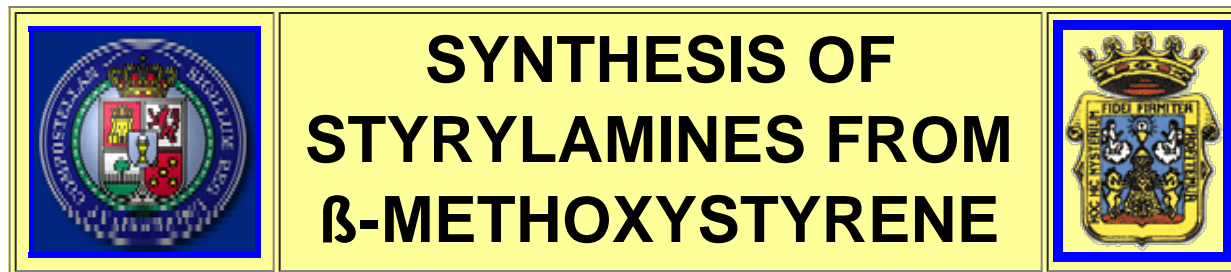


[A0070]

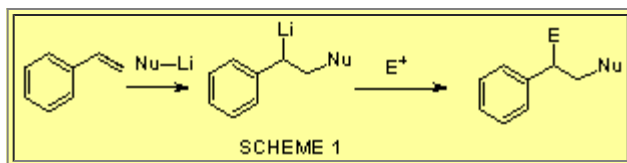


[Julio A. Seijas*](#), [M. Pilar Vázquez-Tato*](#), Luis Barreiro-Castro and M. Gabriela Ónega

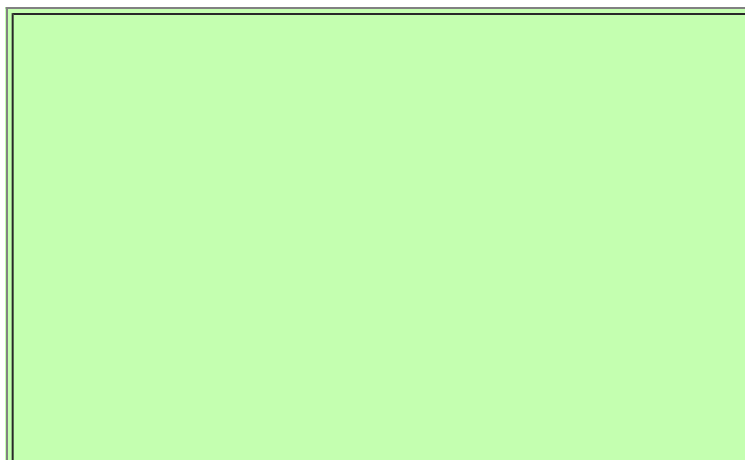
Departamento de Química Orgánica. Facultad de Ciencias de Lugo. [Universidad de Santiago de Compostela](#). Apto. 280. 27080-LUGO. SPAIN
E-mail: goseijas@lugo.usc.es , pilarvt@lugo.usc.es

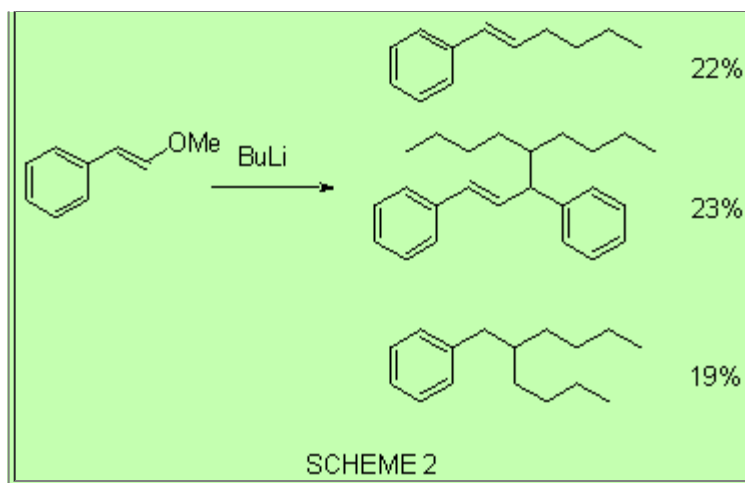
Received: 4 August 2000 / Uploaded: 5 August 2000

In the last years we have been searching on the reactivity of styrenic compounds towards nucleophiles [1], in this communication we want to report the reactivity of beta-methoxystyrene towards butyllithium and lithium amides. The addition of alkyllithiums and lithium amides to styrene usually is followed by the addition of an electrophilic reagent that quenches the benzylic anion. (escheme 1).

