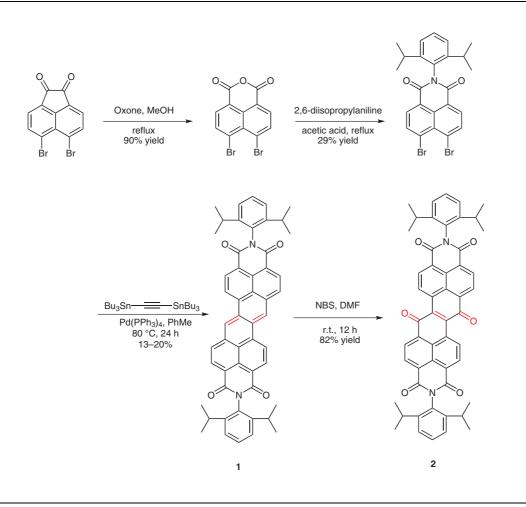
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Soluble and Stable Zethrenebis(dicarboximide) and Its Quinone *Org. Lett.* **2010**, *12*, 4690-4693.

Soluble and Stable Zethrenebis(carboximide) and Its Quinone



Significance: Despite first being synthesized decades ago by Clar and co-workers, zethrene only recently began attracting major interest due to its potentially interesting optoelectronic properties. Poor air and light sensitivity of unsubstituted zethrene would not have aided its cause. A more convenient route to zethrene was found in the 1960's during attempts to synthesize and isolate the unstable tetradehydrodinaphtho[10]annulene, a precursor of zethrene. This was not successfully done until last year.

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 Synfacts 2010, 12, 1357-1357
 Published online: 22.11.2010

 DOI: 10.1055/s-0030-1258940;
 Reg-No.: \$14210SF

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Comment: Employing the same strategy discovered by Staab and Sondheimer in the 1960's, the authors take advantage of the automatic transanular cyclization of the tetradehydrodinaphtho-[10]annulene to form the butadiene core of the zethrene. Meanwhile, the overall improved stability of **1** no doubt makes it an interesting compound for further optoelectronic studies. Extremely notable as well is that attempts to brominate **1** using *N*-bromosuccinimide in the presence of DMF unexpectedly leads to the formation of the respective quinone **2**.

Category

Synthesis of Materials and Unnatural Products

Key words

zethrene

polycyclic aromatic hydrocarbons

quinones

