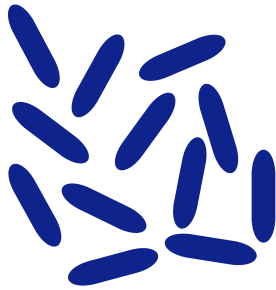


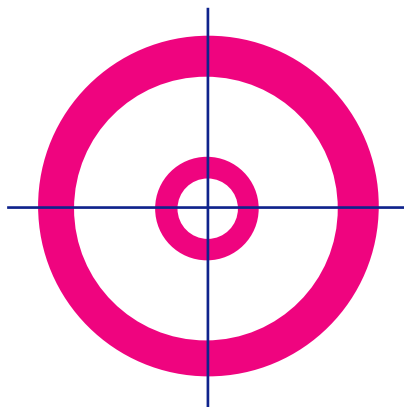
Liquid Crystals

Decreasing Temperature →

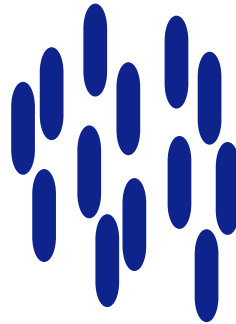
Isotropic



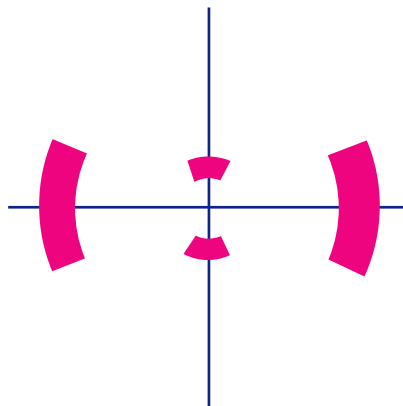
No positional order
No orientational order



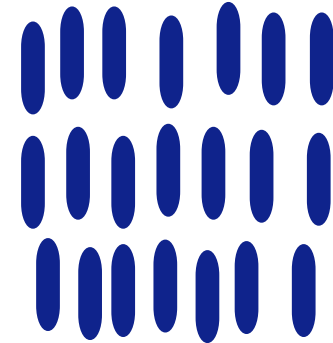
Nematic



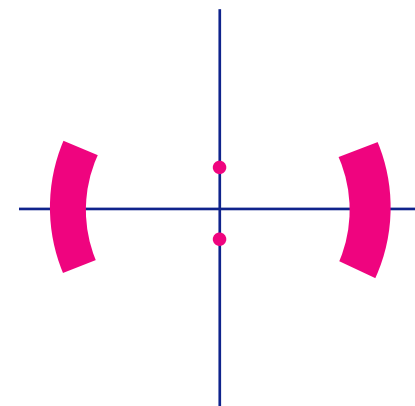
No positional order
Orientational order



Smectic

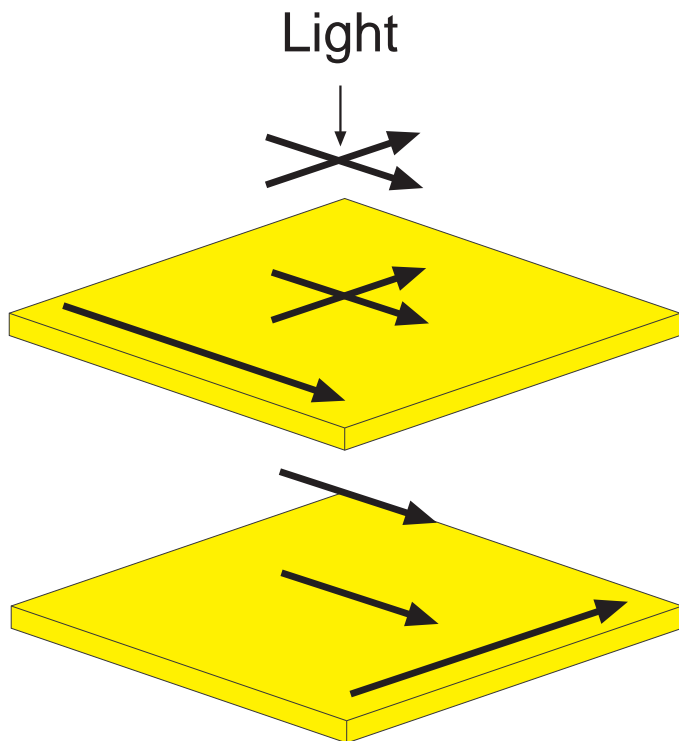


Quasi one dimensional
positional order
Orientational order



Polarizers

Crossed Polarizers



Visualize defects in liquid crystals
Phase transitions
Sunglasses



Long rod-like molecule
Birefringent
(2 optical axes)

Liquid Crystal Display

