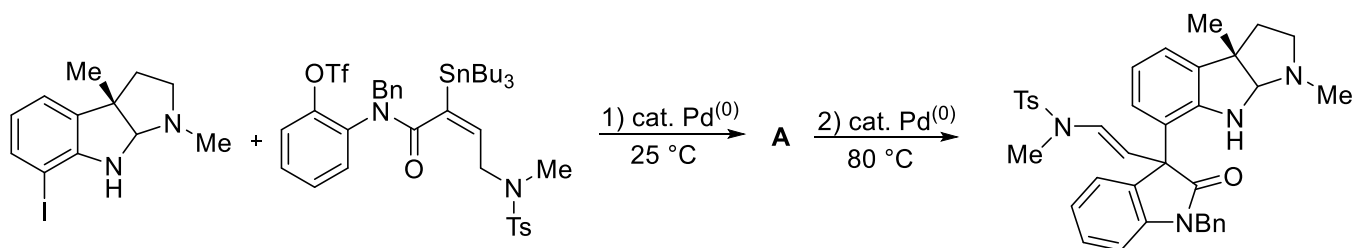


SR2025 - POW11



The shown transformation consists of two consecutive palladium-catalyzed reactions.

- What are the names of the two reactions?
- Give the structure of product **A**.
- Provide both catalytic cycles.

**Hint:** Consider differences of the reaction rates of the halides/pseudohalides (in this case iodide vs triflate) at the initial oxidative addition step to account for the chemoselectivity.