

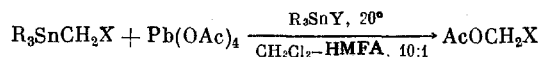
REACTIONS OF STANNYLACETIC ACID DERIVATIVES
WITH LEAD TETRAACETATE

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On oxidation of organometallic compounds with lead tetraacetate, organic acetates are usually obtained [1], but organotin compounds, with a rare exception [2], were not used in this reaction.

The reaction of functionally substituted derivatives of organotin compounds R_3SnCH_2X ($R = Bu, X = CO_2Et$ (I); $R = Ph, X = CO_2Et$ (II); $R = Bu, X = CO_2Me$ (III); $R = Bu, X = CO_2Al$ (IV); $R = Et, X = CONMe_2$ (V); $R = Et, X = CN$ (VI)) with $Pb(OAc)_4$ proceeds with difficulty. The reaction proceeds readily only in the case of $PhCH(SnEt_3)CO_2Et$ (CH_2Cl_2 , $20^\circ C$, 1 h), and $PhCH(OAc)CO_2Et$ formed was isolated in a 76% yield. However, we found [3] that in the presence of a catalyst for the reactions of these compounds with electrophilic agents, $R_3'SnY$ ($R' = Bu, Y = I$ (VII); $R' = Ph, Y = I$ (VIII); $R' = Me, Y = OAc$ (IX)), the oxidation proceeds readily and the corresponding acetates are obtained in good yields



Given are R_3SnCH_2X , $R_3'SnY$, time of reaction, yield of $AcOCH_2X$ (GLC): (I), (VII), 10 min, 97%; (II), (VIII), 20 min, 94%; (III), (IX), 2 h, 92%; (IV), (IX), 3 h, 83%; (V), (IX), 1 h, 85%; (VI), (IX), 2 h, 72%.

If we take into account the accessibility of the stannylated α -functionally substituted compounds [4], the reaction studied can be recommended for the synthesis of the corresponding α -acetoxy derivatives.

LITERATURE CITED

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