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## Phosphorus, Sulfur, and Silicon and the Related Elements

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## TELLUROLOTHIOPHENE AND RELATED COMPOUNDS

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## TELLUROLOTHIOPHENE AND RELATED COMPOUNDS

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Unsubstituted 2-thienyllithium reacts successively with elemental tellurium and alkylhalides giving rise to 2-alkyltellurothiophenes.

In contrast to benzene series, action of bromine leads through bromode-telluration to alkyltribromotellurides, which are easily transformed to aliphatic ditellurides. Condensation doesn't occur with alkylsubstituted aliphatic halides and in all cases di 2-thienyltelluride is by distillation isolated.

Di n.butylditelluride has been obtained by this method with 82 % yield from thiophene. Reduction with sodium borohydride gives sodium butyltellurate, tellurium reagent for synthesis of unknown tellurolesters. I.R. carbonyl frequency of these compounds has been determined and compared with O, S and Se congeners.

Introduction of tellurium on 2-lithiosubstituted thiophenes with 1-3 dioxolane group in 3 position gives rise to 3-formyl 2-butyltellurothiophenes, starting material for tellurolo 2,3-b thiophene synthesis and a wide variety of 2-substituted derivatives.