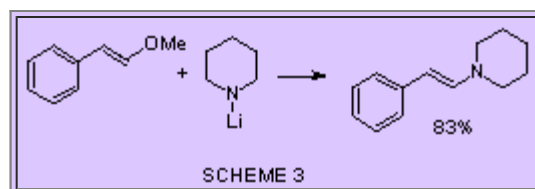


We found that addition of butyllithium to β -methoxy styrene (0°C/THF) it gave a mixture of products all of them coming from an addition-elimination mechanism.(scheme 2). We tried to control the reaction to stop it at the stage of formation of β -butylstyrene but we did not have success.





We checked also the reactivity with the lithium amide of piperidine at 0°C in THF, but no reaction product could be isolated, we carried out the reaction in dry ethyl ether and in this case, the addition-elimination was clean and led to the corresponding enamine in a 83% yield. However when we treated the same methoxystyrene with the lithium amide of butylamine, we did not observed addition product.



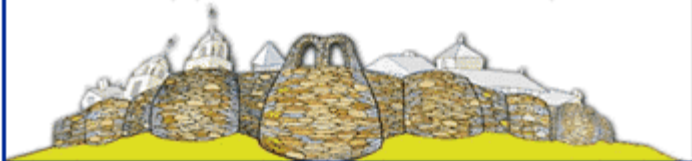
Actually we are trying to know the scope of this reaction. We think this reaction would constitute a good entry to the preparation of styrylamines, these are alkaloids present in some *bromeliaceae*, *amaranthaceae*, *liliaceae*, *rutaceae* and sponge *Axinyssa aplysinoides* [2].

Acknowledgements: Financial support from DGES (project PB96-0932) is gratefully acknowledged.

References:

- 1.- Estévez, J.C.; Villaverde, M.C.; Estévez, R.J.; Seijas, J.A.; Castedo, L., *Synthetic Commun*, 1990, **20**, 503-507. Seijas, J. A.; Vázquez-Tato, M.P.; Castedo, L.; Estévez, R.J.; Ruíz, M., *J. Org. Chem.*, 1992, **57**, 5282-5283. Martínez, M.M.; Ónega, M.G.; Tellado, M.F.; Seijas, J.A.; Vázquez-Tato, M.P., *Tetrahedron*, 1997, **53**, 14127-14130. Seijas, J.A., Vázquez-Tato, M.P.; Entenza, C.; Martínez, M.M.; Ónega, M. G.; Veiga, S., *Tetrahedron Lett.*, 1998, **39**, 5073-5076.
- 2.-Blackman, A.J., Green, R. D., *Aust. J. Chem.*, 1987, **40**, 1655-1662. Blackman, A.J., Eldershaw, T.P.D., Garland, S.M., *Aust. J. Chem.*, 1993, **46**, 401-405. Compagnone, R.S.; Faulkner, J.D., *J. Nat. Prod.*, 1995, **58**, 145-148. Greger, H., Zechner, G.; Hofer, O.; Hadacek, F.; Wurz, G., *Phytochemistry*, 1993, **34**, 175-180. Hinterberger, S.; Hofer, O.; Greger, H., *Tetrahedron*, 1994, **50**, 6279-6286. Prakash, D.; Raj, K.; Kapil, R. S.; Popli, S. P., *Indian J. Chem., Sect. B*, 1980, **19**, 1075-1076. Lin, J.-H., *Phytochemistry*, 1989, **28**, 621-622. Milner, P.H.; Coates, N.J.; Gilpin, M.L.; Spear, S. R.; Eggleston, D.J., *J. Nat. Prod.*, 1996, **59**, 400-402. Greger, H.; Zechner, G.; Hofer, O.; Vajrodaya, S., *J. Nat. Prod.*, 1996, **59**, 1163-1168.

MURALLA ROMANA DE LUGO



All comments on this poster should be sent by e-mail to (mailto:ecsoc@listserv.arizona.edu) (ecsoc@listserv.arizona.edu) with **A0070** as the message subject of your e-mail.

