

# Liquid Crystal Images



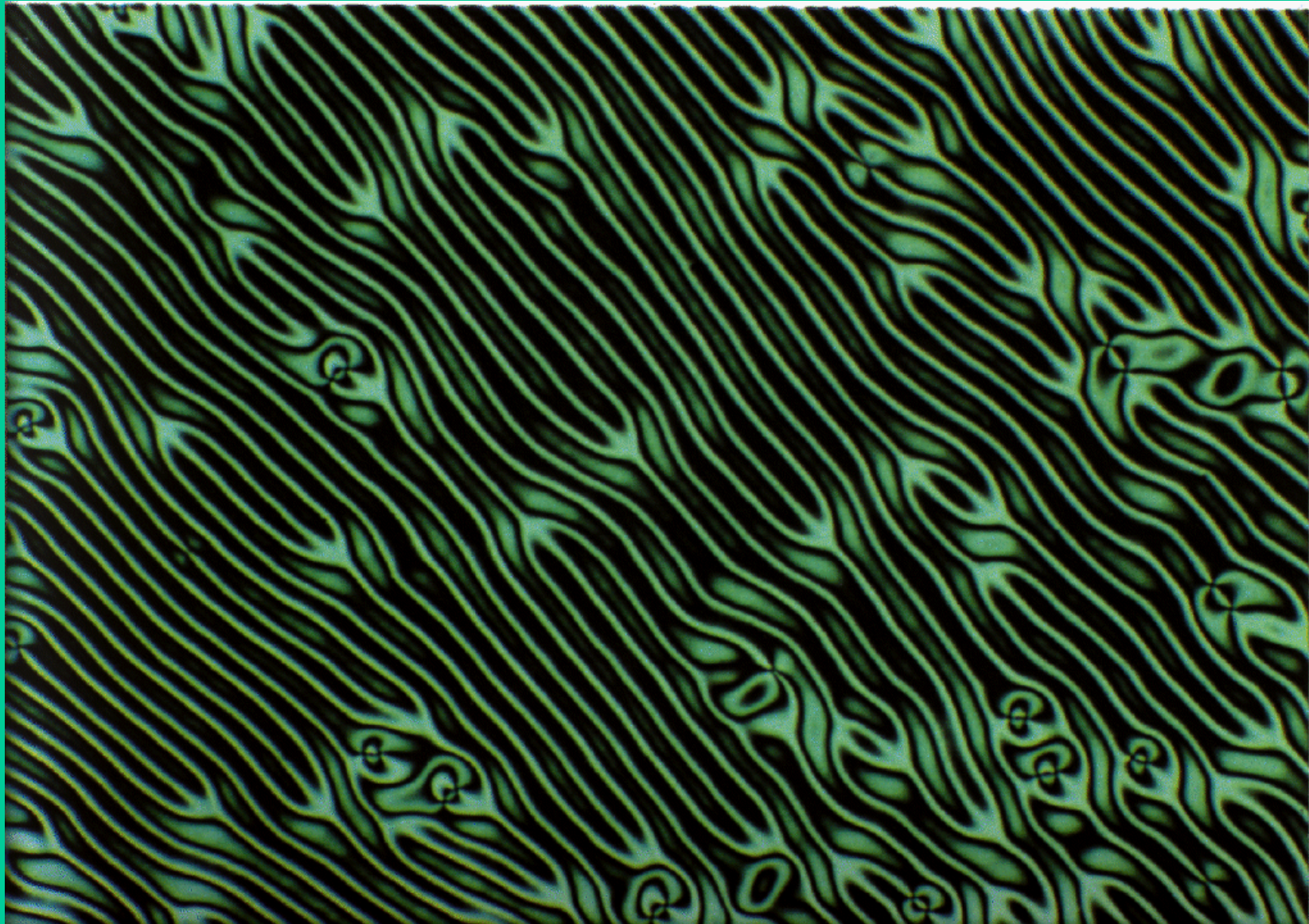
## Polarization Microscope Pictures of Liquid Crystals

