

CHEM 322: Coordination Chemistry

Topic: Isomerism

Submission date.

Roll No.

Name.

Isomerism in Coordination Complexes

For each of the following structures from the Cambridge Structural Database (CSD), fill in the information requested in the table below. The shading indicates relationships between the structures in the table. All nine of the structures are available in the Teaching Subset of the CSD can be accessed from the Cambridge Crystallographic Data Centre using the following link, <https://www.ccdc.cam.ac.uk/structures/>. The structures can be viewed directly in the browser window using the JSmol viewer. Alternatively, the structures can be viewed in Mercury, a free visualization program available from the CCDC, which includes the Teaching Subset.

Please choose the metal coordination number, the type of isomerism (geometric, optical, linkage, coordination, ionization) possible for each complex, and which isomer (cis/trans, mer/fac, or R/S) is observed for the structure from the appropriate drop-down list. For linkage isomers, you can choose

Structure	Metal CN	Type of isomerism observed	Which isomer observed?	Name of ligand in linkage isomer	Comment (for any additional thoughts)
CEZEP					
CEZIT					
YUHRIC					
YUHROI					
GONXUC					
GONYAJ					
NAMCEL					
NAMCIP					
FAMZEZ					

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