Chiral Center, chiral atom, chirality center, or center of chirality is a tetrahedral atom in a molecule bearing four different ligands, with lone pairs, if any, treated as ligands.

eg. 1:

![Diagram of a chiral center]

eg. 2:

![Diagram of a chiral center]

eg. 3:

![Diagram of a chiral center]

If a chiral center is a carbon atom, it can also be called an asymmetric carbon atom. Thus, in eg. 1 the chiral center is an asymmetric carbon atom.

The term stereocenter, also called stereogenic center, is often used synonymously with the term chiral center. However, the term stereocenter has a different definition, according to which all chiral centers are stereocenters but not all stereocenters are chiral centers.

Contributors

- Gamini Gunawardena from the OChemPal site (Utah Valley University)