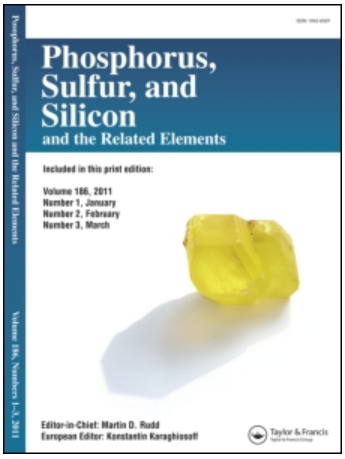


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# Synthesis and Reactivity of Aminodiphosphanes

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**To cite this Article** Güth, W. , Niecke, E. and Westermann, H.(1987) 'Synthesis and Reactivity of Aminodiphosphanes', Phosphorus, Sulfur, and Silicon and the Related Elements, 30: 3, 798
**To link to this Article: DOI:** 10.1080/03086648708079290
**URL:** http://dx.doi.org/10.1080/03086648708079290

# Synthesis and Reactivity of Aminodiphosphanes

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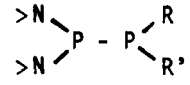
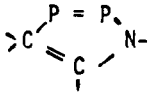
Synthetic routes to various aminodiphosphanes 1 are reported.

1 

R = N<, R' = H; R = R' = Cl, N<, $SiMe_3$

Their synthesis is performed by (i) elimination reactions of secondary diaminophosphanes, (ii) P-P coupling of silyldiaminophosphanes with phosphorus trichloride, (iii) reductive coupling of diaminochlorophosphanes with alkali metals or (iv) reaction of diaminochlorophosphanes with lithium bis(trimethylsilyl)phosphide.

In the case of 1 (R = N , R' = H) the thermal decomposition gives the novel cyclic ring-system 2, whose bonding properties will be discussed in light of u.v. and p.e.-spectroscopic measurements.

2 

Furthermore the reaction behaviour of 1 and 2 with transition metal compounds will be reported.