**Dr.Manoj Kumar**

**Associate professor**

**Department of Chemistry**

**Raja Singh College,Siwan**

**Rheochor:**

The volume of the molar volume of the liquid at a temperature at which its coefficient of viscosity is unity. It is denoted by R .

R= $\frac{M}{D}$ = v [molar volume]

**Kopp’sLaw**

 Kopp's law will sit down with either of two relationships discovered by the German chemist Armin Franz Moritz Kopp .

 1. Kopp found that the molecular heat capability of a solid compound is that the total of the atomic heat capacities of the weather composing it; the weather having atomic heat capacities however those needed by the Dulong–Petit law retain these lower values in their compounds.

2. In finding out organic compounds, Kopp found a daily relationship between boiling points and additionally the number of CH2 groups gift.

**Liquid crystal**

A liquid could be a state of matter between liquid and solid. they modify form sort of a fluid however have the molecular alignment characteristics of a solid crystal. Liquid crystals square measure composed of organic, rod-shaped molecules that align in parallel, and also the common sorts employed in electronic displays square measure nematic, cholesteric and smectic

**Nematic Liquid crystal:** The nematic part is that the simplest variety of liquid and is that the innovate that the crystal molecules haven't any orderly position and area unit liberal to move any that means. However, whereas they need no specific order, throughout this part the molecules do tend to purpose within the same direction, that is what differentiates it from a pure liquid. liquid during this part is characterised by its thread-like look once checked out below a magnifier. the employment of nematic liquid is common in telescope lenses because it permits for a transparent image once researchers area unit confronted with atmospherical turbulence.

Properties :-

1. Because of the absence of the translational order nematic crystal flow like a normal liquid.

2. Because of the orientation of the molecules about a preferred axis nematic state gives rise to anisotropy in several properties e.g. optical,viscosity and elasticity.