Text for Home pictures:

C16MA:

**Liquid Crystalline Surfactant** (Cal poly green color)

Amphiphilic surfactants form ordered lyotropic liquid crystalline phases when the concentration is over a critical value.

Coil\_rod transition:

**Time-Dependent Chromism of A Conjugated Polymer**

A conjugated polymer exhibits time-dependent chromism in marginal solvent due to an intramolecular coil-to-rod transition

Core-shell hybrid:

**Organic-Inorganic Core-Shell Hybrids**

High resolution TEM reveals core-shell structures of ZnO nanowires grafted by side-functionalized polythiophene.

Crack spherulite:

**Polymer Spherulite**

A semicrystalline biopolymer displays spherulite structures with cracks under polarized optical microscope.

Double Layer:

**Graphene-Induced Polymer Transcrystallization**

A semicrystalline polymer shows ordered crystals around a single graphene fiber due to strong interfacial interactions.

GO dried:

**Cellular Structures of Graphene Oxide**

Graphene oxide sheets form cellular structures during drop drying due to shear flow.

Graphene pattern:

**Spider Webs of Graphene Oxide**

Graphene oxide sheets form spider web patterns during drop drying due to local nematic order.

Hexagnal lc:

**Hexagonal Liquid Crystal**

A hexagonal liquid crystal exhibits focal conic textures under polarized optical microscope.

LC texture:

**Lyotropic Liquid Crystals**

A lyotropic liquid crystal forms ordered smectic liquid crystalline phases when the concentration is over a critical value.

Microfluidics:

**Liquid Crystal Microfluidics of Graphene Oxide**

Graphene oxide liquid crystals flow in the microchannel and form unique patterns due to liquid crystal director orientation.