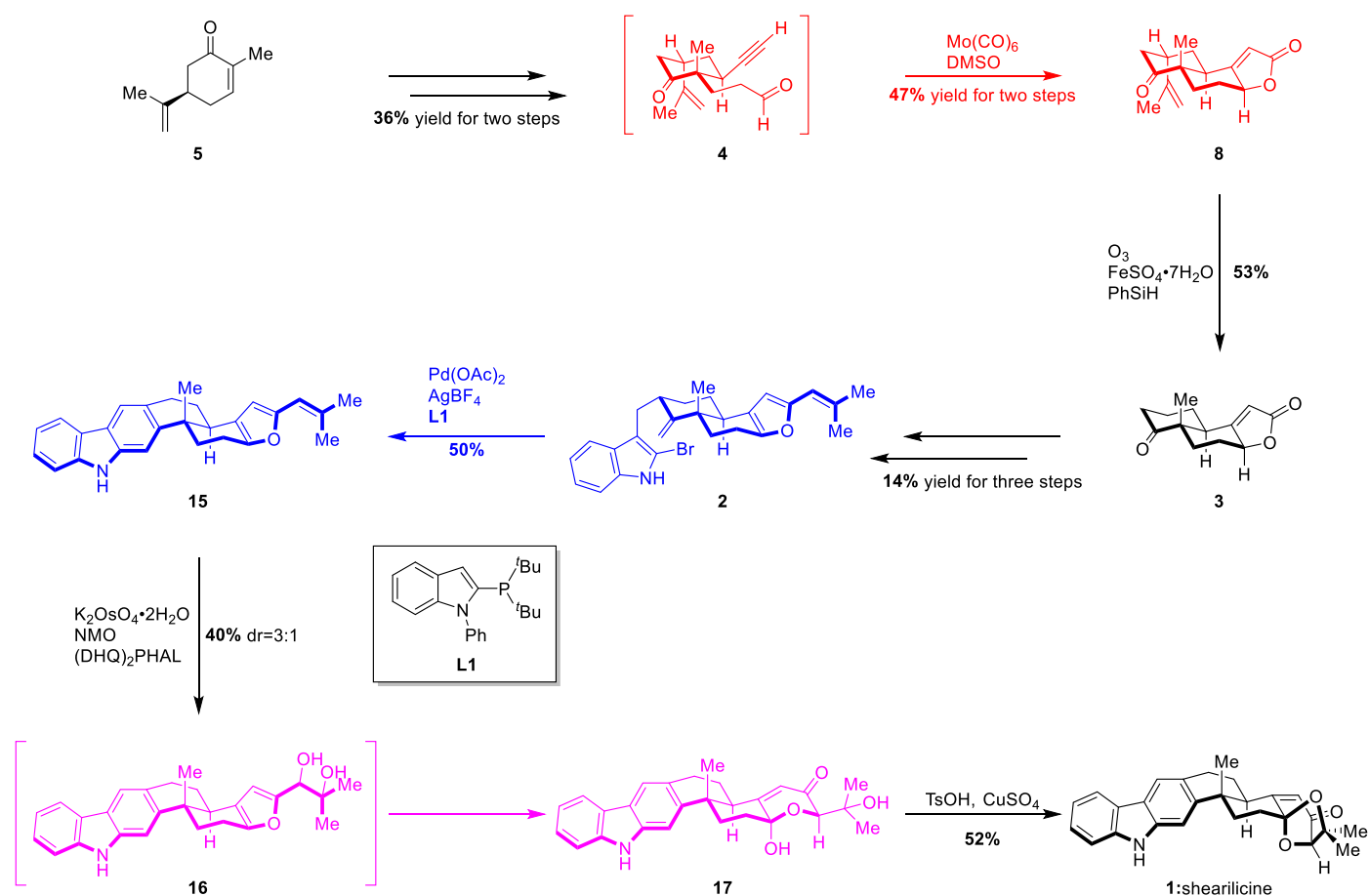


**Key steps:**

- Hetero-Pauson–Khand cycloaddition.
- Intramolecular Heck coupling.
- Spontaneous achmatowicz rearrangement.

Significance:

Newhouse and coworkers achieved the first total synthesis of the indole diterpenoid natural product shearilicine in 11 steps and provided a strategy for the total synthesis of related indole diterpenoid natural products.