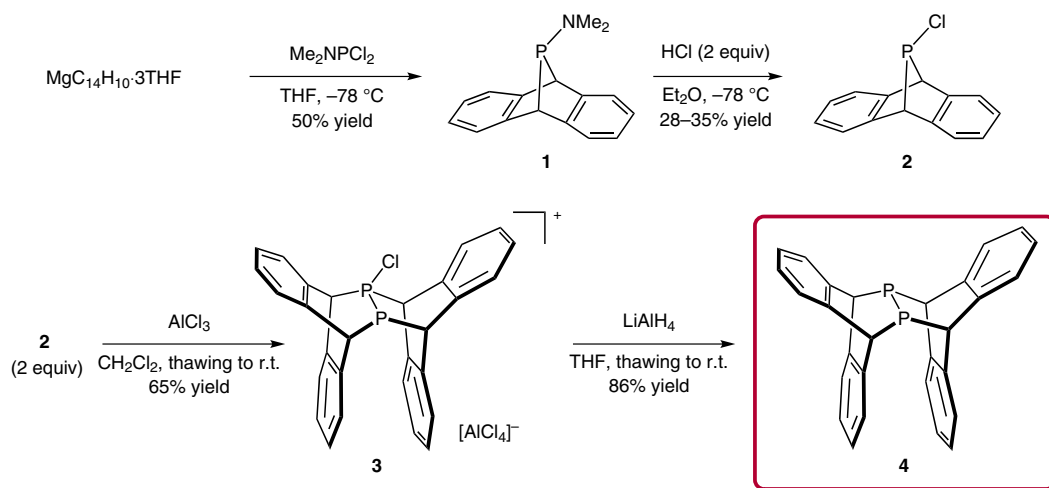
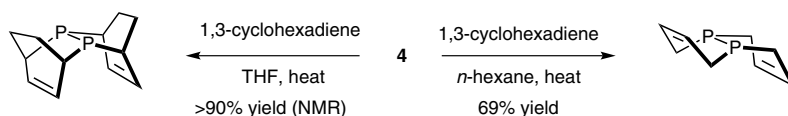


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 ALCALÁ, MADRID, SPAIN)
 A Retro Diels–Alder Route to Diphosphorus Chemistry: Molecular Precursor Synthesis, Kinetics of P₂ Transfer to
 1,3-Dienes, and Detection of P₂ by Molecular Beam Mass Spectrometry
J. Am. Chem. Soc. **2014**, *136*, 13586–13589.

Pass the P₂



Trapping reactions:



Significance: Cummins and co-workers have developed a novel system for thermally transferring the diphosphorus molecule P₂ from a transannular diphosphorus bisanthracene adduct **4** to various 1,3-dienes via a retro-Diels–Alder reaction.

Comment: Treatment of **4** with platinum ethylene complex [(C₂H₄)Pt(PPh₃)₂] at room temperature furnishes the expected platinum diphosphorus complex (P₂)[Pt(PPh₃)₂]₂, broadening the scope of this P₂ precursor to inorganic complexes.

Category

Synthesis of
Materials and
Unnatural Products

Key words

retro-Diels–Alder
reaction

phosphorus

fused ring systems

SYNFACT
of the month