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Dynamics of the Growth of Twist Fingers in Cholesteric Liquid Crystals CLINTON BRAGANZA, Kent State University, DENG-KE YANG, Kent State University — Cholesteric liquid crystals can be switched to the homeotropic state, where the helical structure is unwound, by externally applied fields higher than a threshold. When the field is reduced below the threshold, the helical structure is restored by nucleation of twist fingers from the homeotropic state. We studied the structure of the twist fingers and their evolution. We observed that the fingers grew with a constant speed which is determined by the field and the cell thickness.

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