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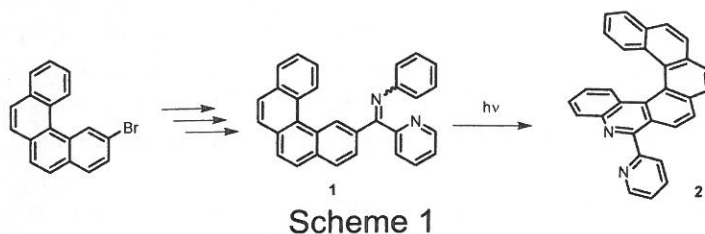
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Photochemical Synthesis of Aryl-azahelicenes

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Photocyclization of stilbene-like molecules represents one of the most important synthetic methods for preparation of polyaromatic compounds such as helicenes¹. Unlike stilbenes, few examples of photocyclization of imines were published in the literature². This work is focused on synthesis of functionalized azahelicenes by photocyclization of aromatic imines. The synthetic strategy is illustrated on preparation of 6-(2-pyridyl)-5-aza[6]helicene (**2**) (scheme 1). The imino specie **1** readily undergoes photocyclization reaction in the presence of Lewis acid to furnish the corresponding pyridyl-aza[6]helicene **2**. In this manner various aryl-aza[n]helicenes were prepared and characterized.



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1 Gingras, M. *Chem. Soc. Rev.* **2013**, 42, 968.

2 a) Badger, G. M.; Joshua, C. P. *Tetrahedron Lett.* **1964**, 5, 3711.

b) Thompson, C. M.; Docter S. *Tetrahedron Lett.* **1988**, 29, 5213-16.

c) Danilenko, N. I.; Fomenko, T. V.; Korobeinicheva, I. K.; Gerasimova, T. N.; Fokin, E. P. *Bull. Acad. Sci. SSSR, Div. Chem. Sci.* **1980**, 29, 1149.