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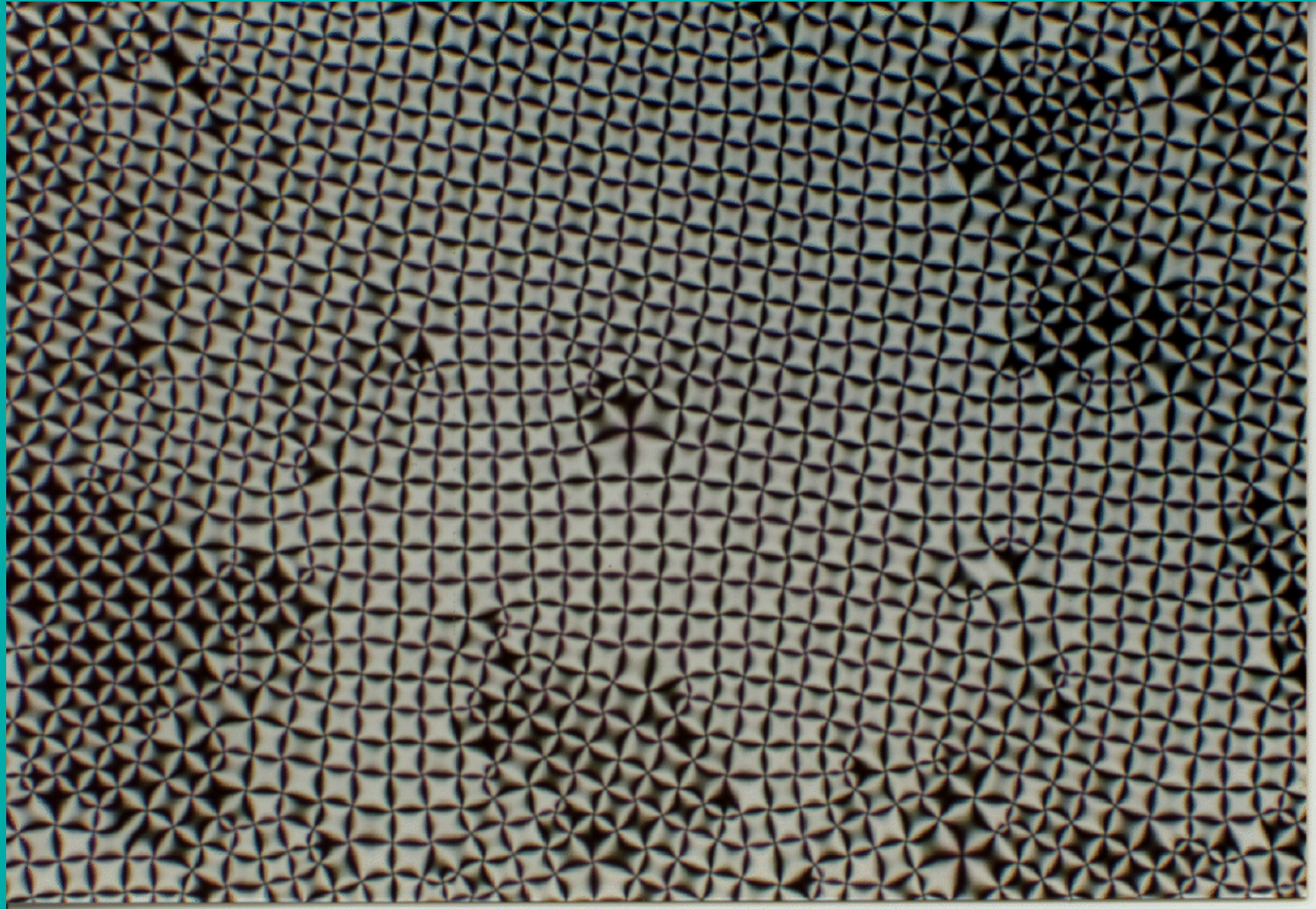
<http://www.lci.kent.edu/polmicpic.html>



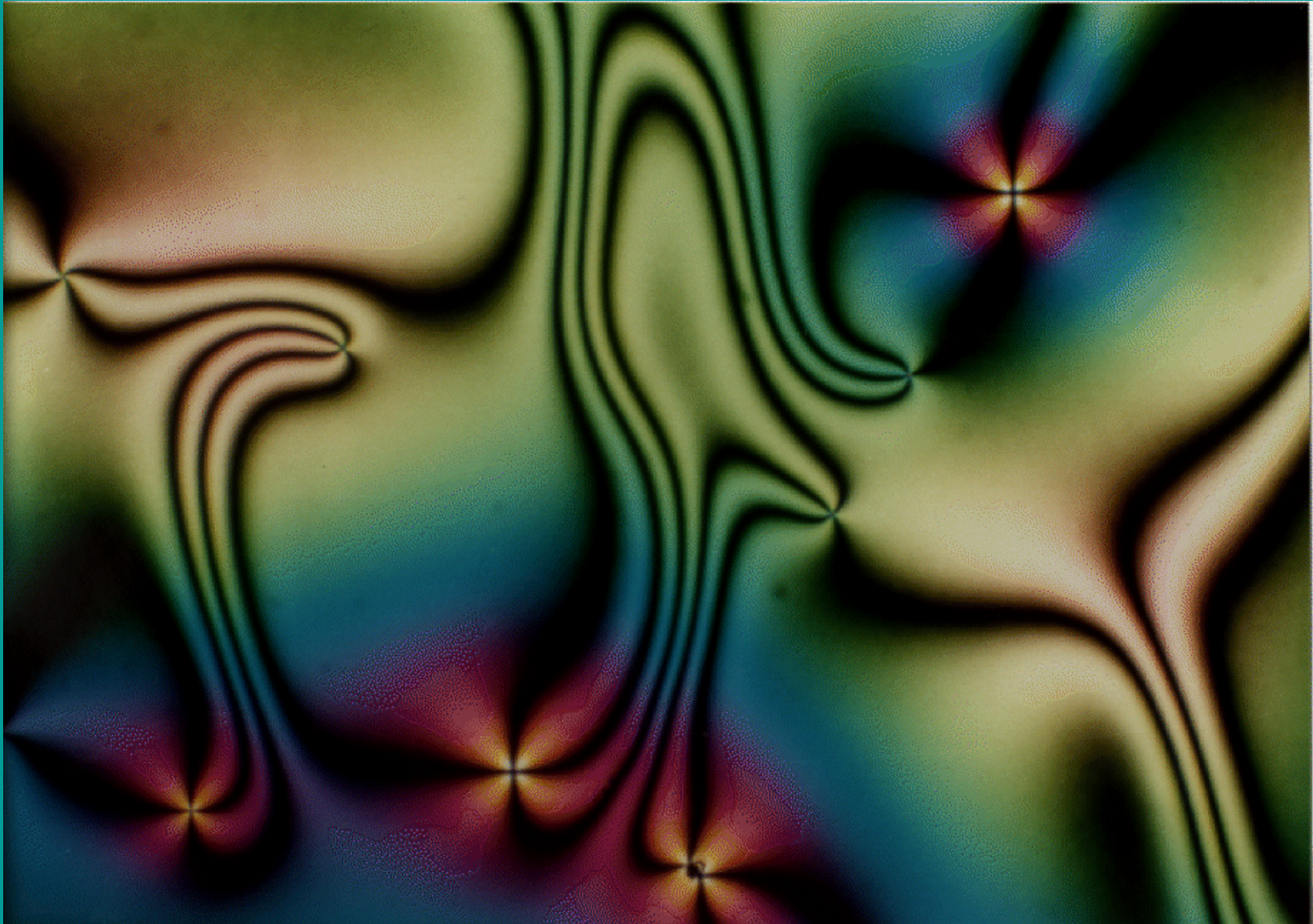
## Thin Nematic Layer on Isotropic Substrate



