

Poster Presentation

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A novel isomers of 1,3,4-thiadiazole derivatives

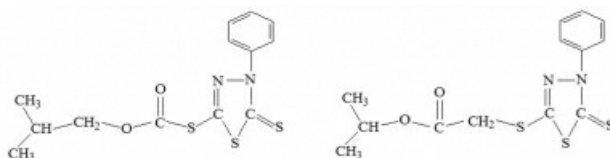
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Heterocyclic nucleus 1,3,4-thiadiazole constitutes an important class of compounds for new drug development. The synthesis of novel thiadiazole derivatives and investigation of their chemical and biological behavior have gained more importance in recent decades. During the recent years, there has been intense investigation of different classes of thiadiazole compounds, many of which possess extensive biological activities.

We will discuss a novel extracted isomers of 1,3,4-thiadiazoles derivatives and their possibilities for pharmaceutical and industrial importance. The process of extraction brought to the formation isomers that differ chemically and on crystallographic parameters. The new derivatives of 1,3,4-thiadiazole, isomers with brutto-formula C₁₃H₁₄N₂O₂S₃, crystallize in the triclinic and monoclinic systems, space groups P-1 and P2₁/c, respectively. Inter- and intramolecular hydrogen bonds help to stabilize the structures. Both hydrogen bonds networks can be described using graph set theory. They will be discussed in detail. The present review highlights the recently synthesized derivatives of 1,3,4-thiadiazole possessing important biological activities. This project is funding in the framework of grant A9-T-050-Uzbekistan on the synthese and study of the antitumant activity of new compounds.



Keywords: [thiadiazole derivatives](#), [biological activity](#), [hydrogen bond](#)