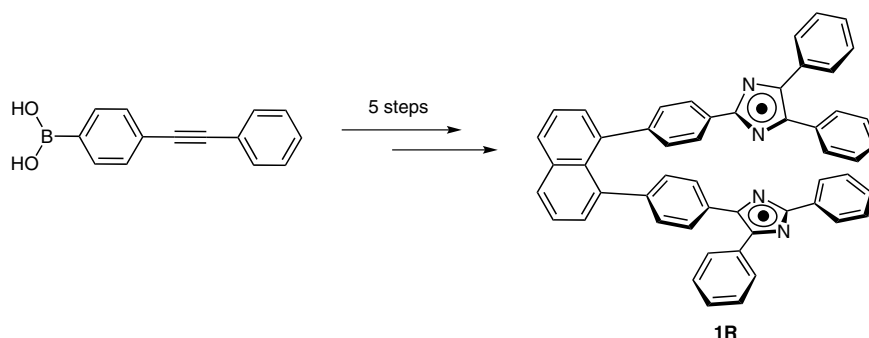


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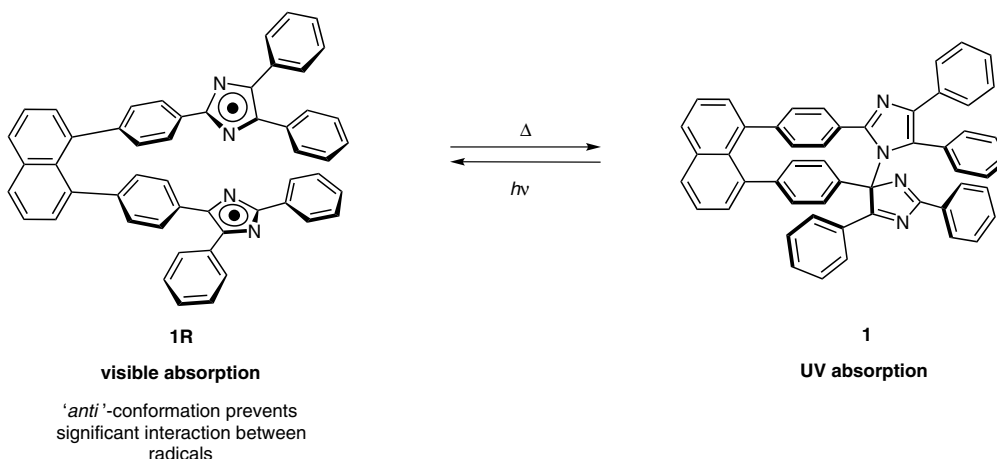
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Photochromism of a Naphthalene-Bridged Imidazole Dimer Constrained to the "Anti" Conformation  
*Org. Lett.* **2013**, *15*, 2938–2941.

## Tuning Photochromic Properties Through Molecular Conformation



Photochromism of dimer:



**Significance:** The synthesis and photochromic properties of imidazole dimer **1** is reported. Unlike similar photochromic molecules previously studied by the authors (e.g., *J. Am. Chem. Soc.* **2013**, *135*, 3164; *Synfacts* **2013**, *9*, 500), the dimer system is conformationally locked in an 'anti' configuration. The resulting weak interaction between the radicals of **1R** leads to narrowing of its visible absorption profile and, consequently, increased control over the color of the radical system.

**Comment:** The photochemical transformation of **1** to **1R** was studied using transient visible-NIR absorption spectroscopy. Additionally, the activation parameters of the thermal conversion of **1R** to **1** were evaluated via Eyring plots. Although this thermal reaction is noted to be fast at room temperature, the authors emphasize that the photochromism of **1** and control over the color of **1R** may render this molecular system useful in the development of ophthalmic lenses.

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