SYNTHESIS OF NOVEL THIENO[2,3-D]PYRIMIDINE DERIVATIVES

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The condensation of Gewald's amides ${\bf 1}$ with aromatic aldehydes results in the formation of compounds ${\bf 2}$, ${\bf 3}$ and ${\bf 4}$.

This work deals with the investigations of mutual transformations of compounds **2-4** and their modification through the reduction and electrophilic substitution. It was found that the alkylation of compounds **3** proceeds regeoselectively to give O-alkylated products **5**. However, the alkylation of compounds **2** results in the heterocyclization into dihydropyrimidone **6**.

The structure and composition of all the compounds obtained were confirmed by IR, ¹H NMR spectroscopy, elemental analysis. Many compounds were characterized by X-ray analysis and NOE's.