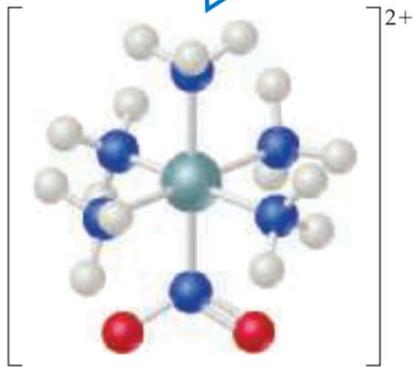


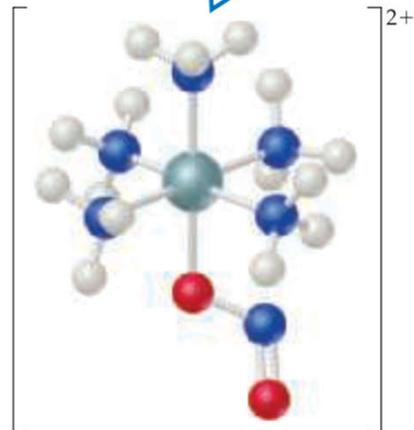
Aula 14 QE

ISOMERIA

Ligação

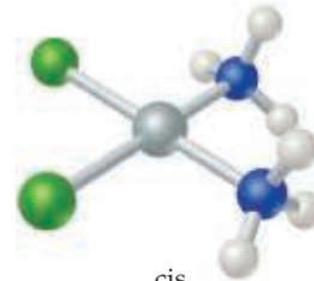
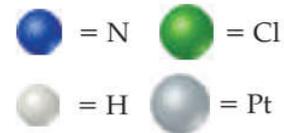


Nitro isomer
Bonding via ligand N atom

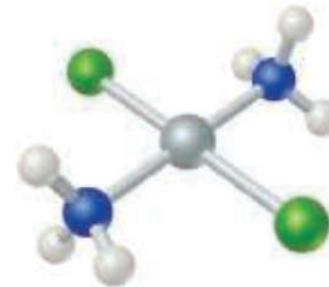


Nitrito isomer
Bonding via ligand O atom

Geométrica

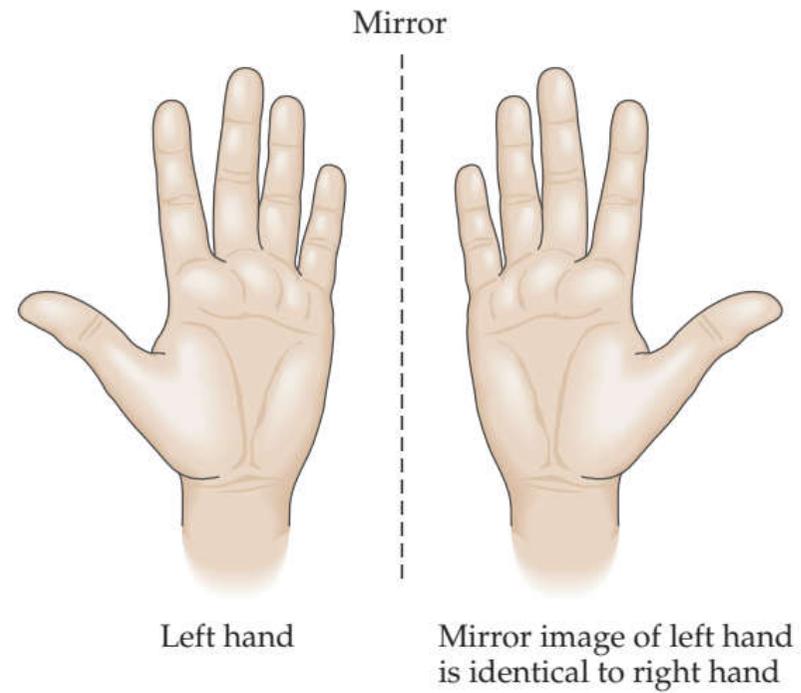
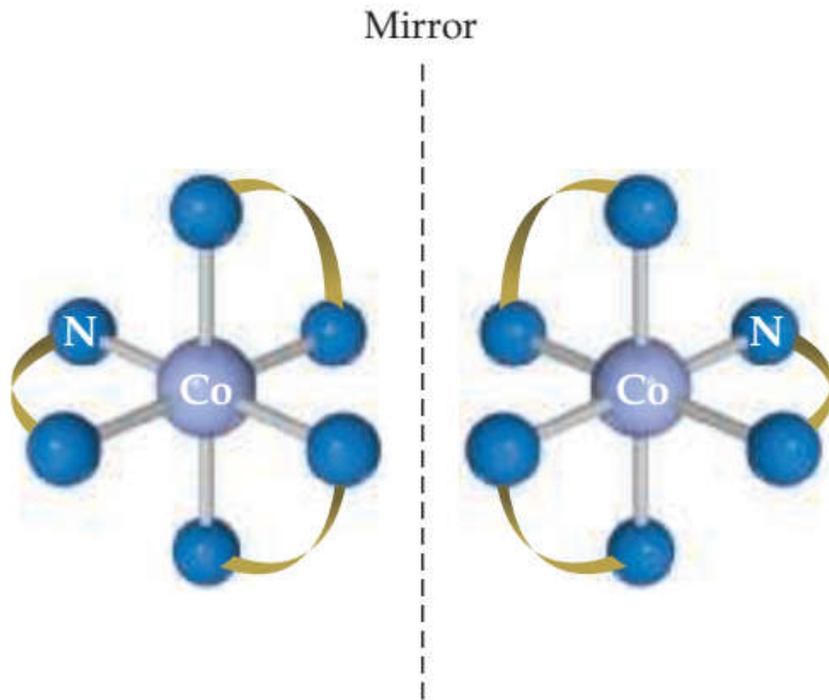


