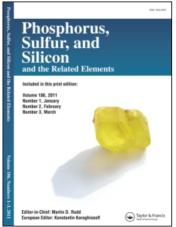
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Sterically and Electronically Stabilized Organophosphorus Compounds

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Abstract The dialkylamino groups and the methoxy group were employed in a protective group and attempts were made to prepare dithioxo- and selenoxophosphoranes.

We have been successful in stabilizing unusual phosphorus compounds in lowcoordination states by using the 2,4,6-tri-t-butylphenyl group. 1,2 Some bulky groups containing dimethylamino group were utilized in stabilizing $RP(=X)_2$ and RP(=X), where X=S or Se. The lone pair electrons in the amino group seem to stabilize the phosphorus with intramolecular coordination, which was confirmed by X-ray crystallography, ³¹P NMR, and ⁷⁷Se NMR.³ On the other hand, the methoxy group in place of amino does not lead to stabilization but rather to destabilization, activating such phosphoranes or intermediates to serve as sulfurization or selenation reagent of carbonyl compounds.4

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