Consider a compound that has the following structural formula.

\[
\begin{array}{c}
\text{H} & \text{H} \\
\text{X} & \text{C} & \text{C} & \text{Y} \\
\text{H} & \text{H} \\
\end{array}
\]

\[X, \ Y = \text{any ligand except hydrogen}\]

The following staggered conformation, in which the dihedral angle between X and Y is 180°, is called the anti conformation.

\[
\begin{array}{c}
\text{H} & \text{H} \\
\text{H} & \text{H} \\
\text{H} & \text{H} & \text{X} & \text{H} \\
\text{H} & \text{H} \\
\end{array}
\]

eg. butane

\[
\begin{array}{c}
\text{H} & \text{H} \\
\text{H} & \text{H} \\
\text{CH}_3 & \text{C} & \text{C} & \text{CH}_3 \\
\text{H} & \text{H} \\
\end{array}
\]

see also gauche conformation

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**Contributors**

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