

Abstract Submitted
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Blue Phase Mixtures of Bent-Core Liquid Crystals and Chiral Dopants¹ STEFANIE TAUSHANOFF, Liquid Crystal Institute, Kent State University, KHOA VAN LE, Department of Organic and Polymeric Materials, Tokyo Institute of Technology, ROBERT TWIEG, Department of Chemistry, Kent State University, HIDEO TAKEZOE, Department of Organic and Polymeric Materials, Tokyo Institute of Technology, ANTAL JAKLI, Liquid Crystal Institute, Kent State University — Stable blue phase materials are made using nematogenic bent-core liquid crystals doped with a high twisting power chiral material. Studies show the existence of stable BPIII (blue fog) phase in a relatively wide 10-20 ° C temperature range. Polarizing optical microscopy, optical rotation and electro-optical studies were used to characterize the material.

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