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TRIFLUOROMETHYL SUBSTITUTED TIN HETEROCYCLES – NEW BUILDING BLOCKS IN PREPARATIVE ORGANOFLUORINE CHEMISTRY

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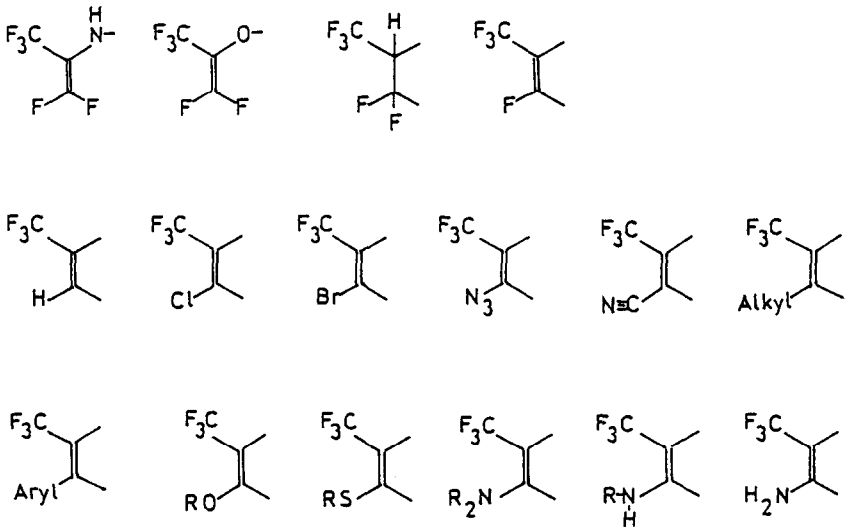
4,4-Bis(trifluoromethyl) substituted heterodienes of type $(CF_3)_2C{=}N{-}C(R^1){=}X$ (X=O,S,NR^2) react with tin(II) compounds to give [4+1] cycloadducts. The cycloaddition process causes an »Umpolung« at the carbon atom the two trifluoromethyl groups are attached to. This is the precondition for a controlled, stepwise elimination of fluoride from one of the trifluoromethyl groups. Trifluoromethyl substituted tin heterocycles therefore are useful building blocks for synthesis of fluoro and trifluoromethyl substituted organic compounds [1]. Hexafluoroacetone and the bis(trifluoromethyl) substituted heterodienes can be used as synthons for substructures such as:



1. K. Burger, K. Geith und N. Sewald, J. Fluorine Chem, in press.