COLLIGATIVE PROPERTIES

Colligative properties depend only on *the osmolarity*, i.e. number of dissolved particles in solution and not on their chemical nature (types of solutes). **Non-colligative properties** depend on the identity of the dissolved species and the solvent.

Increase of solution osmolarity causes:

- Osmotic pressure increase
- Vapour pressure decrease
- Freezing point decrease
- Boiling point increase

They have following *consequences*:

- Solution with higher osmolarity stays as liquid over larger range of temperatures compare to solution with lower osmolarity.
- The reduction of vapour pressure of a solvent is proportional to the molar concentration of the solute (*Raoult's law*).