

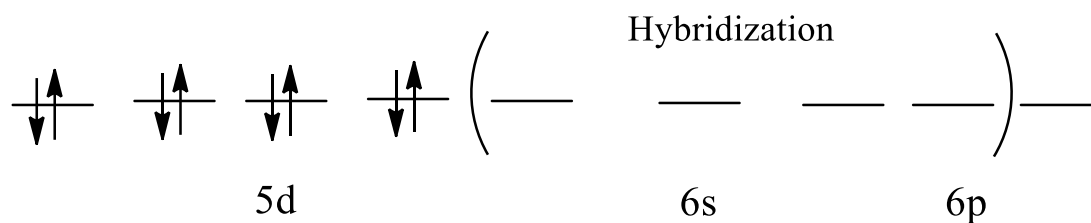
Answer on Question #53714 – Chemistry – Inorganic Chemistry

Question:

Find the hybridization of $(\text{PtCl}_4)^{2-}$ by drawing the proper structure of it.

Answer:

Having electronic configuration $[\text{Xe}] 6s^0 4f^{14} 5d^8 6p^0$ Pt(II) has one s, two p and one d orbitals for hybridization.



Therefore, Pt has dsp^2 hybridization, and the corresponding complex anion exhibits a square-planar geometry:

