RADICAL CHEMISTRY OF POLYMER-SUPPORTED DIAZIDOIODATE(I)

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Late-stage functionalization offers the possibility to modify natural products or drug candidates. Investigations into a general method for radical chemistry on different structures were explored using polymer-supported haloate(I) complexes.

The polystyrene supported diazidoiodate(I) was firstly described by Kirschning *et al.* in 1999.[1] It can be generated in the reaction of (diacetoxyiodo)benzene with polystyrene-bound iodide which gives polymer-bound di(acetyloxy)iodate(I) reacting with trimethylsilylazide to afford the stable, non-explosive polymer-bound analogue of iodine azide. Traditionally, polymer-supported diazidoiodate(I) was employed in *anti*-1,2-additions to alkenes.[1] Recently, we reinvestigated the properties of this class of reagents in aromatic substitutions of arenes and importantly in radical azidations. This includes benzylic positions but also unprecedented phenolic oxidation/azidation reactions and the selective oxidation of secondary alcohols.



^[1] Angew. Chem. 1999, 111, 2720-2722; Angew. Chem. Int. Ed. 1999, 38, 2594-2696.