

## 11.1 Zeff and Electron Shielding (Video)

This project was preformed to supply **LibreText Authors** with videos on General Chemistry topics which can be used to enhance their projects. Also, these videos are meant to act as a learning resource for **all General Chemistry students**.

### Video Topics

As the  $n$  value of the subshell of the electron increases the distance between the nucleus and the electron also increases. This means that as  $n$  increases the interaction between the proton and electrons decreases. Electrons in orbitals closer to the nucleus shield the nucleus from electrons further away. The effective nuclear charge,  $Z_{\text{eff}}$ , that an electron feels depends on the actual nuclear charge,  $Z$ , and the screening ability of other electrons in the atom. This video helps to define the periodic trend of  $Z_{\text{eff}}$ .

### Link to Video

**$Z_{\text{eff}}$  and Electron Shielding:** <https://youtu.be/uRXqGwgWPyI>



### Attribution

- Prof. Steven Farmer ([Sonoma State University](#))

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