CHAPTER 6

CONCLUSION

The conclusions for this study are

1. Molecular weight of the dyes have no significance on the dyeability.

2. The disperse dye capable of dyeing polypropylene is of anthraquinone type containing some hydrophobic substituents.

3. C.I. Disperse Red 60 is the most suitable dye in this study.

4. For dyeing at temperature in the range of 70 - 110 °C, the dye uptake increases as the concentration of carrier increases up to an optimum point, i.e. at 1 g/l, then the increasing of carrier concentration beyond this point will give the reverse effect on the dyeability.

5. For dyeing at higher temperature, i.e. 120 or 130 °C, the dyeing performance decreases as the carrier concentration increases.

6. Light fastness of C.I. Disperse Red 60 dyed on polypropylene is not so good.

For the future work, polypropylene tape yarn should be further dyed with some anthraquinone disperse dyes which contain more hydrophobic substituents in their structure. The fastness to washing should also be studied.