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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

Pass the P₂

**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 \([\text{C}_2\text{H}_4]\text{Pt}([\text{PPh}_3]_2)\) at room temperature furnishes the expected platinum diphosphorus complex \(\text{P}_2[\text{Pt}([\text{PPh}_3]_2)]\), broadening the scope of this P₂ precursor to inorganic complexes.