Today in Chemistry History



28th February – Linus Pauling's birthday (1901) and electronegativity



Linus Pauling

Born

28 February 1901

Died

19 August 1994





Pauling is famed for his work on chemical bonding, for which he won a Nobel Prize in Chemistry. In 1932 he proposed the Pauling electronegativity scale. He also researched biological molecules.

Electronegativity and the Pauling Scale



Covalent



Polar

covalent





Ionic bond

0.0 - 0.4

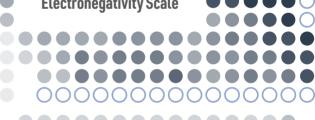
0.4 - 1.7

>1.7

Difference in electronegativity

Electronegativity is a measure of the tendency of an atom to attract electrons when it is part of a compound. Generally, electronegativity increases moving towards the top right of the Periodic Table. The difference in electronegativity between two bonded atoms gives information on the nature of the chemical bond between them.







0.75-1.00

1 50-1 75

1.25-1.50

2 00-2 50 2.50-3.00

1.75-2.00

3.00-4.00

1.00 - 1.25