

Contents

		Page
	Acknowledgement	i
Chapter 1	Introduction	1
Chapter 2	Theoretical Background And Experimental Methods	27
Chapter 3	Orientational Order Parameter Of A Binary Mixture Showing Induced Smectic Phase	69
Chapter 4	Phase Diagram, Density And Optical Studies On Binary Mixture Of A Cyanobiphenyl (11OCB) And A Benzoate Ester (ME6.O5) Showing Enhanced Smectic Phase	85
Chapter 5	Physical Properties Of A Mesogenic Mixture Showing Induced Smectic A_d Phase. I: Refractive Index, Density, X-ray Diffraction And Static Dielectric Permittivity Studies	97
Chapter 6	Physical Properties Of A Mesogenic Mixture Showing Induced Smectic A_d Phase. II: Diamagnetic Susceptibility Anisotropy And Splay And Bend Elastic Constants	131
Chapter 7	Phase Transition And Physical Properties Of Bicyclohexane Compounds: Showing Induced Refractive Index And X-ray Diffraction Measurements	144
Chapter 8	Summary And Conclusion	172
	List Of Publications	177