

Liquid-crystalline polymorphism of symmetrical azobananas: bis(4-(alkylphenyl)azophenyl) 2-fluoroisophtalates

K.Żygadło^a, Z.Galewski^b

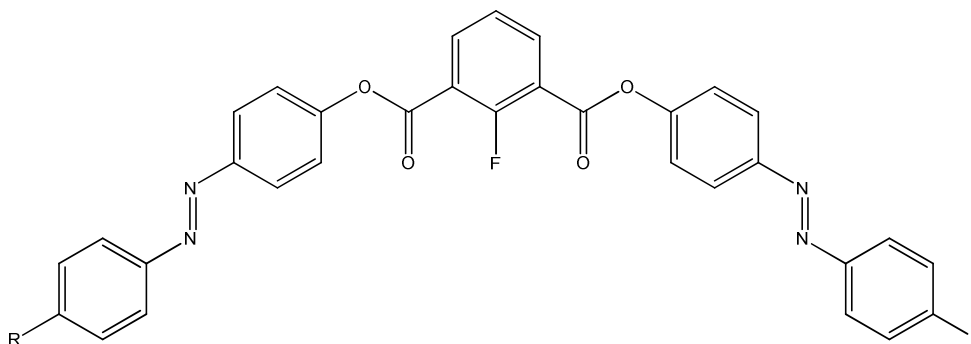
University of Wrocław, Faculty of Chemistry, Joliot-Curie 14, 50-383 Wrocław, Poland

a. e-mail: ly@eto.wchuwr.pl

b. e-mail: zg@wchuwr.pl

Ferroc properties in liquid crystals are very widely investigated. The discovery of achiral (1) compounds exhibiting ferroelectric and antiferroelectric properties has opened a new fascinating area for researchers all over the world (2).

In the literature only few derivatives of isophthalic acid have been reported (3). Here we present the synthesis of a new series of bent-core molecules containing substituted 2-fluoroisophthalic acid and azo moiety.



The preliminary tests show complex mesomorphic behavior, nematic phase and banana phases exhibiting ferroc properties. The nematic phase shows homeotropic alignment. The lower temperature B_x mesophases are very stable and show ferroc switching.

References

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