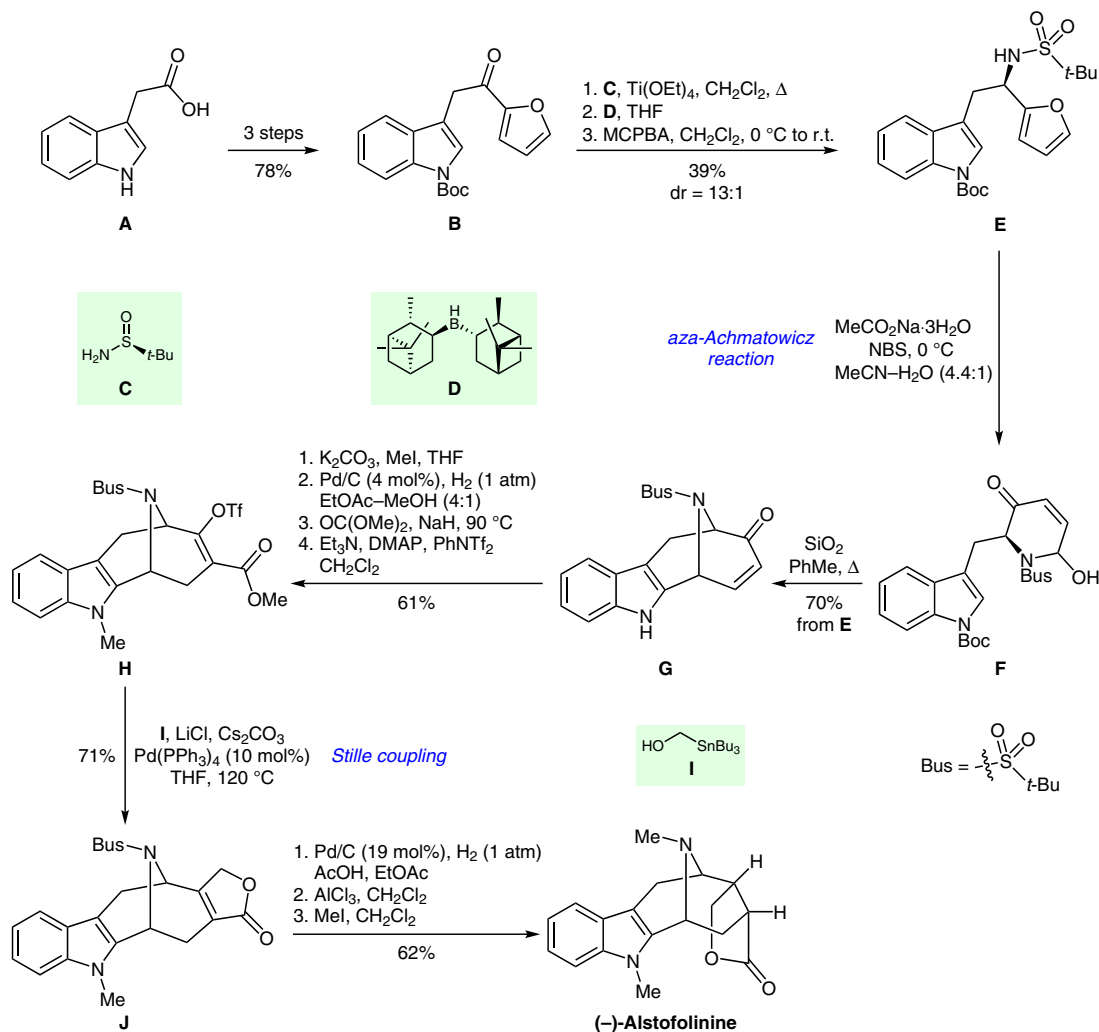


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Total Synthesis of (-)-Alstofoline A through a Furan Oxidation/Rearrangement and Indole Nucleophilic Cyclization Cascade
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Total Synthesis of (-)-Alstofoline A



Significance: (-)-Alstofoline is an indole alkaloid isolated from the plant *Alstonia macrophylla* bearing a prominent [3.3.1] azabicyclic core. Qi and co-workers employ their recently developed sequence involving aza-Achmatowicz rearrangement and indole nucleophilic cyclization to efficiently access the natural product core **G** under mild conditions in good yield.

Comment: The authors commence their synthetic endeavor by preparation of chiral sulfonamide **E** by action of reductive amination with Ellman's sulfonamide (**C**) and diastereoselective reduction. aza-Achmatowicz rearrangement was succeeded by intramolecular cyclization to afford the characteristic [3.3.1] bicyclic intermediate. Installation of the lactone by Stille coupling with tributylstannyl methanol (**H**), hydrogenation, deprotection, and N-methylation finalized the synthesis of (-)-alstofoline.