

## ChemistrYES! B. Bonelli, M.U. Tomalino

### Errata Corrige to the First Edition

**Page 11:**  $\text{MnO}_4^{2-}$  **manganate** ion

**Page 14, Paragraph 2.4.3:**  $\text{H}_2\text{S}_{(\text{aq})}$  is **hydrosulphuric** acid,  $\text{HCN}_{(\text{aq})}$  is **hydrocyanic** acid,  $\text{HF}_{(\text{aq})}$  is **hydrofluoric** acid,

**Page 21, eq. (10):**

$$\text{electron mass} = \text{charge} \times \frac{\text{mass}}{\text{charge}} = \frac{(-1.602 \times 10^{-19}) (-5.686 \times 10^{-12} \text{ kg/C})}{9.109 \times 10^{-28} \text{ g}} = 9.109 \times 10^{-31} \text{ kg} = \quad (10)$$

**Page 73, eq (24):**

$|\chi_A - \chi_B|$  according to eq. (24):

$$|\chi_A - \chi_B| = c [BE_{AB} - (BE_{AA} * BE_{BB})^{\frac{1}{2}}] \quad (24)$$

**Page 162, Table 10.3:**

Compound	Intermolecular force	Superficial tension (J/m <sup>2</sup> ) at 20°C
Diethyl ether CH <sub>3</sub> CH <sub>2</sub> -O-CH <sub>2</sub> CH <sub>3</sub>	Dipole-dipole; London	1.7*10 <sup>-2</sup>
Ethanol CH <sub>3</sub> CH <sub>2</sub> -O-H	<b>H bond</b>	2.3*10 <sup>-2</sup>
Water	<b>H bond</b>	7.3*10 <sup>-2</sup>

**Page 225, Table 13.1**

Disturbance	Reaction direction	Effect on $Q$	Effect on $K(T)$
[R] increases	right →	$Q < K$	None
[R] decreases	left ←	$Q > K$	None
[P] increases	left ←	$Q > K$	None
[P] decreases	right →	$Q < K$	None
<b>For gas phase reactions with <math>\Delta n = 0</math></b>			
P increases (V decreases)	no shift	None	None
P decreases (V increases)	no shift	None	None
<b>For gas phase reactions with <math>\Delta n &lt; 0</math></b>			
P increases (V decreases)	right →	$Q < K$	None
P decreases (V increases)	left ←	$Q > K$	None
<b>For gas phase reactions with <math>\Delta n &gt; 0</math></b>			
P increase (V decreases)	left ←	$Q > K$	None
P decreases (V increases)	right →	$Q < K$	None

**Page 249**

Kinetic law	<b>Zero order</b>	<b>First order</b>	<b>Second order</b>
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Page 302, Figure 16.5