cis
Cl ligands adjacent to each other
NH₃ ligands adjacent to each other

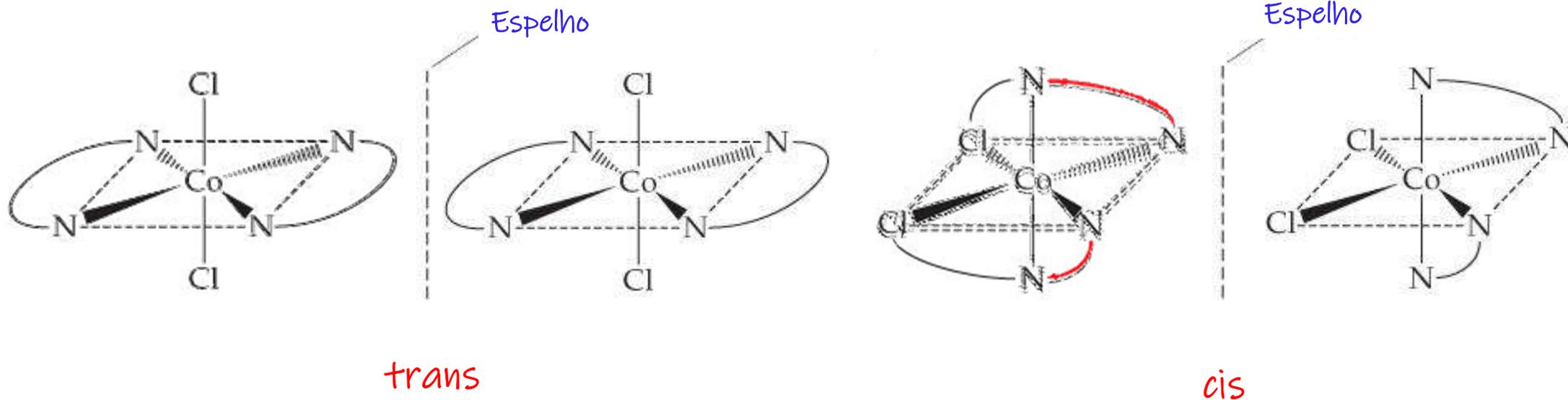
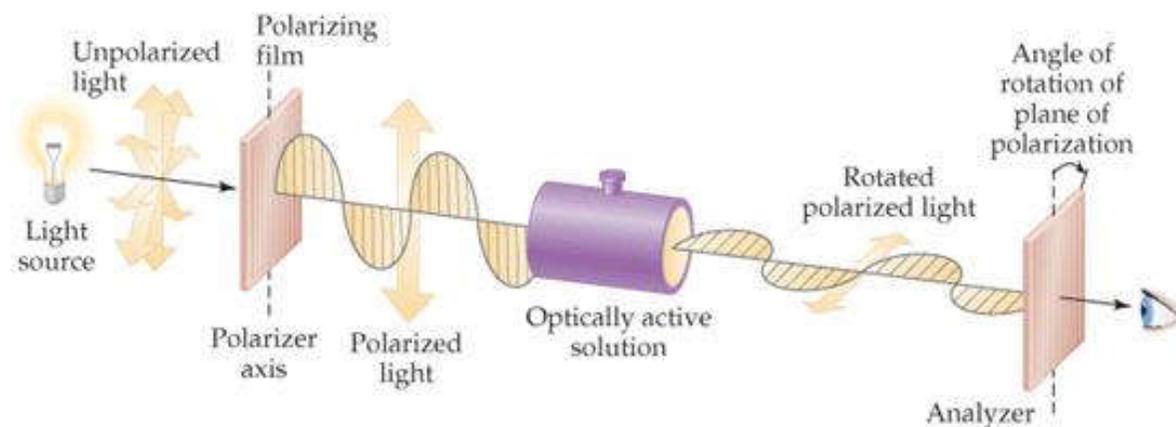


