

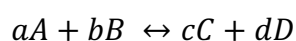
## Answer on Question #76580 - Chemistry - General Chemistry

### Question:

Larger value of  $K_c$  indicates that the reversible reaction goes to completion since reversible reaction do not go to completion

### Answer:

Equilibrium constant of reaction  $K_c$  is a ratio of composition equilibrium concentrations of products to reagents with including of coefficients of reaction. Let's define  $K_c$  for the following reaction:



$$K_c = \frac{[C]^c [D]^d}{[A]^a [B]^b}$$

This equation is valid for direct reaction of formation products C and D. As we will increase concentrations of A and B the value of  $K_c$  will decrease. Since increasing of products' concentrations (C and D) will lead to changing of path of the reaction, because of increasing of value  $K_c$ . By this way we can conclude, that the larger value of equilibrium constant of reaction leads to completion of reversible reaction and direct reaction will not be completed.