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Crystal structure analysis and synthesis of Di-iodobis(3- methylpyridine)mercury(II)

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Abstract : Single crystals of Di-iodobis(3-methylpyridine)mercury(II) were grown by slow evaporation method and X-ray diffraction analysis reveals monoclinic $P21/n$ space group with unit cell dimensions of $a = 9.569(5) \text{ \AA}$, $b = 15.242(5) \text{ \AA}$, $c = 11.380(5) \text{ \AA}$ and $\beta = 100.966(5)^\circ$. The geometry surrounded by two I atoms in the equatorial plane. The benzene rings are planar and make a dihedral angle of $82.4(2)^\circ$. Crystal data were collected using BRUKER SMART APEX II CCD X-ray diffractometer. The structure was solved by direct method and refined on F^2 by full-matrix least-squares procedure to the final R1 of 0.024 using SHELXL programs.

Key Words: Methylpyridine, Mercury(II), Crystal packing and Crystal structure.

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