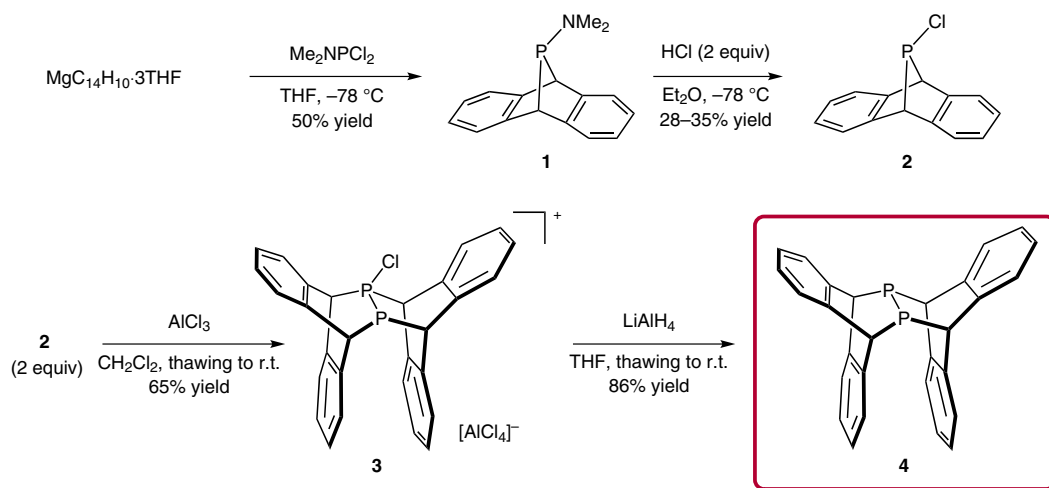
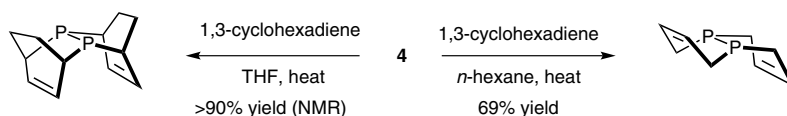


A. VELIAN, M. NAVA, M. TEMPRADO, Y. ZHOU, R. W. FIELD, C. C. CUMMINS*
(MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, USA AND UNIVERSIDAD DE
ALCALÁ, MADRID, SPAIN)
A Retro Diels–Alder Route to Diphosphorus Chemistry: Molecular Precursor Synthesis, Kinetics of P₂ Transfer to
1,3-Dienes, and Detection 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.