Metallacycle-Mediated Annulation for the Synthesis of Hydroindanes

**Significance:** Cheng and Micalizio report a stereoselective annulation reaction to afford cross-conjugated triene-containing hydroindanes that are subsequently trapped by a dienophile in a [4+2]-cycloaddition reaction to obtain highly functionalized carbo- and heterocyclic systems.

**Comment:** The tendency of products of type A to undergo Diels–Alder-based dimerization upon standing was harnessed to accomplish this reaction cascade of annulation and intermolecular cycloaddition.

**Selected examples:**

- 45% yield
- 36% yield
- 54% yield