



Ultrasonic Study of Molecular Interactions and Compressibility Behaviour of Potassium Carboxylates

Yadvendra Sharma*

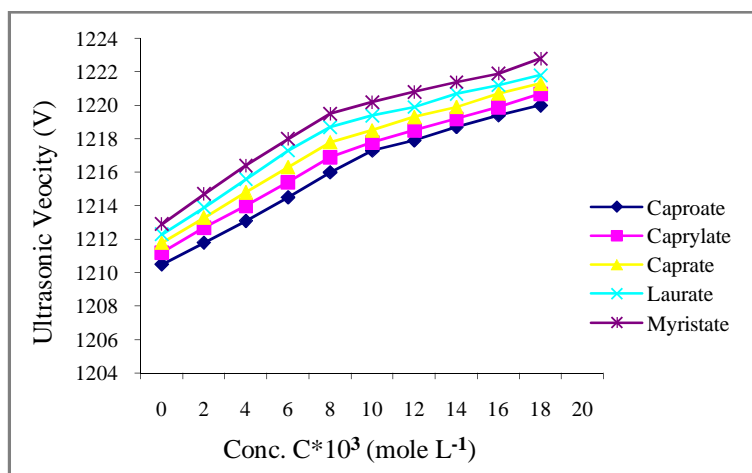
Department of Applied Science, Faculty of Engineering and Technology, Agra College, Agra (U.P.), **INDIA**
Email: yadvendra.fet@gmail.com

Accepted on 25th December, 2019

ABSTRACT

Ultrasonic measurements have been made on Potassium carboxylates (caproate, caprylate, caprate, laurate, myristate) in 70% chloroform-30% propylene glycol (v/v) with a review to determine the CMC (critical micelle concentration), carboxylate solvent interaction and various acoustic parameters of the system. The value of CMC increases with increase in the chain length of fatty acids. The results of ultrasonic velocity, adiabatic compressibility, intermolecular free length, specific acoustic impedance and apparent molar volume suggested that there is a significant interaction between carboxylate and solvent molecule.

Graphical Abstract



Ultrasonic Velocity Vs Concentration for Potassium carboxylates.

Keywords: Ultrasonic velocity, Adiabatic compressibility, Potassium carboxylates, CMC values.