

ERRATUM

REASSIGNMENT OF THE FAR INFRARED SPECTRA OF THE TRIPHENYLTIN CHLORIDE AND TETRAMETHYLAMMONIUM DICHLOROTRIPHENYLSTANNATE(IV) (*J. Organometal. Chem.*, 10 (1967) 373, 375)

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(Received December 16th, 1968)

The vibrational spectrum of the solid triphenyltin chloride has been discussed in a recent publication¹. The bands at 449 (broad), 332, 230, 180, 152 and 85 cm^{-1} have been assigned earlier. In addition to these bands, a band at 271 cm^{-1} in the far infrared (550 to 70 cm^{-1}) was also observed which was not reported there. This band was excluded in the publication, because Kriegsmann and Geissler² attributed it to a phenyl vibration in their spectrum of the triphenyltin chloride in solution. Recently Poller³ assigned this band to a mode of $\text{Sn}-\text{C}_6\text{H}_5$ stretching and a band at 449 cm^{-1} to a phenyl vibration ($16b(B_1)$). In the light of these studies it is plausible to revise the earlier assignment on the triphenyltin chloride which was based on Kriegsmann and Geissler². Thus the band at 271 cm^{-1} is attributed to the mode of $\text{Sn}-\text{C}_6\text{H}_5$ stretching and the band at 490 cm^{-1} to a phenyl vibration ($16b(B_1)$). The bands at 85 and 152 cm^{-1} are attributed to the e and a_1 modes of the $\text{Sn}(\text{C}_6\text{H}_5)_3$ deformations respectively according to the analogy of the band assignments of the ClGeBr_3 molecule⁴. The last band at 180 cm^{-1} is attributed to $\text{C}_6\text{H}_5-\text{Sn}-\text{Cl}$ bending (e mode) as it had been assigned earlier.

In addition to the bands at 460, 450, 190 (broad), 150 and 135 cm^{-1} in the far infrared spectrum, in the range 550 to 70 cm^{-1} of the tetramethylammonium dichlorotriphenylstannate(IV), a band at 270 cm^{-1} was also observed. This latter band is now attributed to the SnC_3 antisymmetrical stretching in the present revised assignment, instead of the bands at 460 and 450 cm^{-1} as it was assigned earlier. The bands at 460 and 450 cm^{-1} are attributed to a phenyl vibration. The other assignments are not changed.

I am grateful to Dr. R.C. Poller for valuable comments and Mr. Prithvi Raj for fruitful discussions.

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