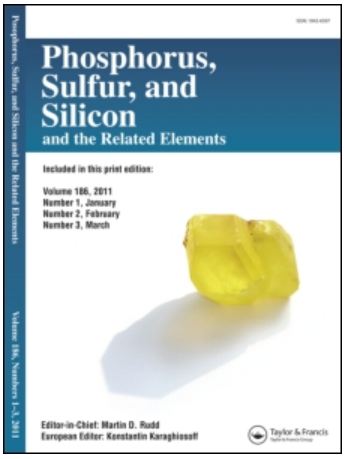

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Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713618290

A New Heterocycle from the Reaction of N,N'-Dimethylthiourea with Diamino Phosphinoalkines

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To cite this Article Fluck, E. and Kuhm, P.(1987) 'A New Heterocycle from the Reaction of N,N'-Dimethylthiourea with Diamino Phosphinoalkines', Phosphorus, Sulfur, and Silicon and the Related Elements, 30: 3, 782
To link to this Article: DOI: 10.1080/03086648708079274
URL: http://dx.doi.org/10.1080/03086648708079274

A New Heterocycle from the Reaction of N,N′-Dimethylthiourea with Diamino Phosphinoalkines

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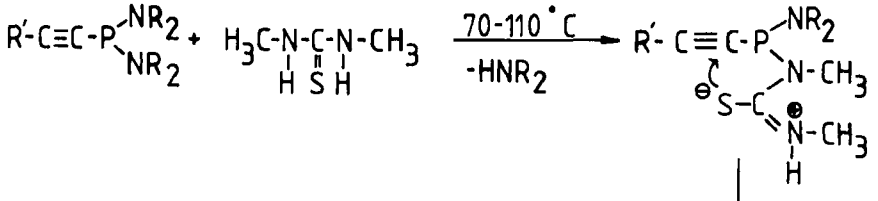
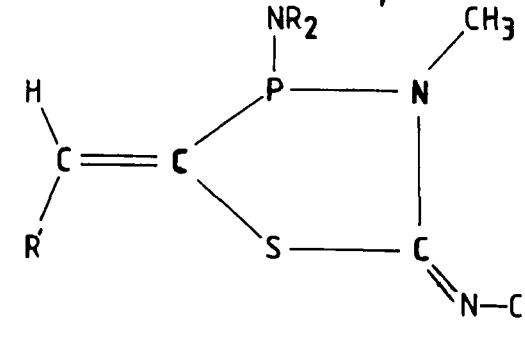
The reaction of N,N'-dimethylthiourea with bis(dialkylamino)phosphinoalkines proceeds in two steps:
1) a transamination reaction,
2) ring closure by the nucleophilic attack of the sulfur atom at the C≡C triple bond.



comp.	NR_2	R′
I	$-Net_2$	$(et_2N)_2P-$
II	$-N\langle O \rangle$	$\left[N\langle O \rangle\right]_2P-$
III	$-Net_2$	H-



The structure of compound II was elucidated by ^{13}C-, ^{1}H- and ^{31}P-NMR-Spectroscopy, as well as EI-Mass-Spectroscopy. Reactions of the new heterocycle will be presented.