AIM OF THE WORK

Water-soluble polyesters prepared from dicarboxylic acids and diols, have been mainly used in the paint industry. However, only limited informations are available in regard to water-soluble polyesters as surfactants in polymers which have an amphipathic molecular structure similar to traditional surfactants.

The aim of the present investigation is to cover the following aspects:

- Preparation of some of these polymeric surfactants.
- Evaluation and comparison of surface active properties of these polymers.
- Examination of their biodegradability properties in a medium containing ordinary river water
- Screening the biocidal activity of some of these polymers towards microorganisms.
- Evaluation of the application of these polymers in some different fields such as detergents, emulsification, wetting, sequestering properties, solubilization and dispersability on applied dyes.