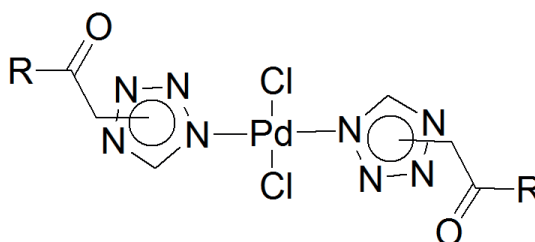


SYNTHESIS, STRUCTURE AND BIOLOGICAL ACTIVITY OF Pd(II) COMPLEXES CONTAINING DERIVATIVES OF TETRAZOLYLACETIC ACIDS DERIVATIVES AS LIGANDS

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Coordination compounds of platinum group metals containing nitrogen ligands are traditionally used in the treatment of cancer. It is known that the DNA molecule is the main biological target for these type anticancer drugs. The development of new highly effective coordination compounds with polynitrogen heterocycle ligands is an urgent task of medical chemistry.^{1,2}



Here we have synthesized several series of Pd(II) complexes containing tetrazol-1-yl-, tetrazol-2-yl- and tetrazol-5-ylacetic acids as ligands. The composition and structure of the complexes were proved by means of HRMS, IR and ¹H, ¹³C NMR spectroscopies, as well as X-ray analysis. The efficiency of the interaction of these compounds with DNA was investigated, and a hypothesis for the mechanism of their biological action was proposed.

References

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2. Ostrovskii, V.A.; Popova, E.A.; Trifonov, R.E. *Adv. Heterocycl. Chem.* 2017, 123, 1.

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