



Synthesis, Characterization Studies of a Novel Indole Derivative: 3,3'-[(5-methylthiophen-2-yl) methanediyl]bis (1*H*-indole)

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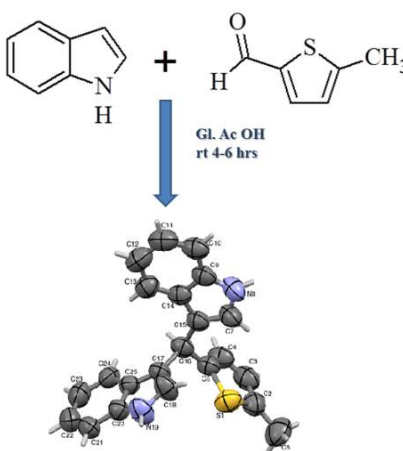
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Accepted on 10th February, 2018

ABSTRACT

The title compound 3, 3'-[(5-methylthiophen-2-yl) methanediyl]bis(1*H*-indole) was synthesized and the resultant compound was crystallized using ethanol by slow evaporation technique. The compound was characterized by FTIR, ¹H NMR and finally the structure was confirmed by single crystal X-ray diffraction studies. The title compound crystallizes in monoclinic *C*₂/*c* spacegroup with cell parameters *a*=26.282(4) Å, *b*=10.3274(14) Å, *c*=17.671(2) Å, β=130.254(8) and *Z*= 8. The indole rings are orthogonal to each other.

Graphical Abstract



Keywords: 1*H*-Indoles; Crystal structure; FTIR spectrum; Orthogonal conformation.