

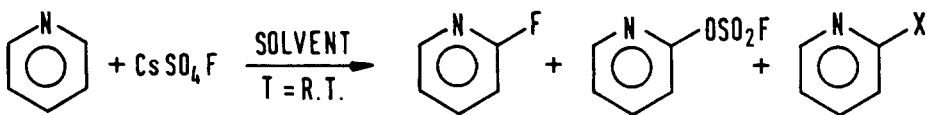
ROOM TEMPERATURE REACTIONS OF CsSO_4F WITH HETEROCYCLIC MOLECULES

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It has been already demonstrated that caesium fluoroxysulphate (CsSO_4F) reacted with various organic molecules under mild conditions, while the course of the reactions strongly depended on the structure of the organic molecule and functional groups present.

We now report our investigations on the course of the reactions of CsSO_4F with various 5-substituted 1,3-dimethyl pyrimidines in hydrophilic solvents, where vicinal 5-fluoro-6-alkoxy products were formed. Stereochemistry depends on the substituent and solvent. Pyridine readily reacted with CsSO_4F at room temperature and up to three products were formed. Products distributions and their structures depend on the solvent used, while the following products were generally present: 2-fluoropyridine, 2-Cl (in CH_2Cl_2 or CHCl_3) or 2-alkoxypyridine (in alcohols), and 2-pyridylfluorosulphonate.



SOLVENT: CH_2Cl_2 , CHCl_3 ; X = Cl

ROH; X = OR