conceptual chemistry

6.6 polar covalent bonds result from an uneven sharing of electrons //極性共價鍵

1)"*evenly*": if the two atoms that form a covalent bond are the same, then y have the same positive charge, so electrons are shared evenly.

We can illustrate this by putting two electrons right between the two atoms: H : H, or draw a probability cloud.

如果組成共價鍵的兩個原子是同一種元素，則核內的正電一樣大，電子就會被兩個原子平均的享有。

可以在電子點式（上面那個，我不確定他叫什麼）裡把兩顆電子放在正中間，或畫一個左右對稱的機率雲。

2)"*unevenly*":electrons are more attracted by one of the two atoms, H - F etc.(electrons are more attracted by F, like this: H : F).

基本上就跟上面那個相反。例子是氟化氫氣體。//其他例子：氨氣

3)"*DIPOLE*":In this case, electrons spend more time around F atom. Therefore, F side of the bond is a little bit negative. On the other hand, H side of the bond is a little bit positive because electrons have been dragged away. This separation of charge is called "*DIPOLE*", represented by"$\delta-$" &"$\delta+$", and also"$\overset{\delta+}{\mathrm{H}}-\overset{\delta-}{\mathrm{F}}$"or"$\overrightarrow{\mathrm{H-F}}$".

在前面那個例子裡，電子會比較靠近氟原子，因此氟原子附近呈現些微負電（H端完全相反）。這種現象被稱為「鍵偶極」。鍵偶極可以有上方的表示方法。

//電偶極：有兩個相聚一段距離，電量相等、電極相反的電荷構成的電場。

//https://www.youtube.com/watch?v=yAIDwxpqEu0

4)"*electronegativity*": how strong an atom is able to drag an electron towards itself when bonded.

電負度。