Evaluating the structural features of Bis(triphenylphosphine)nickel(II)complex using Avogadro

Abstract

The 3D structure of the Bis triphenyl phosphine Nickel (II) complex was drawn in Avogadro software. Using the Avogadro interface, various properties such as bond length, bond angle, electrode potential and geometry of the complexes were explored. The 3D structure of the complex with different types of ligands was also drawn. Properties of the complexes with different ligands were compared in Avogadro. In addition, 3D structures of the complexes were drawn by changing the central metal ion to Platinum, Palladium and Cobalt. The change in the properties of the complex with change in the central metal ion was analysed. It was observed that with change in the central metal ion the colour of the complex changes.

Keywords

Complex, ligand, central metal, geometry, Avogadro