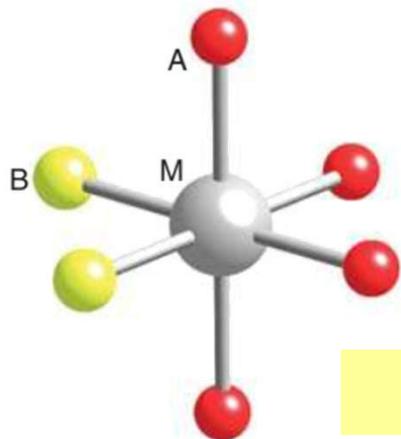
trans
Cl ligands on opposite sides of central atom
NH₃ ligands on opposite sides of central atom

Óptica



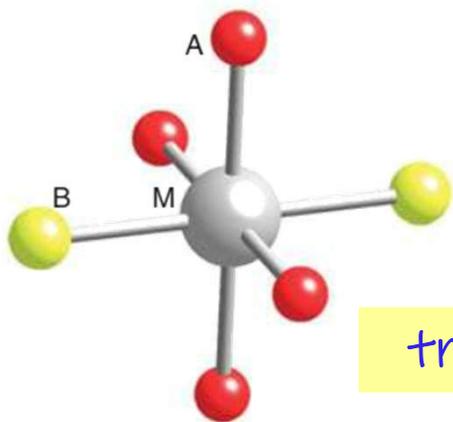
Os compostos $\text{cis-}[\text{Co}(\text{en})_2\text{Cl}_2]^+$ ou $\text{trans-}[\text{Co}(\text{en})_2\text{Cl}_2]^+$ tem isômeros ópticos?





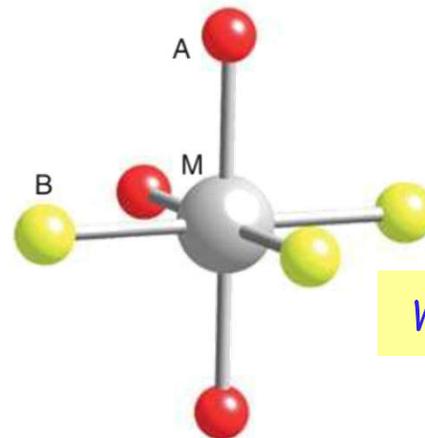
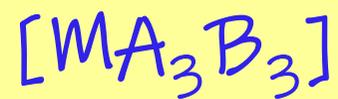
cis

