENTERPRISES, NEW DELHI-8, INDIA)

1. ABSORPTION, ATTENUATION AND DISPERSION
2. ACOUSTIC IMPEDANCE
3. ADIABATIC, ISOTHERMAL, ISENTROPIC COMPRESSIBILITY
4. AVAILABLE VOLUME
5. AZEOTROPISM
6. COHESIVE ENERGY BARRIER
7. EFFECTIVE DEBYE TEMPERATURE
8. EQUILIBRIUM CONSTANT AND HEAT OF COMPLEXATION
9. EXCESS ENTHALPY
10. GRUNEISEN PARAMETER, LEGEMANN'S RELATION
11. HYDRATION NUMBER
12. HYDROGEN BONDING
13. INTERMOLECULAR FREE LENGTH
14. INTERNAL PRESSURE AND FREE VOLUME
15. LATENT HEAT OF VAPORISATION
16. LENNARD JONES POTENTIAL EXPONENT
17. MOLECULAR INTERACTIONS – ION-ION AND ION-SOLVENT INTERACTIONS
18. MOLECULAR RADIUS
19. MISCIBILITY, COMPATIBILITY AND GLASS TRANSITION OF POLYMERS
20. PHASE TRANSITIONS
21. PROTON RELAXATION RATE
22. RAO CONSTANT FORMALISM AND RAO SPECIFIC SOUND VELOCITY
23. RELATIVE ASSOCIATION ( $R_A$ )
24. RELAXATION TIME AND RELAXATION STRENGTH
25. SPACE FILLING FACTOR
26. SPECIFIC HEAT RATIO
27. SOLVATION NUMBER
28. STACKING CONSTANT
29. SURFACE TENSION
30. THERMODYNAMIC FLUCTUATIONS OF PRESSURE, TEMPERATURE AND VOLUME
31. TRANSPORT PROPERTIES
32. VAN DER WAAL'S CONSTANT
33. WADA CONSTANT

This instrument is used widely for various:

1. Pure Liquids
2. Liquid Mixtures
3. Solutions
4. Organic Compounds
5. Electrolytes
6. Polymers
7. Amino Acids / Proteins
8. Drugs , Blood
9. Milk , Sugar
10. Calcium Soaps
11. DDT
12. Metal Chelates
13. Oils, Fats
14. Lubricants, Petroleum Fractions
15. Seed Germination
16. Nanofluids