

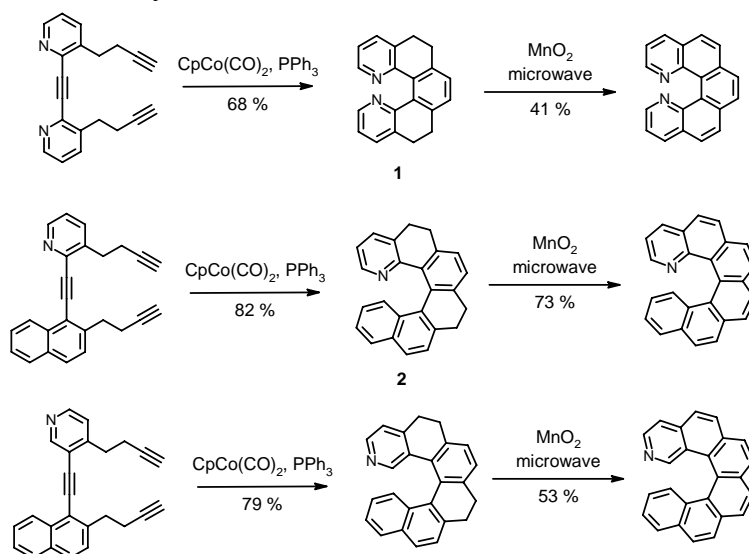
SYNTHESIS OF FULLY AROMATIC AZAHELICENES

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Azahelicenes and their derivatives have been rather rare although they might find interesting applications in various branches of chemistry. As the presence of nitrogen usually disqualifies the photodehydrocyclization approach [1-2], we have developed an alternative route using intramolecular [2+2+2] cycloisomerization of heteroaromatic triynes under Co(I) or Ni(0) catalysis [3-5].

Using this novel approach, we have prepared tetrahydroazahelicenes 1-3. For the final dehydrogenation step, routine methods have proved to be unsuccessful. Therefore, we have developed a new protocol based on microwave-assisted MnO₂ oxidation. It has provided a direct access to a series of fully aromatic azahelicenes.



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