Catalytic Deracemization of Allenes

**Significance:** Bach and co-workers report an al-lene deracemization reaction catalyzed by an or-ganic chiral sensitizer under visible light. By using this method, several racemic allenes were convert-ed into enantiomers with yields of ≤100% and er values of ≤98.5:1.5. DFT calculations are also pro-vided to support the proposed mechanistic description.

**Comment:** Light-driven deracemization of chiral compounds might be implicated in the origin of early-stage chirality. The present unprecedented discovery presents an example to support this hy-pothesis. With different substrate classes, solutions to generate chiral centers might be possible in cases where thermally controlled catalytic deracemiza-tions are entropically disfavored.

**Mechanistic description on the basis of DFT calculations:**

Selected examples:

- 56% yield, er = 95.5
- 89% yield, er = 98.2
- 100% yield, CO$_2$Me, er = 97.5:2.5
- 100% yield, er = 96.5:3.5