CONTENTS

Chapter No.		Page No.		
	TILT			
	APPR	ROVAL		
	CERT	TIFICATE		
	DECI	LARATION		
	BIO-I	DATA	i	
	ACK	ACKNOWLEDGEMENTS		
	CON	CONTENTS		
	LIST	LIST OF ABBREVIATIONS AND SYMBOLS		
	LIST	OF FIGURES	ix	
	LIST	OF TABLES	xiii	
	ABST	ABSTRACT		
1.	INTR	1 - 8		
	1.1	Background and Justification	1	
	1.2	Scope of the Study	7	
	1.3	Major Objectives	8	
2.	REV	9 - 30		
	2.1	Lipid Oxidation	9	
	2.2	Natural Antioxidants	13	
	2.3	Rosemary	18	
	2.4	Sunflower Oil	20	
	2.5	Synergistic Effects of Natural Antioxidants	21	
	2.6	Thermo-Oxidative Stability of Oils	22	
	2.7	Shelf Life Prediction Models	25	
3.	MAT	ERIALS AND METHODS	31 - 64	
	3.1	Materials and Equipment	31	
	3.2	Characterization of Raw Materials	32	
	3.3	Shelf Life Determination	42	
	3.4	Empirical Models for Shelf Life Prediction	50	
	3.5	Frying Stability of Sunflower Oil Blends	55	
	3.6	Effect of Relative Humidity and Light	60	
		Conditions on Oxidative Stability		

	3.7	Statistical Analysis	62	
4.	RESU	ULTS AND DISCUSSION	65 - 140	
	4.1	Characterization of Rosemary	65	
	4.2	Oxidative Stability of Sunflower oil	72	
	4.3	Optimization of Synergistic Blend	90	
	4.4	Empirical Models for Shelf Life Prediction	100	
	4.5	Frying Stability of Sunflower Oil Blends	114	
	4.6	Effect of RH and Light on the Oxidative	130	
		Stability		
5.	SUM	SUMMARY AND CONCLUSIONS		
	5.1	Experimental	142	
	5.2	Summary of the Results	146	
	5.3	Conclusions	151	
	CON	CONTRIBUTIONS BY THE SCHOLAR		
	FUTU	FUTURE SCOPE OF RESEARCH REFERENCES APPENDIX I APPENDIX II		
	REFE			
	APPE			
	APPE			
	APPE	APPENDIX III		
	PUBI	PUBLICATIONS		