

There are different types of vapour deposition techniques, they include : sputter deposition, Chemical Vapour Deposition (CVD) and Physical Vapour Deposition (PVD). These vapour deposition methods are used to deposit functionally graded surface coatings and they give excellent microstructure, but they can only be used for depositing thin surface coating. They are energy intensive and produce poisonous gases as their byproducts [66]. Other methods used in producing functionally graded coating include : plasma spraying, electrodeposition, electrophoretic, Ion Beam Assisted Deposition (IBAD), Self Propagating High-temperature Synthesis (SHS), etc [67].