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Advanced Liquid Crystal Materials: From Tunable Photonics to Solar Energy

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2:15 p.m.

101 Goergen Hall

Liquid crystals (LCs) represent a fascinating state of matter which combines order and mobility on a molecular and supermolecular level. The unique combination of order and mobility results in that LC is typically “soft” and responds easily to external stimuli. The responsive nature and diversity of LCs provide tremendous opportunities as well as challenges for insights in fundamental science, and opens the door to various applications. Conventional nematic LCs have become the quintessential materials of LC displays. With the LC displays ubiquitous in our daily life, the research and development of LCs are moving rapidly beyond display applications and evolving into entirely new and fascinating scientific frontiers. In this talk, I will focus on our recent progress on advanced liquid crystal materials: from tunable photonics to solar energy.

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