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Title:	A Modular Approach to Inorganic Phosphazane Macrocycles
Authors:	Singh, Sanjay (/jspui/browse?type=author&value=Singh%2C+Sanjay)
Keywords:	Macrocycles Modular synthesis Phosphazanes
Issue Date:	2017
Publisher:	Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim
Citation:	Angewandte Chemie - International Edition, 56(31), pp.9087-9090.
Abstract:	Inorganic macrocycles, based on non-carbon backbones, present exciting synthetic challenges in the systematic assembly of inorganic molecules, as well as new avenues in host–guest and supramolecular chemistry. Here we demonstrate a new high-yielding modular approach to a broad range of trimeric and hexameric S- and Se-bridged inorganic macrocycles based on cyclophosphazane frameworks, using the building blocks [S=(H)P(μ-NR)]2. The method involves the in situ generation of the key intermediate [Eurn:x-wiley:14337851:media:anie201702558:anie201702558-math-0001 (Surn:x-wiley:14337851:media:anie201702558:anie201702558-math-0002)P(μ-NR)]22−(E=S, Se) dianion, which can be reacted with electrophilic [ClP(μ-NR)]2 to give PIII/PV hexameric rings or reacted with I2 to give trimeric PV variants. Important issues which are highlighted in this work are the competitive bridging ability of S versus Se in these systems and the synthesis of the first air-stable and chiral inorganic macrocycles.
Description:	Only IISERM authors are available in the record.
URI:	https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201702558 (https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201702558) http://hdl.handle.net/123456789/2666 (http://hdl.handle.net/123456789/2666)
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