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San Diego, California, USA



Conference OP211

Liquid Crystals XXVII

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Abstract Due: 8 March 2023

Author Notification: 15 May 2023

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Liquid crystals in their various mesophases are technologically important electro-optic materials. They possess many unique and useful physical and optical properties and are widely used in various optoelectronic display, beam/image, and optical information processing systems, with response times ranging from milli-, through micro-, nano- to pico- and femto-seconds, covering a wide spectral range from near UV to infrared. In recent years, innovation in nanofabrication and development of plasmonic nanostructures have also led to the emergence of liquid crystalline metamaterials and metasurfaces that possess emergent functionalities and properties that hold high promises for applications in advanced optical and photonic devices/systems.

This conference provides a forum for presentations of research results on all aspects of liquid crystal material and optical sciences and technologies. The emphasis is on new, novel, or unique liquid crystalline materials and other soft matters, optical properties and phenomena, and their applications in display, information, and image processing systems, electro-optics and nonlinear optics.

Papers are solicited from the following and related topics:

- new liquid crystalline materials, soft matters and complex fluids, possessing large and broadband birefringence, ferroelectricity, chirality and other characteristics suitable for advanced electro-optical applications
- new optical and electro-optical processes and phenomena of fundamental or applied significance

- advance LC display science and technologies, optical alignment, holography, storage, and switching materials, processes, and devices
- liquid crystal incorporating nano-particulate and nanostructures; tunable metamaterials and metasurfaces
- nonlinear optics: materials, phenomena, and applications
- bio-photonics and sensor, ultrafast pulse modulations, beam and phase front manipulations.

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