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## Phosphorus, Sulfur, and Silicon and the Related Elements

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## Unexpected but Easy Synthesis of a Dihydrophosphadiazaazulene

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# UNEXPECTED BUT EASY SYNTHESIS OF A DIHYDROPHOSPHADIAZAAZULENE

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Abstract The title compound is the main product of the 2:1 reaction of DMAD with diazaphosphinines. The supposed mechanisms with intermediates and related products will be presented.

A dihydrodiazaphosphaazulene  $\underline{6}$  was the surprising final product of the 1:2-reaction of  $\underline{1}$  with DMAD. It could be shown, that the bicyclophosphadiazaoctatriene  $\underline{2}$  is an intermediate of the reaction. Two reaction pathways seem to be possible according to the thermal and nucleophilic reactivity of  $\underline{2}$ , leading to the formation of  $\underline{3}$  or  $\underline{4}$  respectively. An other intermediate  $\underline{5}$  has been observed. Its structure still has to be established by x-ray diffraction, allowing to decide, which mechanism is the right one.

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<sup>&</sup>lt;sup>§</sup> X-ray structure determination