55 *cis*- $[MA_4B_2]$



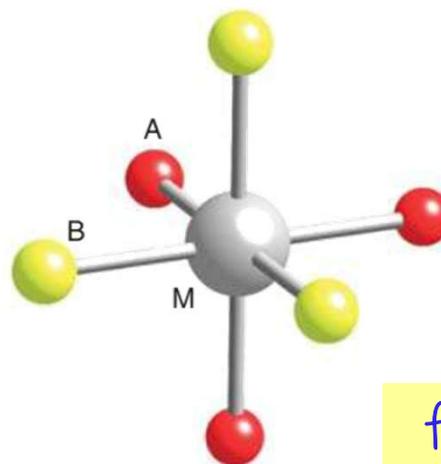
trans

56 *trans*- $[MA_4B_2]$



mer

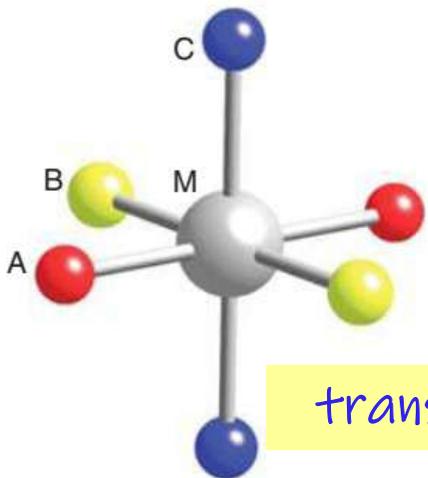
57 *mer*- $[MA_3B_3]$



fac

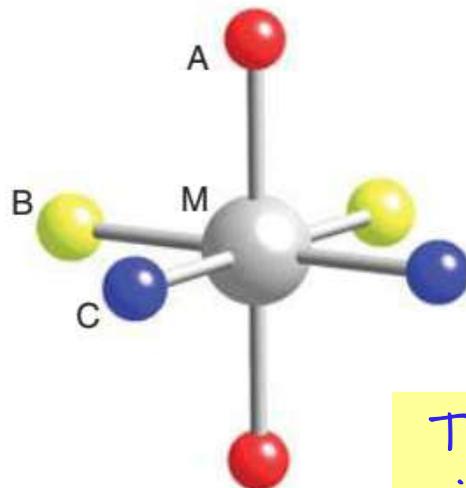
58 *fac*- $[MA_3B_3]$

$[MA_2B_2C_2]$



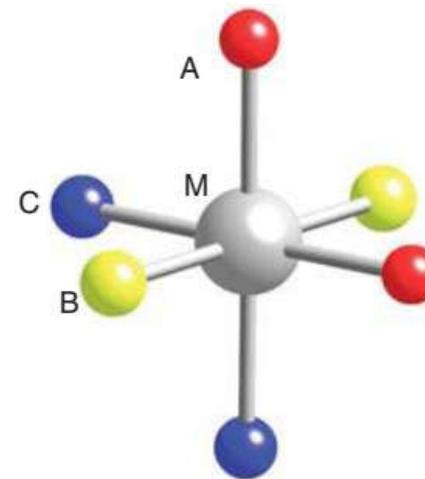
trans

59 $[MA_2B_2C_2]$

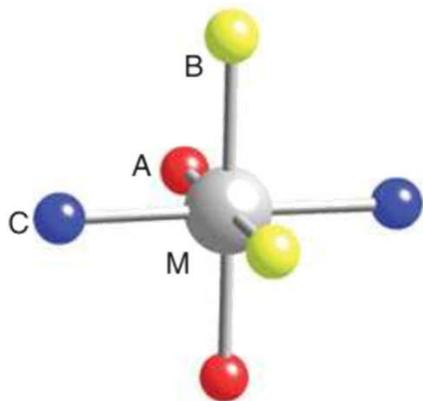


Trans,
cis, cis

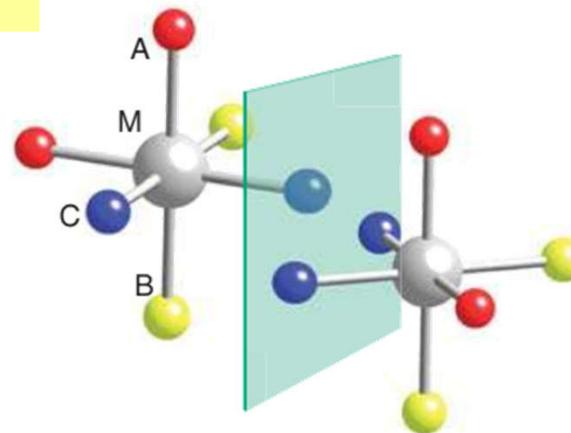
60 $[MA_2B_2C_2]$



61 $[MA_2B_2C_2]$

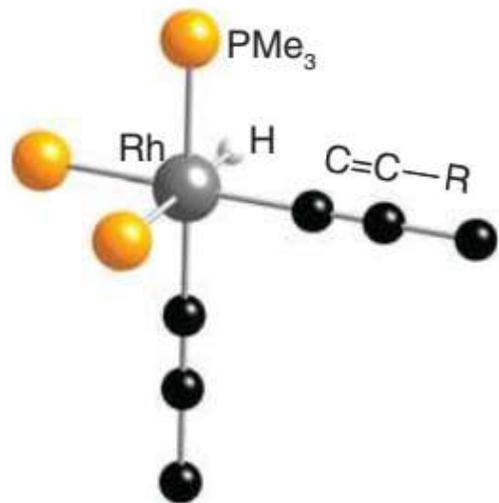


62 $[MA_2B_2C_2]$



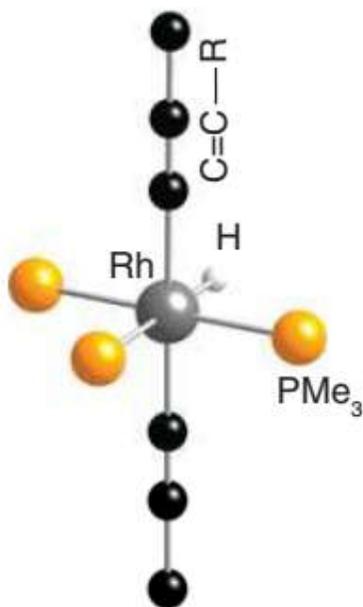
cis

63 $[MA_2B_2C_2]$ enantiomers



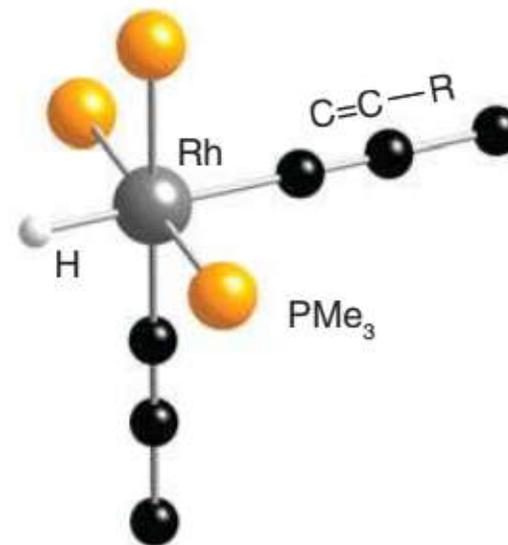
