

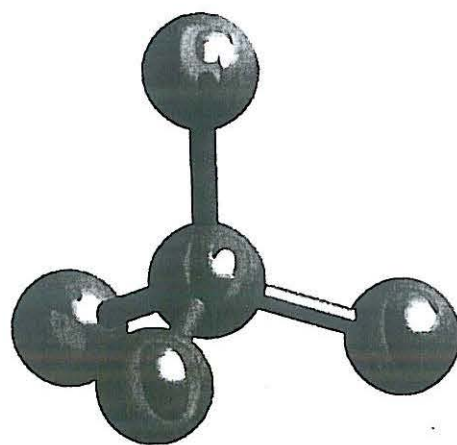


ESOC 12

The 12th
European Symposium
on Organic Chemistry

July 13 - 18, 2001
Groningen, The Netherlands

Programme & Abstracts

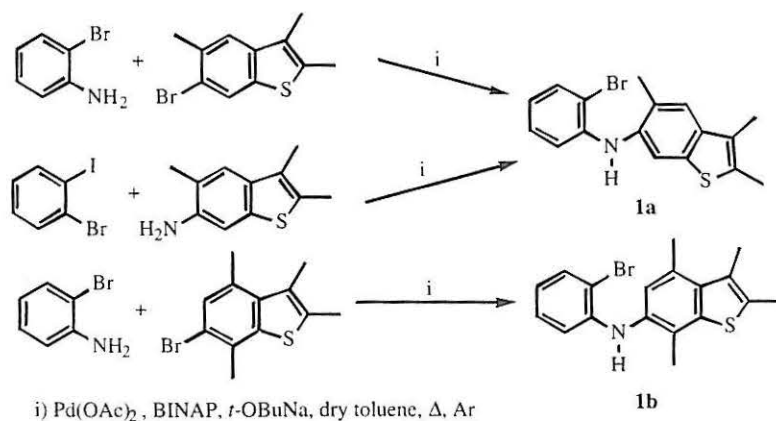


palladium-catalyzed amination to obtain *o*-halodiarylamines precursors of thienocarbazolesIsabel C.F.R. Ferreira^a, Maria-João R.P. Queiroz^a and Gilbert Kirsch^b^aDepartamento de Química, Universidade do Minho, 4700-320 Braga, Portugal^bGroupe de Synthèse Organique et Hétérocyclique, Université de Metz, 57045 Metz, France

e-mail: mjrpq@quimica.uminho.pt

o-Bromodiarylamines **1** were prepared by palladium-catalyzed amination of 2-bromo-iodobenzene or 6-bromobenzo[*b*]thiophenes, using Buchwald conditions¹. The yield for *o*-bromodiarylamine **1a** doubled when the starting materials were 2-bromo-iodobenzene and 6-amino-2,3,5-trimethylbenzo[*b*]thiophene (40%) instead of 2-bromoaniline and the corresponding 6-bromo benzo[*b*]thiophene (20%). No *o*-iododiarylamine was isolated neither from the experiment using 2-bromo-iodobenzene as starting material nor from the one using 2-iodoaniline and 6-bromo benzo[*b*]thiophene, in this case only decomposition took place.

o-Bromodiarylamine **1b** was obtained in low yield (10%) using 6-bromo-2,3,4,7-tetramethyl benzo[*b*]thiophene.



Compounds **1a** and **1b** can be cyclised to the corresponding potential anti-tumour thienocarbazoles by an intramolecular Heck reaction².

Thanks are due to the FCT-IBQF-UM(Portugal) and to Escola Superior Agrária do I.P.Bragança for supporting in part I.C.Ferreira.

1- Wolfe, J., Buchwald, L., *J. Org.Chem.*, 2000, 65, 1144-1157.

2- Iwaki, T.; Yasuhara, A.; Sakamoto, T., *J. Chem.Soc. Perkin 1*, 1999, 1505-1510.