

## Tentative Outline

### Special Thematic Issue for Current Organic Synthesis (COS)

#### Liquid Crystals: Synthesis, Characterization and its Applications

*Guest Editor: Prof. Gurumurthy Hegde, Centre for Nano-materials and Displays, B.M.S. College of Engineering, Bull Temple Road, Basavanagudi, Bengaluru, 560019, India*

• Scope of the Thematic Issue: Liquid crystals are the fascinating states of matter has been studied for several years and interest towards this exciting materials is always in an upward trend. Various methods, different strategies, new phases, new applications, new way of characterizing them makes these materials very promising. Due to its applications in various fields, liquid crystal research always hot topic of research. It has been expanded from displays to sensors to medical as well. Their unique way of tuning themselves with the application of electric, magnetic, thermal and optical fields make them the ideal materials for innovative applications. Many new kinds of liquid crystals were also synthesized in this respect and their applications were also elucidated. This thematic issue will cover some aspects of those new liquid crystals and their innovative applications. Composite mixtures of liquid crystals also discussed along with their dielectric, electro-optic behavior. New concept of photoalignment effects in ferroelectric liquid crystals were also presented in this special issue.

**Keywords:** liquid crystals, displays, photo switching, LC-Nano, dielectric, electro-optics, photo-alignment

#### Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Liquid Crystals in Nanotechnology
- Photoswitching effects
- Electro-optic effects
- Dielectric effects
- Photoalignment effects

#### Tentative titles of the articles and list of contributors:

Tentative titles of the articles and list of contributors with their names, designations, addresses and email addresses should be provided.

##### 1. Mesomeric Effects of Azobenzene Bearing Natural Product Based Molecules for Liquid Crystal Materials: An Overview

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##### 2. Chiral Polymorphic Hydrazine-based Asymmetric Liquid Crystal Trimers with Resorcinol as Linking Group

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### 3. Photoaligned ferroelectric liquid crystals: new electrooptical modes

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### 4. Design, Synthesis and structure-property relationships of quinoxaline based liquid crystals

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### 5. Low Molecular Mass Amino Acids and Peptide-Based Liquid Crystal Synthons: An Overview

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### 6. Synthesis and Liquid Crystalline Properties of Low Molecular Weight Dibenzylidene Compounds

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#### Schedule:

✧ Thematic issue submission deadline: Dec 30, 2020

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