Crystal and Molecular Structure of (*trans*-3,4-Diamino-2,2,6,6-tetramethylpiperidine-1-oxyl-N^3,N^4)(oxalato-*O*,*O*')platinum(II) Dihydrate

A. N. Chekhlov

Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow oblast, Russia

Received December 16, 2004

Abstract — The crystal and molecular structure of (*trans*-3,4-diamino-2,2,6,6-tetramethylpiperidine-1-oxyl-N^3,N^4)(oxalato-*O*,*O*')platinum(II) dihydrate was studied by single crystal X-ray diffraction. The crystals belong to the monoclinic system; *a* 8.261, *b* 13.129, *c* 15.224 Å; β 104.29°, *Z* 4, space group $P2_1/n$. The structure was solved by the direct method and refined by the full-matrix least-squares method in the anisotropic approximation to R 0.026 for all the 3660 measured unique reflections. The structure consists of individual mononuclear bischelate molecules containing two different bidentate ligands. The Pt^{2+} coordination is distorted square-planar. The complex molecules and water molecules in the crystal of **I** are linked by hydrogen bonds forming an infinite 3*D* network.