

Abstract Submitted
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Interaction between lyotropic chromonic liquid crystals and polymers XUXIA YAO, JUNG PARK, MOHAN SRINIVASARAO — Lyotropic chromonic liquid crystals (LCLCs) consist of various dyes, drugs, etc., so their importance is self-evident. The interaction of chromonic molecules and polymers is involved in their real applications, such as the dyeing process of fibers, textiles and food, and the functionalization of drugs in vivo. In our research, polymer dispersed LCLC droplets and polymer coated LCLC cells have been fabricated. Effect of interaction was observed by optical texture of LCLCs, as the different polymers induce different director configuration of LCLCs. A textile dye-Benzopurpurine 4B, food dye-Sunset Yellow FCF, and drug-Disodium Cromoglycate mixed with water soluble polymers, proteins and textile polymers have been all studied and compared.

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