

Synthesis of Pyridine-Thioethers via Mono- and Tricationic Pyridinium Salts

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On nucleophilic substitution with S-nucleophiles at room temperature, 1-(4-dimethylamino)-[2,3,5,6-tetrachloropyridin-4-yl]pyridinium chloride (**2**) yielded tetrachloro-4-sulfanylpyridines and 2,3,5-trichloro-4,6-disulfanylpyridines depending on the reaction conditions. Similarly, the tricationic (3,5-dichloropyridine-2,4,6-triyl)-1,1',1''-tris[4-(dimethylamino)pyridinium] trichloride **3** was reacted with S-nucleophiles to give the corresponding 3,5-trichloro-2,4,6-trisulfanylpyridines under mild conditions.

Key words: Nucleophilic Substitution, Thioethers, DMAP, Chloropyridines