

## Synthesis and Mesomorphic Properties of New Polyesters with Banana-shaped Mesogen

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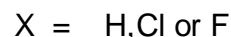
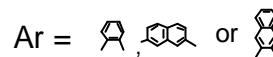
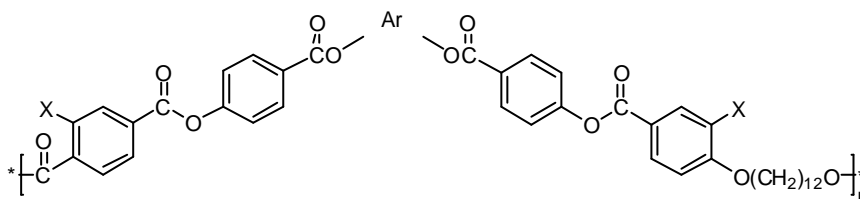
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Over the past few years, a considerable number of studies have been made on the relationship between the structure and properties for the compounds composed of bent cores such as banana-shaped molecules. On the other hand, little report has been given to polymeric materials containing banana-shaped mesogen. In this study, a series of polyesters with banana-shaped mesogen were synthesized, and their liquid crystalline properties were investigated. The central core was varied with 1,2-phenylene, 2,7-naphthylene, and 2,3-naphthylene. And the lateral substituent was varied with hydrogen, chlorine, and fluorine. The presence of a lateral substituent can enhance the ability for the polymer to form B-phase. The properties of polyesters with banana-shaped mesogen were characterized by FT/IR, NMR spectroscopy, differential scanning calorimetry, X-ray diffractometry and polarizing optical microscopy.

To be presented in the Liquid Crystal and Other Non-Emissive Display  
I would like to give poster presentation at the conference



### References

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