15.5 Why do Gases Dissolve in Water? (Video)

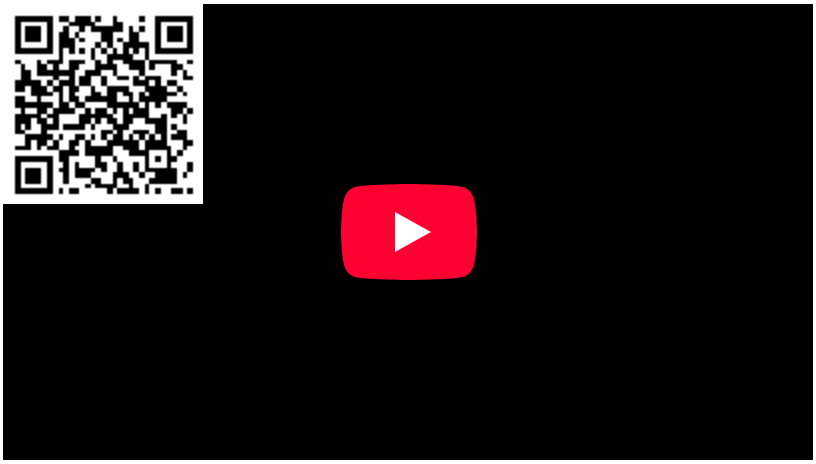
This project was preformed to supply **Libretext Authors** with videos on General Chemistry topics which can be used to enhance their projects. Also, these videos are meant to act as a learning resource for **all General Chemistry students**.

Video Topics

Water (H_2O) is a polar molecule while many gases (O_2 & N_2) are nonpolar. Because gases do dissolve in water, there must be some kind of intermolecular force between them. The permanent dipole in water causes polarization in the O_2 molecule. As the negative side of a water molecule approaches the O_2 molecule, the electrons surrounding the O_2 molecule are pushed away creating an induced dipole. Now there is an interaction between the negative side of the water molecule and the positive side of the O_2 molecule. This is called a Dipole-Induced Dipole intermolecular force.

Link to Video

Why do Gases Dissolve in Water?: https://youtu.be/_pRlZXcCQ64



Attribution

- Prof. Steven Farmer (Sonoma State University)