The three compounds now under investigation are: (1) 5, 7, 12, 14-hexamethyl-1, 8, 11-tetraaza-cyclotetradeca-4, 14-diene (II) coordination compounds with mesomorphic properties having mesomorphic properties constitute a new class of materials which can find practical applications. Going on with our studies on such compounds (M.Ghedini, N. Longeri and R.Bartolino, Mol. Cryst. Liq. Cryst., 269, 1984) we present here an investigation on the copper (II) coordination compounds whose general formula is \((\text{Cu}_n\text{H}_{2n+1})(\text{Cu}_m\text{H}_{2m+1})(\text{Cu}_1\text{H}_3\text{N}_2 \text{NO}_2)_{2}\) Cu(II). In particular we have extensively characterized the complex \((\text{Cu}_6\text{H}_9\text{N}_2\text{O}_4\text{Cu})\), corresponding to \(n=4\), and \(m=12\), by elemental analysis, infrared spectroscopy, optical microscopy, differential thermal analysis and x-ray diffraction.

**Elemental analyses.**

Calc.: C\% 74.35; H\% 9.03; N\% 2.99. Found: C\% 74.40; H\% 9.05; N\% 2.86.

**Thermal behaviour (°C), textures and x-ray diffraction.**

Solid 1 81  
Solid 2 117  S\(_A\) 141  I

In particular x-ray analyses show an unusual diffuse peak in the pattern of the solid 2. Moreover the data suggest an interdigitation in the S\(_A\) mesophase.