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Title:	Two Different Pathways in the Reduction of $[(S=)PCl(\mu-NtBu)]_2$ with Na
Authors:	Bawari, D. (/jspui/browse?type=author&value=Bawari%2C+D.) Prashanth, B. (/jspui/browse?type=author&value=Prashanth%2C+B.) Ravi, S. (/jspui/browse?type=author&value=Ravi%2C+S.) Shamasundar, K.R. (/jspui/browse?type=author&value=Shamasundar%2C+K.R.) Singh, Sanjay (/jspui/browse?type=author&value=Singh%2C+Sanjay)
Keywords:	Biradicaloids Cyclization Phosphazanes Reduction
Issue Date:	2016
Publisher:	Wiley-VCH Verlag
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Abstract:	Reduction of the cyclodiphosphazane $[(S=)CIP(\mu-NtBu)]_2$ (1) with sodium metal in refluxing toluene proceeds via two different pathways. One is a Wurtz-type pathway involving elimination of NaCl from 1 followed by head-to-tail cyclization to give the hexameric macrocycle $[(\mu-S)P(\mu-NtBu)_2P(=S)]_6$ (2). The other pathway involves reduction of the P=S bonds of 1 to generate colorless singlet biradicaloid dianion trans- $[S-P(Cl)(\mu-NtBu)]_2^{2-}$, which is observed in the polymeric structures of three-dimensional $[(S-)^-CIP(\mu-NtBu)_2PCl(S)]Na(Na-THF)_2$ (3) and two dimensional $[(S-)^-CIP(\mu-NtBu)_2PCl(S)](Na-THF)_2$ (4).
Description:	Only IISERM authors are available in the record.
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