

PREFACE

Aromatic polyesters are fairly thermostable. But its applicability is constrained due to its rigorous processing conditions. As such efforts are being made, by incorporating different linking groups, to enhance the processability of thermostable aromatic polyesters.

In the present context a detailed structure-properties relationship study of aromatic polyesters containing different linking groups ($-S-$, $-SO_2-$) has been done, as these properties are the determinant of end-applications of new synthetic materials.

The basic aspects of polyester synthesis, dielectric and thermal analysis has been covered here. The concise review of earlier works and scope of the present study have indicated.

Two new synthetic methods ; such as :

- (1) Low temperature solution polycondensation method
- (2) Biphasic Synthesis using phase transfer catalyst.

are used for synthesis of six sulphur-containing polyesters. The resulting polyesters are characterized with reference to suitable model compounds. The thermal and dielectric analysis of these resulting polyesters have been done. These data are interpreted on the basis of the structures.