

New 2+2, 3+3 and 4+4 macrocycles derived from 1,2-diaminocyclohexane and 2,6-diformylpyridine.

Autorzy

Janusz Gregoliński

Jerzy Lisowski

Tadeusz Lis

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Streszczenie

Two new Schiff base macrocycles – a 4+4 condensation product and a meso-type 2+2 condensation product – were obtained in a reaction of *trans*-1,2-diaminocyclohexane and 2,6-diformylpyridine. Reduction of these compounds led to the corresponding 4+4 and 2+2 macrocyclic amines. The macrocycles were characterised by NMR spectroscopy and electrospray mass spectrometry. The symmetry and stereochemistry of these macrocycles, as well as of new 3+3 and 4+4 diastereomers identified in solution, has been established. X-Ray structures of the 2+2 and 4+4 Schiff base macrocycles confirm the configurations determined on the basis of spectroscopic investigations. The crystal structures reveal that the centres of the square-shaped 4+4 macrocycles form channels as a result of columnar stacking.

Adres publiczny

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