

Answer on Question #72130, Chemistry / Inorganic Chemistry

Although B (Boron) is smaller in size as compared to Be (Berellium) but the first ionisation enthalpy of Be (Berellium) is higher than B (Boron).

Answer

Boron electron configuration is $1s^2 2s^2 2p^1$.

Berellium electron configuration is $1s^2 2s^2$.

In case of Boron first ionization enthalpy is the amount of energy required to remove 2p electron, in case of Berellium – 2s electron. According to aufbau principle electrons on 2p orbital have higher energy than the ones on 2s orbital. That means that it's easier to remove $2p^1$ electron than $2s^2$ electron. That's why the first ionization enthalpy of Be is higher than the one of B.

Answer provided by AssignmentExpert.com