

The first example of platinum(II) assisted coupling of acetonitrile with tetrazole moiety

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Bistetrazoles are a versatile group of ligands capable of various modes of coordination. 1,2-Bis(1-methyltetrazol-5-yl)hydrazine **1**, a new functionally substituted bistetrazole, was synthesized by reduction of bis(1-methyltetrazol-5-yl)diazene. The reaction of **1** with K_2PtCl_6 presents a redox process leading to the formation of amorphous platinum(II) complex **2** which recrystallization from acetonitrile results in the first reaction of metal-mediated tetrazole-nitrile coupling giving crystalline azametallacycle **3**. Complex **3** was characterized by UV-*vis* and IR spectroscopy, thermal and X-ray structure analyses.

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