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Poster Presentation

Synthesis of N-Aryl-4-Hydroxy-5H-Benzo[a]phenothiazine- and N-Aryl-4-Hydroxy-5H-Benzo[a]phenoxazine-5-Imines

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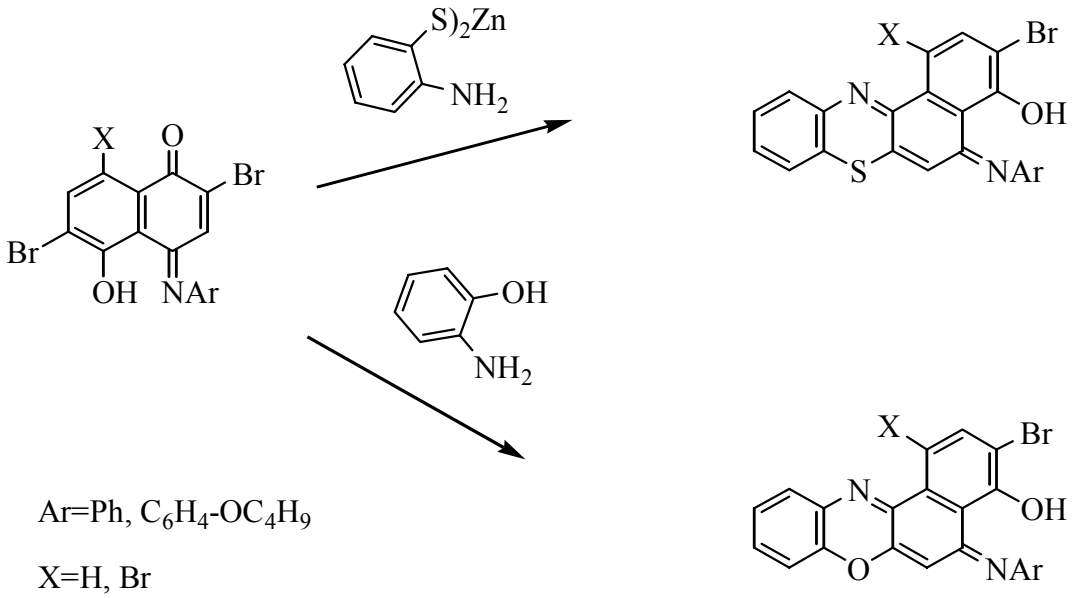
Phenothiazines and phenoxazines are well known for their various pharmacological activities. N-Aryl-1,4-naphthoquinone-4-imines have shown antibacterial and anticancer activity. We describe the synthesis of a number of benzo[a]phenothiazine- and benzo[a]phenoxazine-analogoues, which have an additional N-arylimine function at C-5 position.

The reaction of N-aryl-2,6-dibromo- or 2,6,8-tribromo-5-hydroxy-1,4-naphthoquinone-4-imines with zinc salts of 2-aminobenzenethiols gave substituted 4-hydroxy-5-H-benzo[a]phenothiazine-5-imines, and with 2-aminophenol gave substituted 4-hydroxy-5H-benzo[a]phenoxazine-5-imines.



Ar=Ph, C_6H_4-OC_4H_9

X=H, Br