CONCLUSION

Ketorolac tromethamine-loaded pellets were coated with ethyl cellulose and hydroxy propyl cellulose. Eight formulations were prepared by varying the ratio of polymers.

From all these observations, it was finally concluded as:

- Particle size of the pellets was found increased with increased concentrations of coating solutions.
- Flow properties showed that the all the formulations have excellent flow properties.
- Drug content and content uniformity were found to be good and gave reproducible results.
- IR spectroscopic analysis indicated the compatibility of drug with the Excipients used information.
- On the basis of physico-chemical characterization and in vitro dissolution studies, F8 was the optimized formulation and it showed sustained release of ketorolac tromethamine for 12 hours.
- From the in vivo analgesic activity of formulated sustained release ketorolac pellets studied in mice, it was concluded that the pellet formulation was able to sustain the analgesic activity for 10 hours.
- From the above findings, it was concluded that the objective of formulating sustained release pellets of ketorolac was achieved.
Drug loaded pellets of aceclofenac were coated with HPMC E5 and EC N50 both in combination and alone. Six formulations were prepared by varying the ratio of polymers.

From this, it was finally concluded as:

- FT-IR studies indicated the compatibility of drug with the formulation excipients.
- Particle size of the pellets was found to be increasing by increasing the coating concentrations.
- Flow properties evaluated showed that the optimized formulation have passable flow properties.
- Drug content and content uniformity was found to be good and gave reproducible results.
- Based on the *in vitro* release studies, F6 was considered as optimized formulation which extends the drug release upto 28 hrs and showed 96.51% drug release and the pharmacological evaluations showed that it has significant analgesic activity.