EXPERIMENTAL STUDIES ON LIQUID CRYSTALLINE PHASES AND PHASE TRANSITIONS

A thesis submitted to the Bangalore University for the degree of **Doctor of Philosophy** in the Faculty of Science

by GEETHA G. NAIR

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DECLARATION

I hereby declare that the entire work embodied in this thesis is the result of the investigations carried out by me independently in the Liquid Crystal Laboratory, Raman Research Institute, Bangalore, and that no part of it has been submitted for the award of any Degree, Diploma, Associateship, Fellowship or any other similar title.

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CERTIFICATE

We certify that this thesis has been composed by Ms. Geetha G. Nair based on the investigations carried out by hier at the Liquid Crystal Laboratory, Raman Research Institute, Bangalore, under our supervision. The subject matter of this thesis has not previously formed the basis of the award of any Degree, Diploma, Associateship, Fellowship or other similar title.

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Cover Picture:

Fan shaped texture of smectic A liquid crystal as seen under a polarising microscope.