64 *fac*-[RhH(C≡CR)₂(PMe₃)₃]

fac



65 *mer-trans*-[RhH(C≡CR)₂(PMe₃)₃]

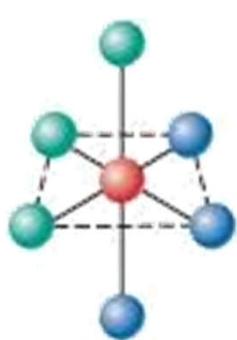
Mer-trans



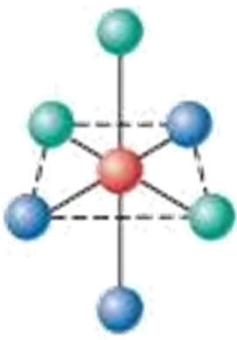
66 *mer-cis*-[RhH(C≡CR)₂(PMe₃)₃]

Mer-cis

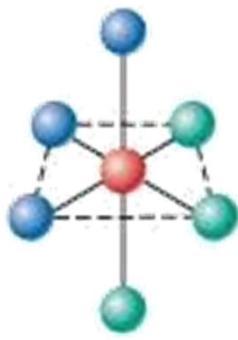
23.5 Existem dois isômeros geométricos de complexos octaédricos do tipo MA_3X_3 , onde M é um metal e A e X são ligantes monodentados. Dos complexos mostrados aqui, quais são idênticos a (1) e quais são os isômeros geométricos de (1)?



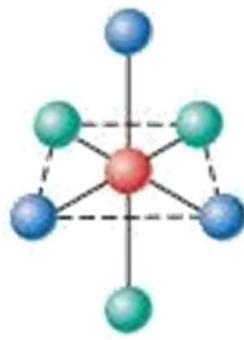
(1)



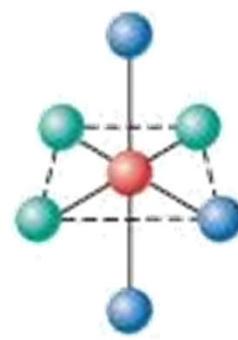
(2)



(3)



(4)



(5)

Obrigado !!