

TABLE OF CONTENTS

INTRODUCTION	5
1 STATE-OF-THE-ART	7
1.1 MEDICAL POLYMERIC SYSTEMS	7
1.1.1 Polymeric materials	7
1.1.2 Polymeric mixtures	11
1.2 PROCESSING	13
1.2.1 Compounding	13
1.2.2 Extrusion	13
1.3 RHEOLOGY	15
1.3.1 Multiphase systems	15
1.3.2 Filled polymeric systems	16
REFERENCES	17
2 AIMS	20
3 SUMMARY OF PAPERS	21
AUTHOR'S PUBLICATIONS	23
JOURNAL ARTICLES	23
CONFERENCE CONTRIBUTIONS	24
CURRICULUM VITAE	26
PAPERS I - IV	