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A Retro Diels–Alder Route to Diphosphorus Chemistry: Molecular Precursor Synthesis, Kinetics of P$_2$ Transfer to 1,3-Dienes, and Detection of P$_2$ by Molecular Beam Mass Spectrometry


Pass the P$_2$

**Significance:** Cummins and co-workers have developed a novel system for thermally transferring the diphosphorus molecule P$_2$ 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 [(C$_2$H$_4$)Pt(PPh$_3$)$_2$] at room temperature furnishes the expected platinum diphosphorus complex (P$_2$)[Pt(PPh$_3$)$_2$], broadening the scope of this P$_2$ precursor to inorganic complexes.