

CHAPTER OVERVIEW

2: Bond Lengths and Resonance

This exercise seeks to reinforce the idea of resonance in describing the electronic structure of simple organic molecules. To do this, we will model simple molecules which do and do not have significant resonance using the Orca and Avogadro software packages. This exercise shows that molecules with significant resonance structures often have what is referred to as partial double bond character.

[2.1: Overview](#)

[2.2: Background](#)

[2.3: Computational Instructions](#)

[2.4: Exercise Questions](#)

This page titled [2: Bond Lengths and Resonance](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Nicholas Boaz and Orion Pearce](#).