

CHAPTER OVERVIEW

2: Rules and Guidelines Governing Organic Synthesis

There are a few rules that provide guidelines for planning strategies in organic synthesis. These rules and guidelines have come from the keen observations of chemists after looking into several examples from their own research and other published work in the literature. *These observations are to be treated as thumb-rules to be applied with caution. They may not be applicable for all situations.* Nonetheless, they serve as guidelines to avoid pit-falls in planning. Since all these rules are governed by the underlying principles of *mechanistic organic chemistry* and *stereochemistry*, these basic mechanistic principles are the touchstones against which the conclusions reached are to be tested. Most of the rules that are useful in planning synthesis are collected here for convenience.

[2.1: Baldwin's Rule for Ring Closure Reactions](#)

[2.2: Bredt's Rule](#)

[2.3: Cram's Rule and Prelog's Rule](#)

[2.4: Hofmann's Rule and Zaitsev's Rule](#)

[2.5: Markovnikov Rule](#)

Contributors and Attributions

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