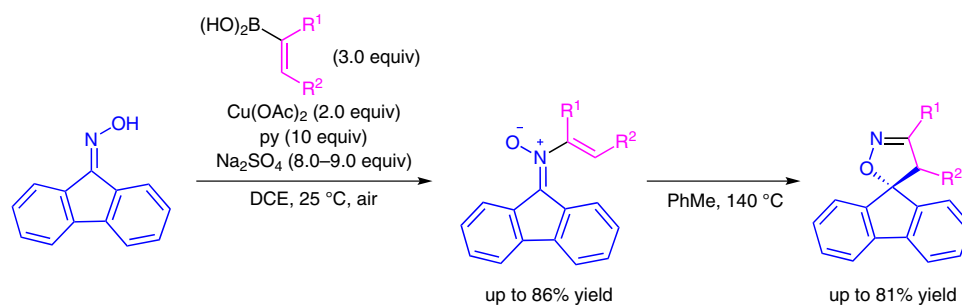


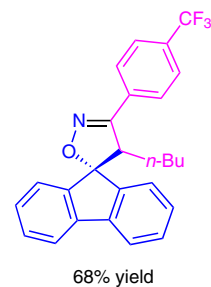
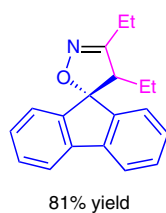
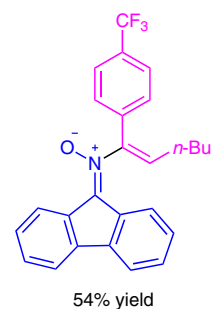
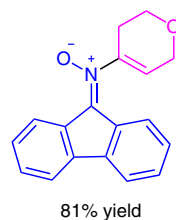
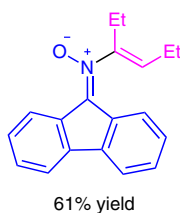
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Preparation and Rearrangement of *N*-Vinyl Nitrones: Synthesis of Spiroisoxazolines and Fluorene-Tethered Isoxazoles  
*Org. Lett.* **2012**, *14*, 5180–5183.

## Preparation and Rearrangement of *N*-Vinyl Nitrones



$\text{R}^1 = \text{Et, Me, H, Ph, 4-O}_2\text{NC}_6\text{H}_4, 4\text{-FC}_6\text{H}_4, 4\text{-F}_3\text{CC}_6\text{H}_4$   
 $\text{R}^2 = \text{Et, Me, } n\text{-Bu, Ph}$   
 $\text{R}^1 + \text{R}^2 = 1\text{-cyclohexene derivatives, 1-cyclopentene, 1-cycloheptene, dihydropyran}$

### Selected examples:



**Significance:** Herein, the authors disclose the single-step, copper-mediated coupling of fluorenone oximes and vinyl boronic acids, which undergo thermal rearrangement via [3+2] cycloaddition to form spiroisoxazolines. The corresponding *N*-vinyl nitrones and spiroisoxazolines are obtained in good yield.

**Comment:** In addition, this methodology may be applied to the synthesis of fluorene-tethered isoxazoles by treatment of *N*-vinyl nitrones with terminal or internal electron-deficient alkynes. The mechanism is supposed to proceed via [3+2] cycloaddition and subsequent elimination.

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