Crystal Structure of N-3-Pyridinyl-methanesulfonamide and trans-Diiodobis(N-3-pyridinyl-methanesulfonamide)platinum(II)

Nicolay I. Dodoff ^a, Richard A. Varga ^b, and Dimitra Kovala-Demertzi ^c

451 10 Ioannina, Greece

Reprint requests to Dr. N. I. Dodoff. E-mail: dodoff@obzor.bio21.bas.bg

Z. Naturforsch. **59b**, 1070 – 1076 (2004); received April 20, 2004

Crystals of *N*-3-pyridinyl-methanesulfonamide, PMSA (monoclinic, $P2_1/c$, a = 5.6436(7), b = 33.875(4), c = 8.3356(10) Å, $\beta = 96.885(2)^{\circ}$) contain two non-equivalent molecules differing considerably in their conformations. The structure is stabilized by a network of hydrogen bonds, the strongest one being between the pyridine N atom and the sulfonamide H atom. Crystals of *trans*-[Pt(PMSA)₂I₂] (monoclinic, C2/c, a = 22.912(2), b = 5.2397(5), c = 17.3376(17) Å, $\beta = 92.631(2)^{\circ}$) contain centrosymmetric complex molecules in which PMSA is coordinated *via* the pyridine N atom, and Pt has a planar coordination. A system of hydrogen bonds of the types N-H···O and C-H···O links the complex molecules.

Key words: N-3-Pyridinyl-methanesulfonamide, Platinum(II), Crystal Structure

^a Institute of Molecular Biology, Bulgarian Academy of Sciences,

Acad. G. Bonchev Street, Block 21, 1113 Sofia, Bulgaria

b National Centre for X-Ray Diffraction, Department of Inorganic Chemistry, Faculty of Chemistry

and Chemical Engineering, Babeş-Bolyai University, RO-400028 Cluj-Napoca, Romania ^c Section of Inorganic and Analytical Chemistry, Department of Chemistry, University of Ioannina,