Reagents for Perfluoroalkylation and Beyond

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The iodanes 1-trifluoromethyl-1,3-dihydro-3,3-dimethyl-1,2-benziodoxole (1) and 1-trifluoromethyl-1,2-benziodoxol-3-(1H)-one (2), known since 2006, have become widely used reagents for the trifluoromethylation of a large variety of substrates. The lecture will discuss the extension of the concept to reagents transfering functionalized tetrafluoroethyl groups, e.g. 3, as well the applications of trifluoromethylated derivatives such as 4.

Recent findings dealing with the development of new reagents for radical trifluoromethoxylations as well as some organotellurium chemistry related to reagents 1 and 2 shall complete the presentation.

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