ELECTROPHILIC REACTIONS OF POLYFLUOROAROMATIC IMIDOYL CHLORIDE DERIVATIVES IN THE PRESENCE OF AICI3

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Previously we have worked out methods of synthesis of polyfluoroaromatic imidoyl chloride derivatives of the general formula $Ar_f N=CCIR$ (including R=Cl), and studied their reactions with O- and N-nucleophilic agents. The present work examines electrophilic reactions of these compounds in the presence of $AlCl_3$. Polyfluoroaromatic imidoyl chlorides have been found to react with aromatic compounds at the ring carbon or functional group heteroatom of the aromatic compound. The reactions of imidoyl chlorides with compounds containing the N=C bond in the side chain yield heterocyclic derivatives.

Reaction routes and mechanisms of these transformations are discussed.