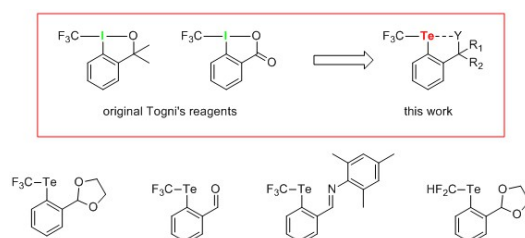


Synthesis of Hypervalent CF₃ Tellurium Compounds

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Hypervalent iodine (III) reagents are electrophilic trifluoromethylating agents commonly applied in organic syntheses. Since their introduction in 2006,^[1,2] the parent structures have been subjected to numerous modifications. However to date, the central iodine atom has been retained in each instance.^[3-5] Herein, we report for the first time a synthesis of unique compounds in which the iodine atom has formally been exchanged for tellurium. Thus, a series of CF₃ tellurium (II) species differing in the functional group coordinated to the central atom has been obtained. All products have been fully characterized using HRMS and NMR spectroscopy, including advanced ¹H¹²⁵Te and ¹⁹F¹²⁵Te correlation measurements. Furthermore, selected modifications performed after installing the CF₃ group on the tellurium atom have been successfully carried out.^[6]



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