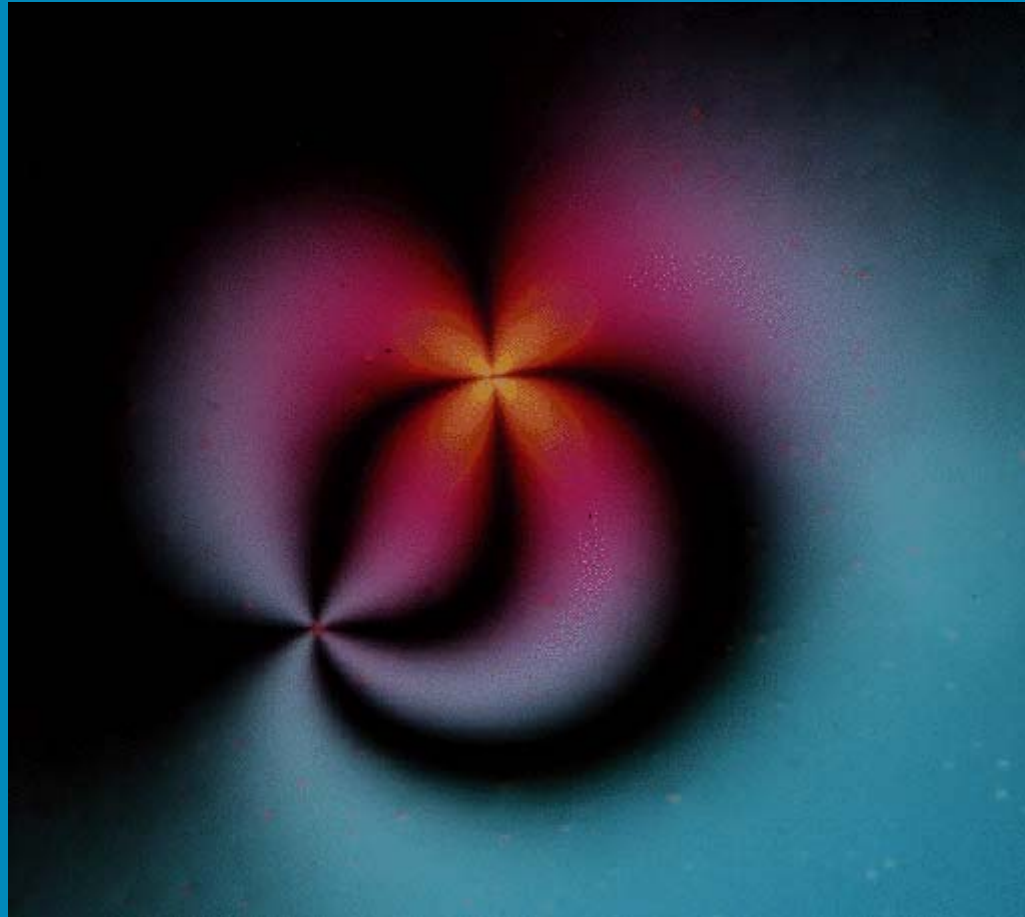
## Thin Nematic Layer on Isotropic Substrate



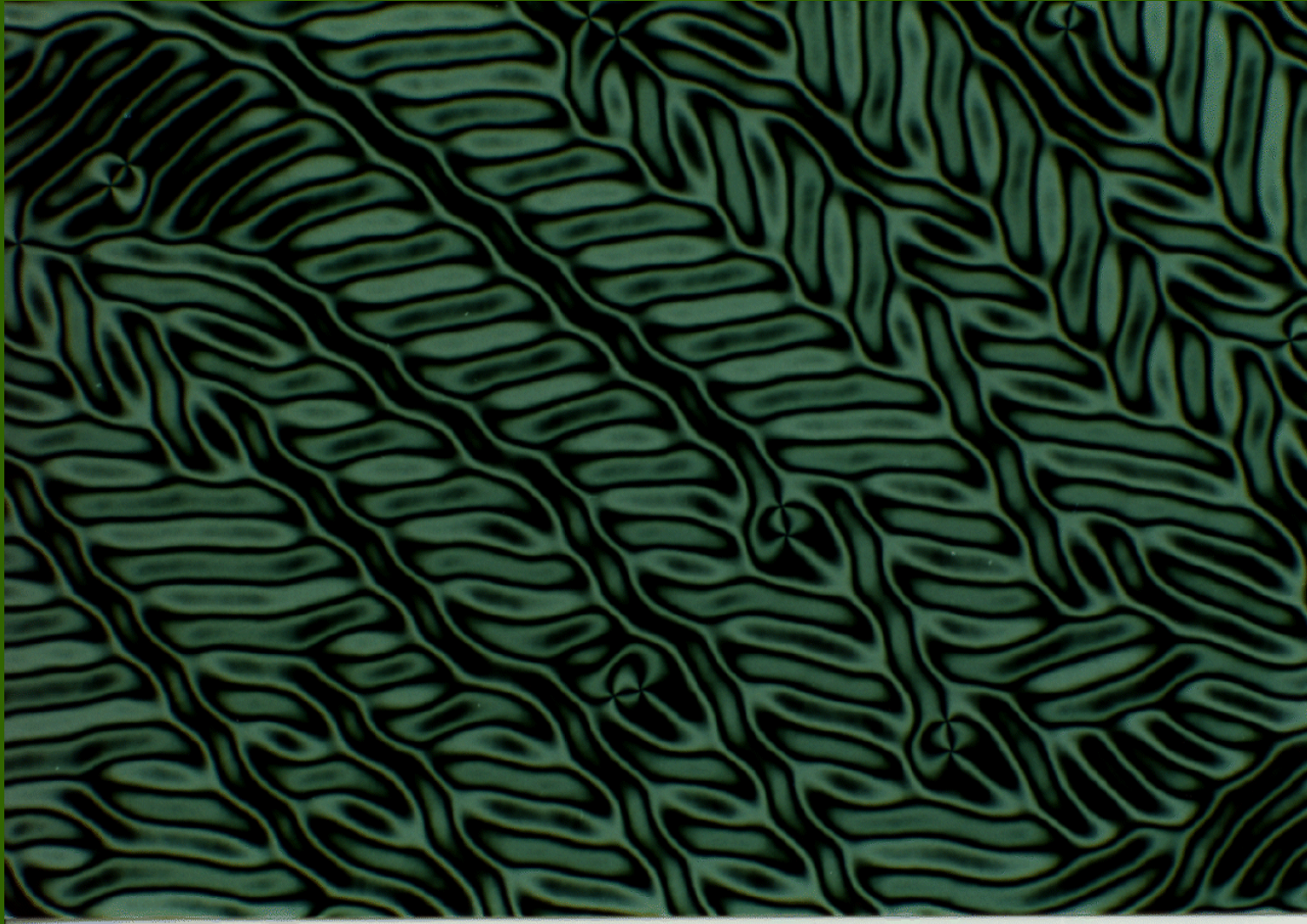
## Point Defects (Schlieren Texture of Nematic Film)



