



13th EUROPEAN SYMPOSIUM ON ORGANIC CHEMISTRY

SEPTEMBER, 10-15, 2003

CAVTAT-DUBROVNIK, CROATIA



PROGRAMME

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ABSTRACTS



PALLADIUM-CATALYZED AMINATION OF ELECTRON-RICH OR POOR BENZO[b]THIENYL BROMIDES

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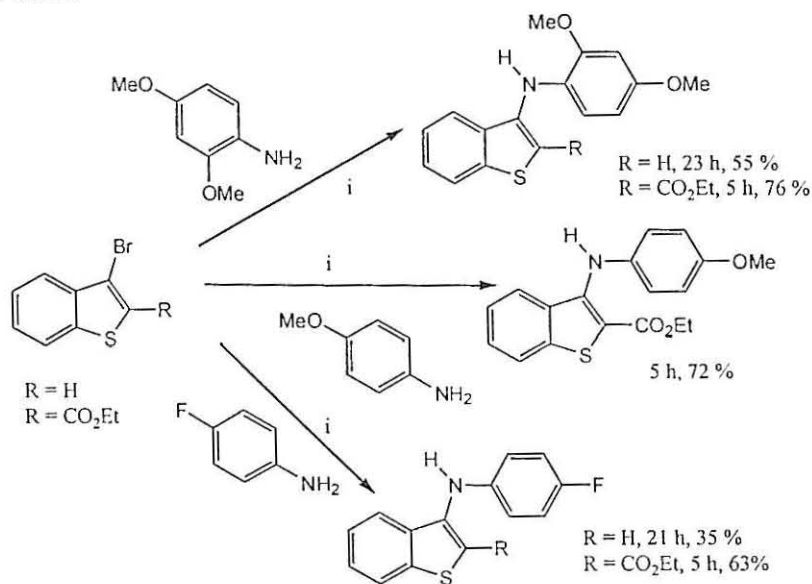
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Recently we have applied the palladium-catalyzed amination to the synthesis of *ortho*-bromodiarylamines in the benzo[*b*]thiophene series.¹ Here we describe the application of this methodology to the amination of electron-rich or poor 3-bromobenzo[*b*]thiophenes, using the same conditions for both cases.



i) Pd(OAc)₂ (3 mol%), BINAP (4 mol%), Cs₂CO₃ (1.4 equiv.), toluene, 100 °C, Ar

The yields were higher, with lower heating times, for the C-N coupling of 3-bromobenzo[*b*]thiophene bearing an ester group in the 2-position. Using these conditions the reaction is compatible with donating or withdrawing groups in the aniline.

The diarylamines obtained can have biological activity or can be used in luminescent materials due to their fluorescence, which is under study. They can also be cyclized to tetracyclic heteroaromatic systems that can also exhibit biological activity.

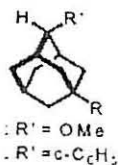
Thanks are due to IBQF-Univ. Minho, to the Fundação Calouste Gulbenkian (Portugal) and to the Socrates-Erasmus exchange programme (U.Minho – U.Metz).

1. Ferreira, I.C.F.R.; Queiroz, M.-J. R. P. and Kirsch, G., *Tetrahedron*, 2003, 59, 3737-3743.

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