**Enantioselective Palladium-Catalyzed Dearomative Heck Reaction**

**Significance:** The authors report an enantioselective palladium-catalyzed dearomative Heck process, which affords a variety of spiroheterocycles and benzo-fused heterocycles in high yields and enantioselectivities.

**Comment:** Various sets of conditions were developed, depending on the heterocyclic scaffold employed. A remarkable number of examples (88) were demonstrated, and the synthetic utility of the products was displayed by a series of derivatizations.

**Reaction schemes:**

1. **88 examples, up to 91% yield; up to 99% ee**
   - Pd(dba)$_2$ (5 or 10 mol%)
   - Chiral phosphoramidite ligand (10 mol%)
   - HCO$_2$H (1.5 equiv)
   - Cs$_2$CO$_3$ (1.5 equiv) or Et$_3$N (3 equiv)
   - 1,4-dioxane, 40–100 °C
   - X = Br, I
   - Z = NR, O
   - *Formic acid only required when Z = NR

2. **Selected examples:**
   - 37 examples
   - Up to 95% yield; up to 99% ee

   - 87% yield, 99% ee

3. **13 examples**
   - Up to 93% yield; up to 94% ee

   - 91% yield, 94% ee

4. **13 examples**
   - Up to 67% yield, up to 98% ee

   - 66% yield, 94% ee

5. **10 examples**
   - Up to 81% yield; up to 95% ee

   - 78% yield, 91% ee

6. **15 examples**
   - Up to 95% yield; up to 97% ee

   - 76% yield, 91% ee

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