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ORGANOMETALLIC APPROACHES TO ORGANOFLUORINE
COMPOUNDS

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Recent work in our laboratory has provided useful preparative routes to R_FMX derivatives, where $M = Zn, Cu, Cd$ and $R_F =$ perfluoroalkyl, perfluoroalkenyl, perfluoroacetylenic, and functionalized R_F groups. These R_FMX compounds are useful reagents in the preparation of perfluoroalkanes, perfluoroolefins, perfluoroacetylenes, polyfluorinated allenes and dienes, partially fluorinated esters, phosphonates and phosphonic/sulfonic acids, and perfluorinated and partially fluorinated α, β -unsaturated ketones. Illustrative examples of the application of these R_FMX reagents in preparative organofluorine chemistry will be presented.