

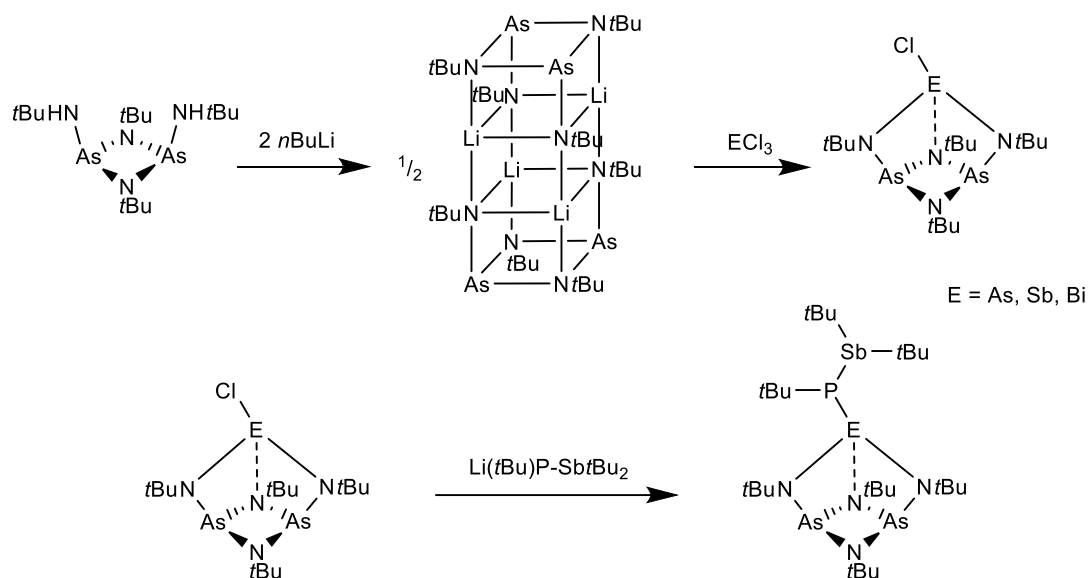
## Preparation of Multinary Interpnictogen Molecules

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Recently, our group investigated the preparation of solely *tert*-butyl substituted molecules with several different pnictogen atoms being attached to another.<sup>[1]</sup> In the course of this study it was possible to integrate the heaviest homologue bismuth to these chains.<sup>[2]</sup> However, di-*tert*-butyl substituted bismuthanes suffer from high sensitivity against light and even moderate temperatures leading to rapid decomposition. Based on this knowledge it seemed to be a hard challenge to prepare even longer chains with four or five different adjacent pnictogen atoms. To overcome this issue we decided to synthesise multinary interpnictogen molecules with bismuth being stabilised by intramolecular nitrogen coordination which has proven to enhance the stability of such compounds.<sup>[3]</sup>



Scheme 1: Building up interpnictogen molecules with a bis(amido)diazadiarsetidine structural motive.

- [1] B. Ringler, M. Müller, C. von Hänisch, *Eur. J. Inorg. Chem.* **2018**, 2018, 640–646.  
 [2] C. Ritter, B. Ringler, F. Dankert, M. Conrad, F. Kraus, C. von Hänisch, *Dalton Trans.* **2019**, 48, 5253–5262.  
 [3] C. Ritter, F. Weigend, C. von Hänisch, *Chem. Eur. J.* **2020**, 26, 8536–8540.