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Organiskās ķīmijas sekcija

SYNTHESIS OF TETRAZOLO[1,5-C]QUINAZOLINE DERIVATIVES

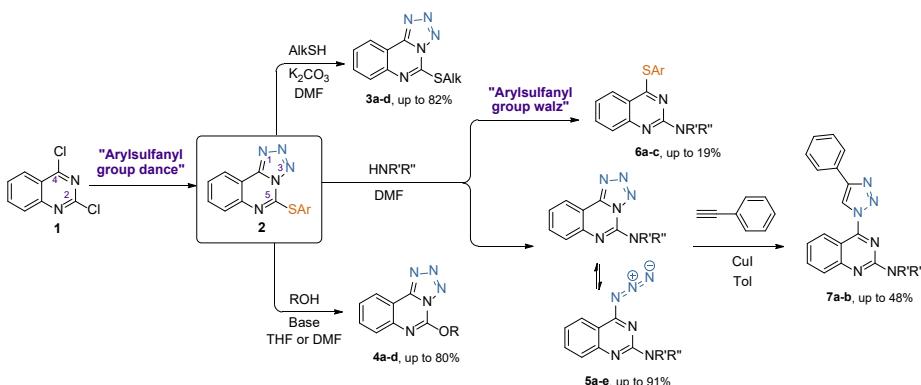
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Quinazoline core is a privileged molecular scaffold, which has already been proven as an effective tool in the treatment of different types of cancer. [1] Our group recently reported unorthodox arylsulfanyl group dance around quinazoline core, leading to novel 5(arylthio)tetrazolo[1,5-c]quinazolines **2**. [2] This paves a path for the synthesis of modified compounds **3**, **4** and **5** that, otherwise requiring complex synthetic approaches, can be easily acquired with good to excellent yields from compound **2**.



Most of these tetrazoloquinazoline derivatives exist mainly in their tetrazole tautomeric form both in a solid state and in solutions. However, some of the alkylamino derivatives **5** are observed to undergo azidoazomethine-tetrazole equilibrium that goes in line with general rules of temperature and solvent effects. [3] The presence of azide form can facilitate further modifications, for example, leading to novel fluorescent 4-triazolyl quinazoline derivatives **7**.

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