

# Chemical equilibrium

V Q B ' G X A T L H ' X W - O T V Y N M ' D S D H D O R T X  
' J A Q A T N O R A C T I V A T I O N - E N E R G Y A N W R  
E N E R G Y - M I N I M I Z A T I O N P P O T H I K H Q S Q  
P A R T I A L - P R E S S U R E U I B Z Z R N K Q Y E T I O  
T H E R M O D Y N A M I C - S T A B I L I T Y W P F T N G '  
R E A C T A N T - F A V O R I N G T V O ' S U - L A E E S -  
A Y N Y D I B Q Q T K I N E T I C - C O N T R O L B R I E N  
B T Q W T O I F E Q U I L I B R I U M - S H I F T T O T T '  
G A S - P H A S E - E Q U I L I B R I U M P ' F E F G O A V  
X K K M A S S - A C T I O N Z - P Z D X U G D I D C E U N D  
K J R E V E R S E - R E A C T I O N O M Z Z A L F M N Q I Q  
L F W V Z W N Q Q J X A F R R X Z Z L P ' L ' U O - E - D M  
H O M O G E N E O U S - E Q U I L I B R I U M F D Z O N R K  
H J K A V C A D Y N A M I C - E Q U I L I B R I U M U O O P  
C H E M I C A L - P O T E N T I A L N S T K F ' N F S I O C  
E Q U I L I B R I U M - M I X T U R E X T S K L G F - T C A  
E Q U I L I B R I U M - C O N S T A N T L M Y S F O E C - T  
K H K O K Q Y M H W X O M O L E - F R A C T I O N H Q A N A  
I O N I Z A T I O N - E Q U I L I B R I U M H J R - U E O L  
T E M P E R A T U R E - D E P E N D E N C E A T P T I R I Y  
S X E X E F O R W A R D - R E A C T I O N U B A C ' L W T S  
- T I I E T Y R P H A S E - E Q U I L I B R I U M N I N C T  
T H X E D L Z E F J S P W W P L H R C J S ' D F G A B C A -  
Y G X L D Z B G J L D ' O J Y B T T Z - S T - E L V R X E E  
S O L U B I L I T Y - P R O D U C T W M M U X N M J I B R F  
I K Y G B O ' S Y O L E - C H A T E L I E R ' S H P U X T F  
P R O D U C T - F A V O R I N G Y K ' Y I T Q W Z ' M J U E  
T F C J B L I Q U I D - P H A S E - E Q U I L I B R I U M C  
S O L I D - P H A S E - E Q U I L I B R I U M I H B B U N T  
A O U O L S L - T M T W O L N ' S H Z Z N O M I Z H H K G S

1. A state where the forward and reverse reactions occur at equal rates.

2. The reaction proceeding in the direction of products formation.

3. The reaction proceeding in the direction of reactants formation.

4. An equilibrium involving reactants and products in the same phase.

5. An equilibrium involving reactants and products in different phases.

6. principle Principle stating how a system at equilibrium responds to changes in conditions.

7. The ratio of product and reactant concentrations at any point in the reaction.
8. A constant expressing the ratio of products to reactants at equilibrium.
9. Equilibrium between different physical states of a substance.
10. The potential energy of a species that influences its chemical reactions.
11. equation An equation relating equilibrium constant to temperature changes.
12. law A law stating that reaction rate is proportional to active masses.
13. A graph showing the progress of a reaction along its pathway.
14. The minimum energy required to initiate a chemical reaction.
15. The influence of catalysts in altering equilibrium speed but not position.
16. Equilibrium favoring product formation under given conditions.
17. Equilibrium favoring reactant formation under given conditions.
18. The pressure exerted by a single gas in a mixture of gases.
19. The ratio of moles of a component to the total moles in a mixture.
20. The stability of a system determined by energy levels at equilibrium.
21. The process of a system seeking the lowest energy configuration.
22. A situation where the reaction pathway determines product amounts.
23. A change in equilibrium position due to external perturbations.
24. Equilibrium in reactions where all components are gases.
25. Equilibrium in reactions where all components are liquids.
26. Equilibrium in reactions involving solid components.
27. The composition of products and reactants at equilibrium.
28. The equilibrium constant for sparingly soluble salts.
29. Equilibrium involving ionization in aqueous solutions.
30. The effect of temperature on the equilibrium constant.