**Enantioselective Minisci-Reaction of N-Heterocycles and Amides through Hydrogen-Atom Transfer**

**Significance:** Phipps and co-workers report a photochemical hydrogen-atom transfer (HAT)-driven enantioselective Minisci reaction of N-heterocycles with amides by using one of a series of chiral phosphoric acids as the chromophore and diacetyl as the terminal oxidant. The corresponding C2-substituted products are obtained in moderate to good yields and with good to excellent enantioselectivities.

**Comment:** On the basis of their recent experimental and theoretical investigations (J. Am. Chem. Soc. 2020, 142, 21091), the authors address several limitations, including the laborious synthesis of reduct-active esters and low-yielding reactions. The successful introduction of easily accessible N-acylated primary amines as sources of α-amino radicals led to the establishment of a more generally applicable system with a broad substrate scope, with diacetyl as an inexpensive chromophore and chiral phosphoric acids to induce enantioselectivity.

**Proposed mechanism:**

**Selected examples:**

55% yield  
er = 96.5:1.5  
with (R)-TRIP

61% yield  
er = 97:3  
with (R)-TCYP

61% yield  
er = 95:5  
with (R)-TCYP

48% yield  
er = 96:4  
with (R)-TCYP

**Keywords:** Minisci reaction, hydrogen-atom transfer, aza-heterocycles, phosphoric acids

**SYNFACTS Contributors:** Benjamin List, Joyce A. A. Grimm

SYNFACTS 2021, 17(06), 0683  Published online: 18.05.2021  DOI: 10.1055/s-0040-1706201; Reg-No.: B03821SF