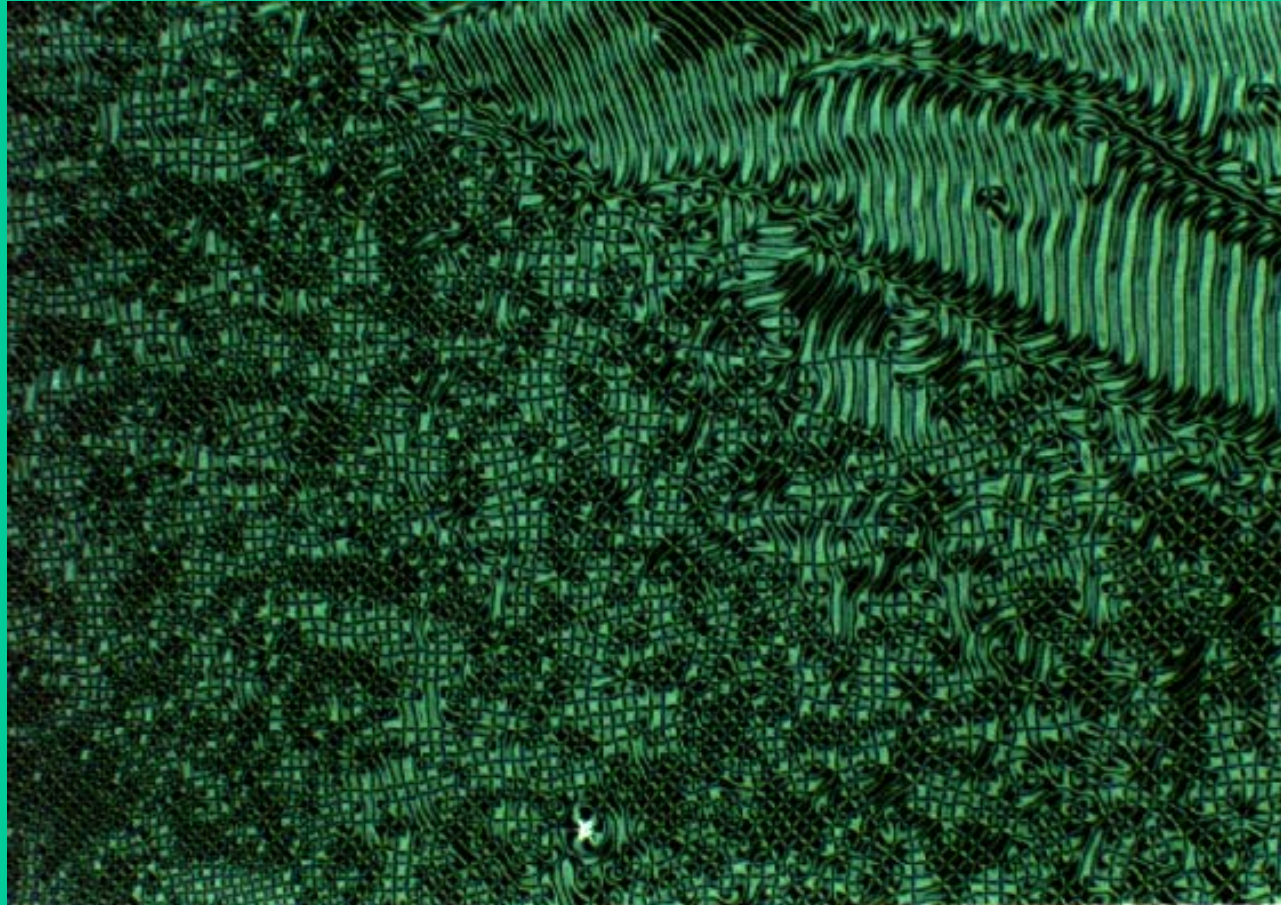
## A Pair of Point Defects



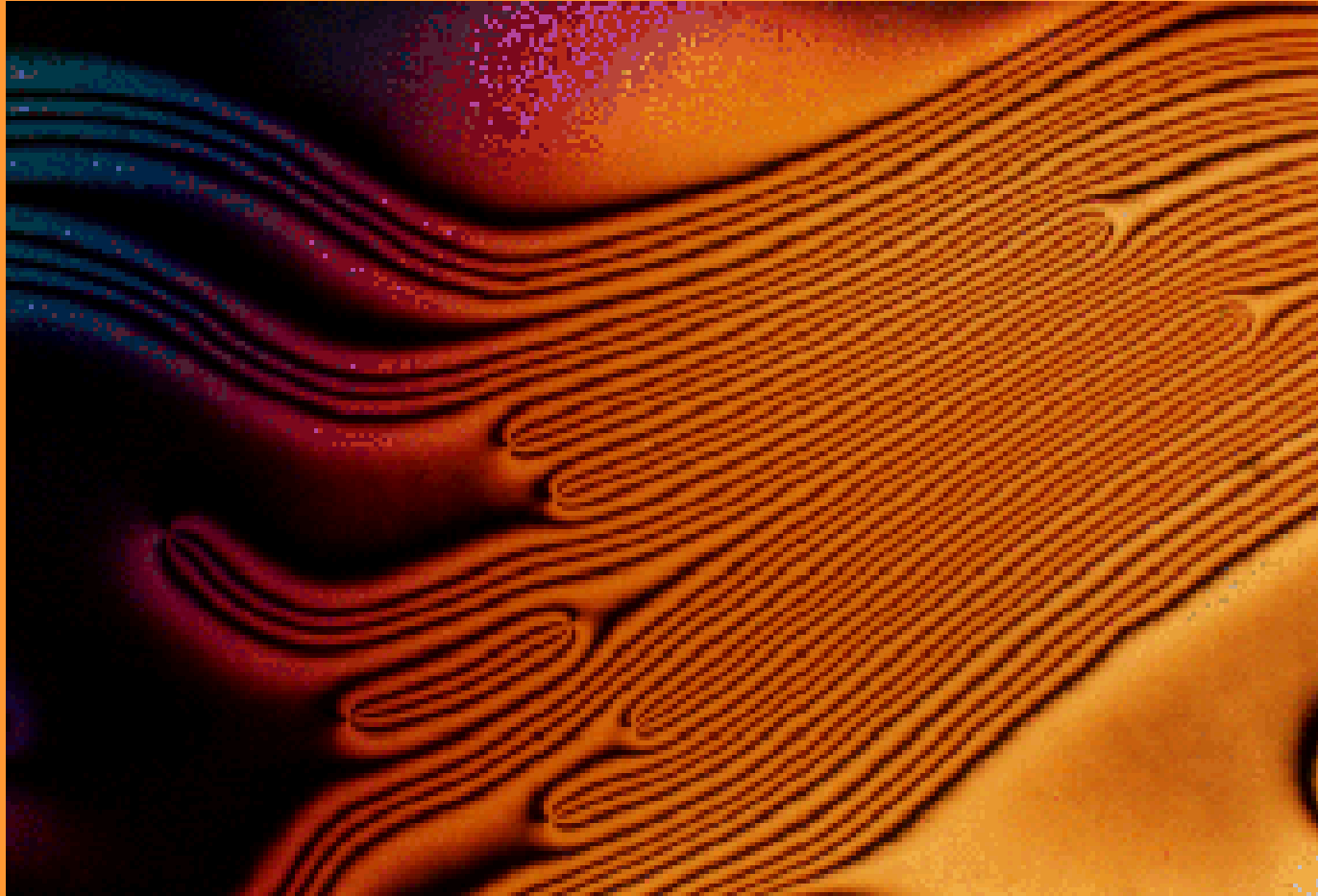
# Thin Nematic Layer on Isotropic Substrate



