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Introduction

The 2010 SPIE Photonics West conference on Emerging Liquid Crystal Technologies V addresses current issues in liquid crystal materials, displays, devices and applications. The scope of the conference is extremely broad, especially with a featured plenary presentation on resonantly pumped optical Kerr nonlinearity and many frontier topics including the nanoparticles self-assembly, dispersion and manipulation, spatial light modulators, bio-active, bio-inspired materials and applications, new materials and substrates, polymer-stabilized liquid crystal displays, dye-doped devices, and holography and holographically formed polymer-dispersed liquid crystals. Furthermore, the cutting-edge works of liquid crystal in photonic systems such as emissive, headmount and projection displays, 3D displays, nonlinear optics and lasing represent the unique feature of the conference.

This conference provides a platform for leading principle investigators to present unpublished or the latest important results in a broad spectrum and enlightening discussion and idea exchange on the issues still in debate. The conference is particularly programmed and scheduled with ample time for presentation and discussion as well as poster presentations. Invited speakers representing both academia and industry come from a wide range of disciplines including, materials science, chemistry, physics and engineering. In addition, the group of participants also includes a good number of contributed oral presentations and poster papers which fosters the excitement of brain storming.

Liang-Chy Chien