Enantioselective Dearomatization of Indoles

**Significance:** Bandini and co-workers report an enantioselective dearomatization of indoles. Using 1 to 10 mol% of chiral phosphoric acid catalyst 1, the desired 3,3-disubstituted indolenines are obtained in moderate to high yields and good to excellent enantioselectivities.

**Comment:** The authors developed an enantioselective electrophilic activation of allenamides, generating enantoenriched dearomatized 3,3-disubstituted indolenines as products. Additionally, a dearomatization–hydrogen transfer cascade was conducted. Performing the reaction in the presence of molecular sieves and Hantzsch ester, the corresponding indolines are obtained in good yields and with high diastereo- and enantioselectivities.

**Selected examples:**

- **NPhTs**
  - 51% yield
  - $\text{er} = 95:5:4.5$
- **NPhTs**
  - 87% yield
  - $\text{er} = 97:4$
- **NPhTs**
  - 69% yield
  - $\text{er} = 95:5:6.5$
  - using (S)-cat. 1
- **NPhTs**
  - 60% yield
  - $\text{er} = 96:4$
  - using (S)-cat. 1
- **NPhTs**
  - 64% yield
  - $\text{er} = 95:5:4.5$
  - using (S)-cat. 1