## Thin Nematic Layer on Isotropic Substrate

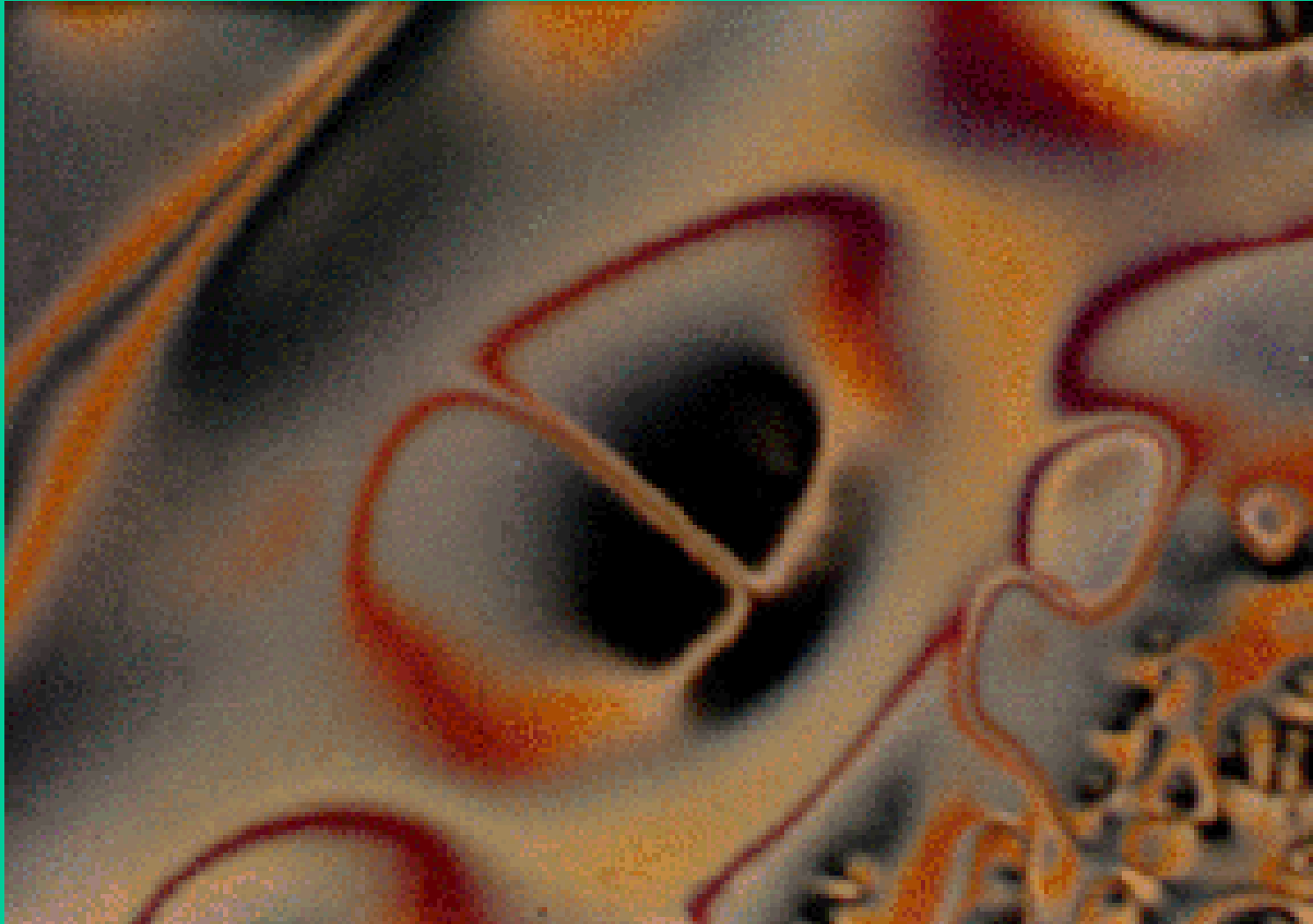


# Wall Defects



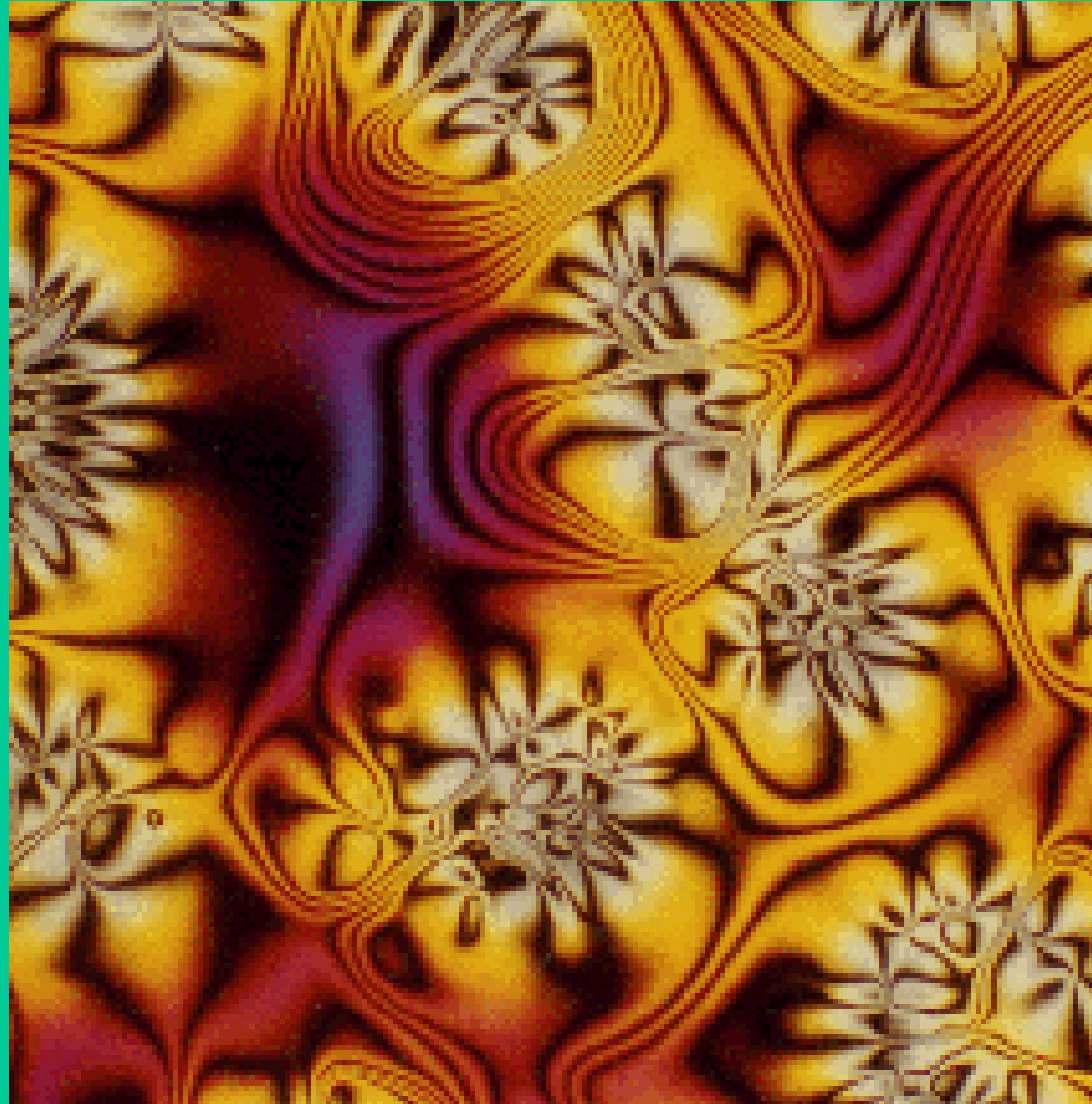


## Hybrid Aligned Nematic Film

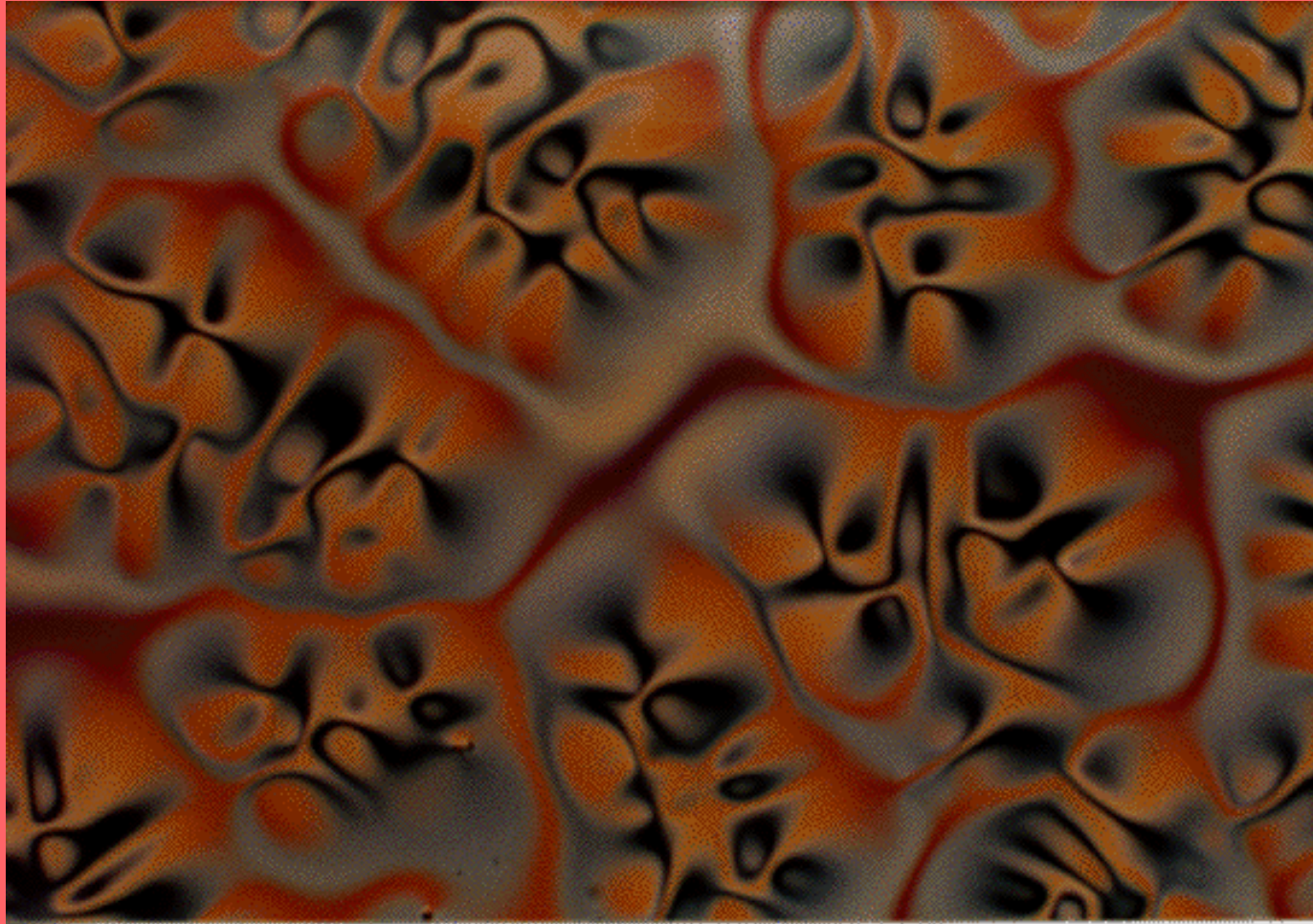


## Hybrid Aligned Nematic Film

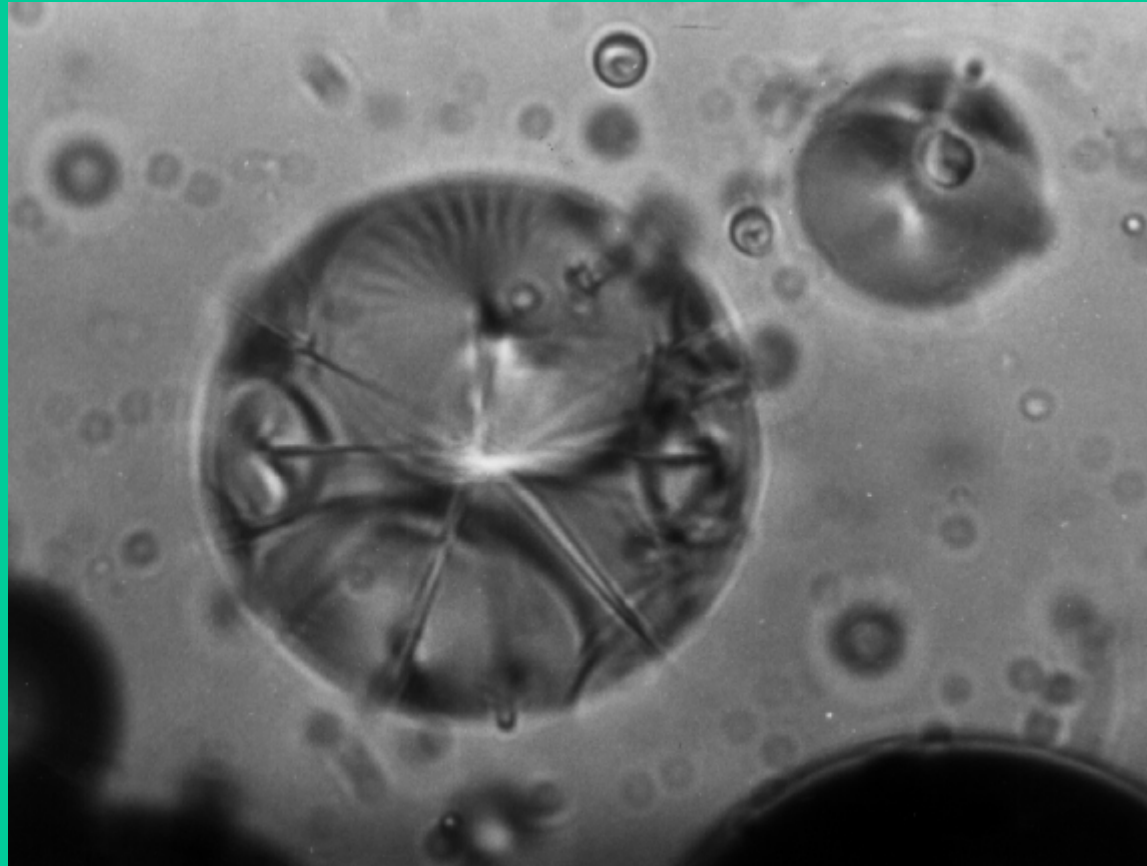




## Hybrid Aligned Nematic Film

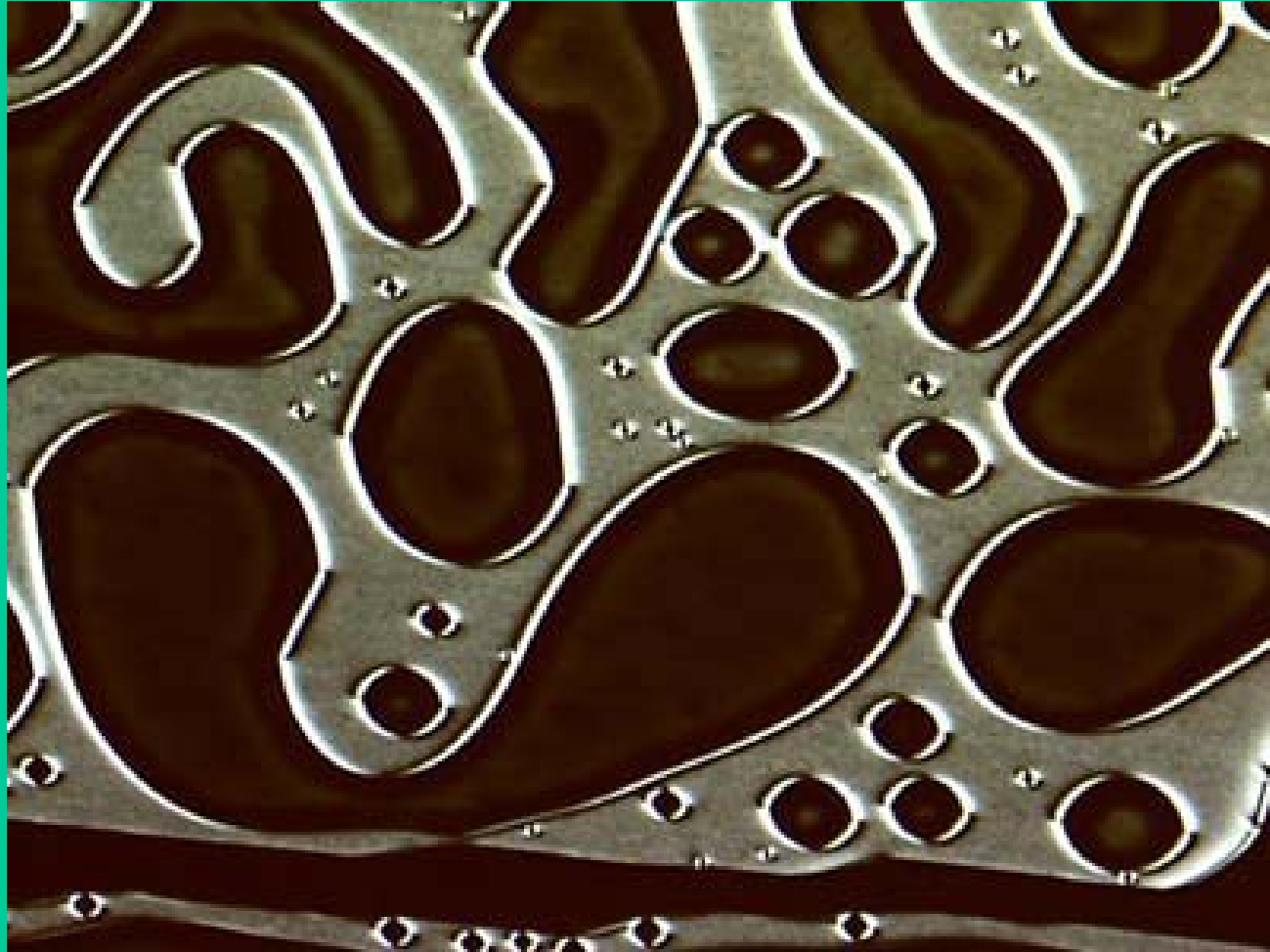


## Smectic A Droplet Suspended in Isotropic Matrix



**Polarizing-microscopy texture of a lyotropic chromonic liquid crystal between two glass plates (gap thickness 10 micron). The nematic liquid crystal phase is formed by a water solution of disodium cromoglycate, an antiasthmatic drug, also known under the trade name INTAL. The perfect alignment of director is distorted by air bubbles trapped in the liquid crystal matrix. Uncrossed polarizers, the angle between the polarizer and analyzer is 70 degrees.**





## Three Images:

**Polarizing-microscopy texture of a lyotropic chromonic liquid crystal between two glass plates (gap thickness 10 micron). The nematic liquid crystal phase is formed by a water solution of disodium cromoglycate, an antiasthmatic drug, also known under the trade name INTAL. The director is uniformly aligned along the direction of light polarization. The perfect alignment of director is distorted by air bubbles trapped in the liquid crystal matrix. Under the microscope, the dark domains of uniform liquid crystal and air bubbles are separated by bright birefringent boundaries with strongly distorted director. Crossed polarizer and analyzer.**





