

FEDERATION OF EUROPEAN CHEMICAL
SOCIETIES

**VIIIth FECHM CONFERENCE
ON ORGANOMETALLIC
CHEMISTRY**



ABSTRACTS

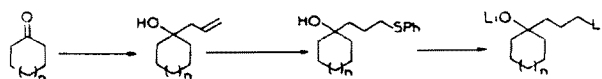
VESZPRÉM-BALATONFÜRED (HUNGARY)
August 27 - September 1, 1989

**METAL ALKOXIDE MODIFIED ORGANOLITHIUM REAGENTS. SYNTHESIS
OF TETRAHYDROFURAN STABLE LITHIOOXYALKYLLITHIUMS SHARING
ONE OR MORE CARBONS WITH CARBOCYCLIC RINGS**

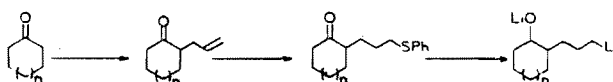
Constantinos G. Screttas and Ioannis D. Kostas , Institute
of Organic Chemistry , The National Hellenic Research
Foundation , Athens 116 35 Greece

We have reported recently¹ that organolithium reagents including t-BuLi can be generated in tetrahydrofuran (THF) and made stable by the addition of magnesium 2-ethoxyethoxide. The ability of $\text{Mg}(\text{OCH}_2\text{CH}_2\text{OEt})_2$ to suppress THF cleavability by organolithium reagents has been taken advantage of in order to prepare storable solutions of certain types of lithiooxyalkyllithiums.

We have synthesized lithiooxybutyllithium reagents which share C(4) with a five-, six- and seven-membered carbocyclic ring. The following synthetic sequence was employed:



Lithiooxypentyllithiums which share two carbons with a carbocyclic ring were prepared as follows:



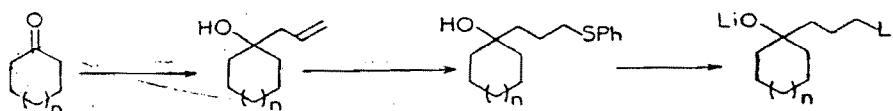
References: 1. C.G.Screttas and B.R.Steele, J.Org.Chem.
54,1013 (1989)

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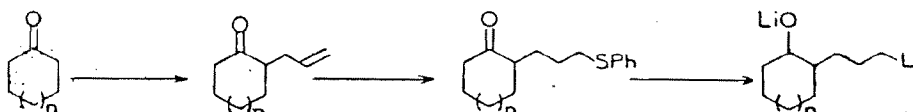
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