

Answer on the question #62993, Chemistry / General chemistry

The bond length in oxygen molecule is larger than the bond in hydrogen molecule

Answer:

The bond length of oxygen molecule is 121 pm^1 and hydrogen molecule is 74 pm^1 . Both of this bond has covalent character, but for hydrogen is the single bond and for oxygen is the double bond.

In the molecule H_2 , the [hydrogen](#) atoms share the two electrons via covalent bonding. There are 8 electrons in the oxygen atom. That is why radius of those two atoms are different and length of bond also will be different.

¹ "Bond Lengths and Energies". Science.uwaterloo.ca. Retrieved 2013-10-15.