^{63}Cu NQR and Structural Studies of Complexes Formed Between Cu(I) Halides and *tris*(o-methoxyphenyl)- or *tris*(p-tolyl)phosphine Ligands*

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The crystal structure of $[tri(o\text{-methoxyphenyl})phosphine]_2Cu_2Br_2$ shows it to be a halogen-bridged dimer with three-coordinated Cu(I) sites. The ^{63}Cu NQR frequency of the corresponding chloride indicates that it has a similar structure. The ^{63}Cu NQR frequencies of the complexes of tri(p-tolyl)phosphine, $L_3Cu_2X_2$, with cuprous chloride and bromide are consistent with their having halogen-bridged structures with both three- and four-coordinated Cu(I) sites analogous to those formed by triphenylphosphine and tri(m-tolyl)phosphine. Cu(I) sites. $[CuBr(P(C_7H_7O)_3]_2$; Triclinic, P $\bar{1}$, $Z=2$, $a=8.969(1)$, $b=10.510(2)$, $c=11.428(2)$ Å, $\alpha=99.46(1)$, $\beta=97.95(1)$, $\gamma=104.17(1)°$, $R=3.5\%$, $R_\omega=2.2\%$.

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