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Catalytic Asymmetric Intramolecular [4+2] Cycloaddition of In Situ Generated *ortho*-Quinone Methides
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Intramolecular [4+2] Cycloaddition of *ortho*-Quinone Methides Generated In Situ

Selected examples:

Significance: The List group has developed a catalytic, asymmetric, intramolecular [4+2] cycloaddition of in situ generated *ortho*-quinone methide. A variety of salicylaldehydes were treated with dienols in the presence of a confined, chiral imidodiphosphoric acid catalyst to provide the desired furanochranes with excellent enantioselectivities and good yields.

Comment: The chromane moiety is frequently found in natural products. The obtained furanochroman products have highly functionalized tricyclic frameworks. This acid-catalyzed reaction may be suitable for natural product synthesis, as two rings and three consecutive stereocenters are formed in a single step.

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