

Answer on Question#71925 – Chemistry – Organic chemistry

**Question:**

Reaction of  $\text{IrCl}_3(\text{tht})_3$  (tht=tetrahydrothiophene) with allyllithium ( $\text{LiC}_3\text{H}_5$ ) in 1:3 molar ratio gave a neutral organometallic compound A which does not have Cl or tht as ligands. Compound A was found to undergo addition reactions further with (a) 1 mole of  $\text{PPh}_3$  and (b) 2 moles of  $\text{PMe}_3$  to give compounds B and C respectively. Compounds A, B and C obey the 18 electron rule. Draw the structures of compounds A-C clearly indicating mode of bonding of ligands involved.

**Answer:**

