shaking of the freshly sampled sediments in laboratory conditions. The quantities of mobilized heavy metals are higher than those recorded in the water layer. The obtained results indicate that for sediments collected in summer there is characteristic a greater mobilization of heavy metals. It was found that due to the sediments desorption the content of Cu have increased in the water horizon by 2.4 times (summer), Zn – by 1.3-1.5 times (spring) and by 2.5-3 times (summer).

II-P-2. COLUMNAR MESOPHASES FROM DISCOTIC SILVER(I) CYCLOMETALATED METALLOMESOGENS

Florentina L. Chiriac[1,2], Iuliana Pasuk[3], Tudor Rosu[2], Viorel Cîrcu[2]

[1] INCD-ECOIND, Drumul Podu Dambovitei 71-73, Sect. 6, 060652 Bucharest Romania, email: laura.badea88@yahoo.com

[2] University of Bucharest, B-dul Regina Elisabeta No. 4-12, Sector 3, 030018 Bucharest, Romania

[3] National Institute of Materials Physics, Atomistilor St., No. 105 bis PO Box MG 7, 077125, Magurele, Romania

Abstract

A series of liquid crystals have been synthesized and studied. Structural characterization of the compounds was done by IR and ^{1}H-NMR spectroscopy. The liquid crystalline properties of these molecules were investigated using polarized light optical microscopy (POM), differential scanning calorimetry (DSC) and powder X-ray diffraction. The mesophase type was assigned based on typical spherulitic texture seen by POM. The Silver(I) complexes all display photoluminescence and are of interest for electrooptical applications.

Keywords: *Optical properties, mesophase, liquid crystals*

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