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## SYNFACTS Highlights in Chemical Synthesis

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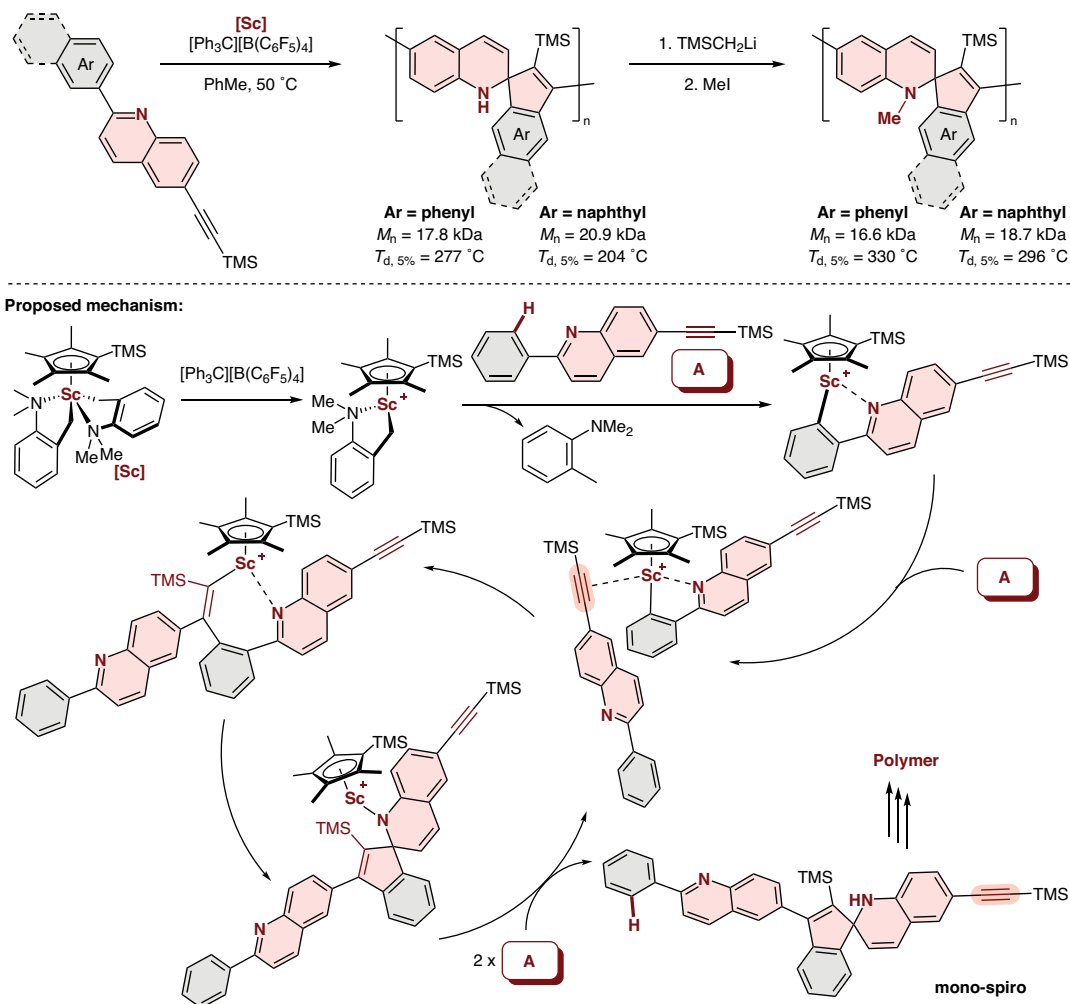
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Synthesis of Rigid Stepladder Polymers via Scandium-Catalyzed Polyspiroannulation of Quinoline with Alkyne  
*J. Am. Chem. Soc.* **2025**, *147*, 1416–1420, DOI: 10.1021/jacs.4c15046

## Creating Spirocenters in Polymerization



**Significance:** Polymers of 3D structures having intrinsic microporosity hold promise for applications such as gas separation and sensing technology. Here, a scandium-catalyzed spiroannulative polymerization is accomplished, producing macromolecules of spirodihydroquinoline as a repeat unit.

**Comment:** A half-sandwich scandium catalyst is found to promote the dearomative spiroannulation of 2-arylquinolines by reacting with internal alkynes. The polymerization is then realized using quinolines bearing both aryl and ethynyl substituents.