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Title:	Product Isomer Distribution in the Sequential Functionalization of Cyclic PIII 2N2 Frameworks
Authors:	Bawari, D. (/jspui/browse?type=author&value=Bawari%2C+D.) Choudhury, A.R. (/jspui/browse?type=author&value=Choudhury%2C+A.R.) Singh, Sanjay (/jspui/browse?type=author&value=Singh%2C+Sanjay)
Keywords:	stepwise functionalization chlorophosph(III)azane [CIP( $\mu$ -NtBu)] <sub>2</sub>
Issue Date:	2017
Publisher:	Wiley
Citation:	European Journal of Inorganic Chemistry, 2017(35)
Abstract:	We have demonstrated stepwise functionalization of chlorophosph(III)azane, [CIP( $\mu$ -NtBu)] <sub>2</sub> with organic azides and chalcogens (S and Se). The in situ <sup>31</sup> P{ <sup>1</sup> H} NMR spectroscopic investigations reveal that conversion of the basic PIII 2N2 framework, leading to PV 2N2 proceeds via (PIII/PV)N2 intermediates. Under controlled conditions, the (PIII/PV)N2 intermediate species can be isolated, providing details of the reaction pathway and distribution of the cis and trans isomers of the PV 2N2 products. It has also been demonstrated that neat reactions at elevated temperatures expedite the formation of PV 2N2 products, without significantly affecting the yields and relative distribution of the cis and trans isomers. All new compounds reported here are potential building blocks for the assembly of inorganic macrocycles and polymers.
Description:	Only IISER Mohali authors are available in the record.
URI:	<a href="https://chemistry-europe.onlinelibrary.wiley.com/doi/pdf/10.1002/ejic.201700855">https://chemistry-europe.onlinelibrary.wiley.com/doi/pdf/10.1002/ejic.201700855</a> ( <a href="https://chemistry-europe.onlinelibrary.wiley.com/doi/pdf/10.1002/ejic.201700855">https://chemistry-europe.onlinelibrary.wiley.com/doi/pdf/10.1002/ejic.201700855</a> ) <a href="http://hdl.handle.net/123456789/1807">http://hdl.handle.net/123456789/1807</a> ( <a href="http://hdl.handle.net/123456789/1807">http://hdl.handle.net/123456789/1807</a> )
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