

# CONTENTS

	Page
<b>CHAPTER I : INTRODUCTION</b>	<b>1</b>
References	27
<b>CHAPTER II : EXPERIMENTAL</b>	<b>37</b>
Infrared absorption measurements	37
Mass spectrometry	37
<b>Sources and purification of thiols</b>	
n-Propylmercaptan	37
Isopropylmercaptan	38
Benzylmercaptan	38
<i>p</i> -Thiocresol	39
<i>p</i> -Chlorothiophenol	39
$\alpha$ -Thionaphthol	40
Preparation of ( <i>E</i> )-1,2-bis-(n-propylsulphonyl)stilbene	40
a) Preparation of ( <i>E</i> )-1,2-bis-(n-propylthio)stilbene	40
b) Oxidation of ( <i>E</i> )-1,2-bis-(n-propylthio)stilbene to ( <i>E</i> )-1,2-bis(n-propylsulphonyl)-stilbene	41

## CONTENTS (Continued)

	Page
<b>CHAPTER II</b> : Preparation of ( <i>E</i> )-1,2-bis-(isopropylsulphonyl)stilbene	41
a) Preparation of ( <i>E</i> )-1,2-bis-(isopropylthio)stilbene	41
b) Oxidation of ( <i>E</i> )-1,2-bis(isopropylthio)stilbene to ( <i>E</i> )-1,2-bis(isopropylsulphonyl)stilbene	42
Preparation of ( <i>E</i> )-1,2-bis(benzylsulphonyl)stilbene	43
a) Preparation of ( <i>E</i> )-1,2-bis(benzylthio)stilbene	43
b) Oxidation of ( <i>E</i> )-1,2-bis(benzylthio)stilbene to ( <i>E</i> )-1,2-bis(benzylsulphonyl)stilbene	44
Preparation of ( <i>E</i> )-1,2-bis( <i>p</i> -tolylsulphonyl)stilbene	45
a) Preparation of ( <i>E</i> )-1,2-bis( <i>p</i> -tolylthio)stilbene	45
b) Oxidation of ( <i>E</i> )-1,2-bis( <i>p</i> -tolylthio)stilbene to ( <i>E</i> )-1,2-bis( <i>p</i> -tolylsulphonyl)stilbene	46
Preparation of ( <i>E</i> )-1,2-bis ( <i>p</i> -chlorophenyl sulphonyl)stilbene	46

## CONTENTS (Continued)

	Page
<b>CHAPTER II</b> :	
a) Preparation of ( <i>E</i> )-1,2-bis( <i>p</i> -chlorophenylthio)stilbene	46
b) Oxidation of ( <i>E</i> )-1,2-bis( <i>p</i> -chlorophenylthio)stilbene to ( <i>E</i> )-1,2-bis( <i>p</i> -Chlorophenylsulphonyl)stilbene	47
Preparation of ( <i>E</i> )-1,2-bis( $\alpha$ -naphthylsulphonyl)stilbene	48
a) Preparation of ( <i>E</i> )-1,2-bis( $\alpha$ -naphthylthio)stilbene	48
b) Oxidation of ( <i>E</i> )-1,2-bis( $\alpha$ -naphthylthio)stilbene to ( <i>E</i> )-1,2-bis( $\alpha$ -aphthylsulphonyl)stilbene	48
References	50
<b>CHAPTER III</b> :	
<b>DISCUSSION</b>	51
Physical properties of ( <i>E</i> )-1,2-bis(alkylthio and arylthio)stilbenes and ( <i>E</i> )-1,2-bis-(alkylsulphonyl and arylsulphonyl)-stilbenes	54
Infrared absorption spectra	55
Mass spectrometry	60
References	72
<b>CHAPTER IV</b> :	
<b>SUMMARY</b>	77