An alpha (symbol: \( \alpha \)) carbon is a carbon atom bonded to a functional group in an organic compound; the carbon atom next to the \( \alpha \) carbon is the beta (symbol: \( \beta \)) carbon, and so on (\( \alpha \), \( \beta \), \( \gamma \), \( \delta \)...).

eg:

\[
\text{CH}_3\text{---CH}_2\text{---CH}_2\text{---Br} \quad \text{functional group}
\]

A compound containing only one functional group may have more than one \( \alpha \) carbon.

eg:

\[
\text{CH}_3\text{---C---CH}_3 \quad \text{functional group}
\]

If a compound contains more than one functional group, the terms \( \alpha \)-carbon, \( \beta \)-carbon, etc. are meaningful only if the functional group is specified.

eg:

Contributors

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