

## Errata and typographic corrections

Ionic Transport Processes in Electrochemistry and Membrane Science

K. Kontturi, L. Murtoimäki, and J.A. Manzanares

ISBN 978-0-19-953381-7, Oxford U.P., Oxford, 1<sup>st</sup> ed. 2008

- p iii: “Helsinki University of Technology” should be “Aalto University”
- p 21, line 1 after eqn (1.65): “eqn (1.50)” should be “eqn (1.60)”
- p 29, eqn (1.95):  $\vec{j}_u^+$  should be  $\vec{j}_u$
- p 29, eqn (1.96):  $\vec{j}_e^+$  should be  $\vec{j}_e$
- p 55 footnote: “eqn (2.68). The” should be “eqn (2.68) the”
- p 64 last line of eqn (2.129):  $\nabla p$  should be  $\bar{\nabla} p$
- p 66 line 4 after eqn (2.133):  $\bar{D}_{10}$  should be  $\bar{D}_{1,0}$
- p 67 eqn (2.140):  $c_i(\bar{v}_1 - \bar{v}_0)$  should be  $c_i(\bar{v}_i - \bar{v}_0)$
- p 81 line 3 from bottom: “reactant” should be “reactants”
- p 84 eqn (3.19):  $m$  should be  $n$
- p 91, eqn (3.56) THREE TIMES: resize the letters in the last fraction so that, e.g., “d” and “x” in dx have the same size
- p 93, eqn (3.70): eliminate parentheses
- p 96, Table 3.1, left column, line 8:  $I_{L,1}$  should be  $I_{L,1}$
- p 96, Table 3.1, left column, line 14:  $I_{L0}$  should be  $I_{L0}$
- p 96, Table 3.1, right column, first heading: “symmetric” should be “asymmetric”
- p 96, Table 3.1, right column, line 8:  $I_{L,1}$  should be  $I_{L,1}$
- p 96, Table 3.1, right column, line 9:  $\Delta\phi \approx 0$  should be  $\Delta\phi_L \approx 0$
- p 96, Table 3.1, right column, line 10:  $\Delta\phi_L \approx 0$  should be  $\Delta\phi \approx 0$
- p 96, Table 3.1, right column, line 11:  $I_{L,i}$  should be  $I_{L,i}$
- p 96, eqn (3.83):  $I_L$  should be  $I_L$
- p 104, eqn (3.112):  $\Gamma(2/3)/\Gamma(1/3)$  should be 0.566
- p 104, eqn (3.113): 0.505 should be 0.566
- p 104, eqn (3.113):  $\Gamma(1/3)$  should be  $\Gamma(1/3)\Gamma(4/3)$
- p 104, eqn (3.114):  $\Gamma(2/3)/\Gamma(1/3)$  should be 0.566
- p 104, 2<sup>nd</sup> ¶, line 2: “later” should be “layer”
- p 104, eqn (3.115) TWICE:  $\Gamma(2/3)/\Gamma(1/3)$  should be 0.566
- p 142, 1<sup>st</sup> ¶, last line:  $\text{Pe}(c_i^\alpha - c_i^\beta)/h$  should be  $-\text{Pe}(c_i^\alpha - c_i^\beta)/h$
- p 153, eqn (4.107) TWICE:  $RT$  should be  $\nu_{12}RT$   
( $\nu$  is the italic greek nu letter, same symbol as in the exponents of first line in p 154)
- p 154, line 1:  $\gamma_{\pm,12}$  should be  $\gamma_{12}$
- p 154, eqn (4.109):  $RT$  should be  $\nu_{12}RT$
- p 157, eqn (4.124):  $e^{-(\mu_{12}^{\circ,M} - \mu_{12}^{\circ,W})/RT}$  should be  $e^{-(\mu_{12}^{\circ,M} - \mu_{12}^{\circ,W})/\nu_{12}RT}$

- (note that  $\nu_{12}$  is the greek nu like in line 16 of p 281 and not the  $\nu_{12}$  in 1st line of p 282)
- p 163, caption Fig 4.21, line 6: “ratio” should be “the ratio”
- p 163, Fig 4.22, y-axis label:  $1/(\kappa_D^M)$  should be  $1/\kappa_D^M$
- p 168, Table 4.1 (if possible): The equations in columns 2 and 3 have been aligned with the second line of text in column 1 and should be aligned at the centre between the two lines of text in column 1.
- p 170, Fig 4.23, x-axis label (panels a, b, c and d): superscript “w” should be in roman style
- p 170, Fig 4.23, y-axis label (panels c and d): superscripts “w” and “M” should be in roman style
- p 210, caption Fig 4.42, line 1: “coion” should be “co-ion”
- p 211, caption Fig 4.23, lines 9, 13, and 15: “coion” should be “co-ion”
- p 222, line 4 (2<sup>nd</sup> line of 1<sup>st</sup> eqn): delete symbol  $\times$
- p 226, 2<sup>nd</sup> eqn from bottom: 
$$= -\frac{F}{\varepsilon} \left\{ \begin{array}{l} c_{12}^w e^{-\varphi} - c_{12}^w e^{\varphi} \\ c_{12}^w e^{-\varphi} - c_{12}^w e^{\varphi} + z_M c_M e^{-z_M \varphi} \end{array} \right. \text{ should be}$$

$$= \frac{F}{\varepsilon} \left\{ \begin{array}{l} 2c_{12}^w \sinh \varphi \\ 2c_{12}^w \sinh \varphi - z_M c_M e^{-z_M \varphi} \end{array} \right.$$
- p 229, 2<sup>nd</sup> eqn in page (1<sup>st</sup> eqn in 4.25): add space in between the two lines of the eqn
- p 248, line 2 after eqn (5.43): “carrier” should be “solute”
- p 248, lines 2-3 after eqn (5.43): eliminate “,  $P_A^o$  and  $P_{CA}$ ”
- p 250, eqn (5.52):  $j_{C,L}$  should be  $j_{C,L}$
- p 270, Fig 5.26 (4 times, if possible) : “low” and “high” should be in uppercase
- p 276, Ex. 5.3, line 2: “completely” should be “completely dissociated”
- p 276, Ex. 5.4, equation: eliminate minus sign in right hand side
- p 276, Ex. 5.4, equation:  $P_{CA}^o$  should be  $P_{CA}$
- p 276, Ex. 5.4, last line: “carriers” should be “carrier”
- p 277, line 7: “(1983), 1–14” should be “(1983) 1–14”
- p 278, line 2: A, B, C, E should be in italics
- p 279:  $I_{L,i}$  should be  $I_{L,i}$
- p 280 v solution velocity: the symbol v should be like the one used in eqn (1.1) (page 1) without the arrow above it
- p 280  $\vec{v}$ ,  $\equiv \sum_i w_i \vec{v}_i$  barycentric velocity (TWICE): the symbols  $\vec{v}$  and  $\vec{v}_i$  should be like the one used in eqn (1.1)
- p 280  $\vec{v}_i$  velocity of component  $i$ : the symbol  $\vec{v}_i$  should be like the one used in eqn (1.1)
- p 280  $\vec{v}_v$  volume-average velocity: the subscript is correct but the symbol  $\vec{v}$  should be like the one used in eqn (1.1)
- p 280  $\delta_{jk}$ :  $\delta_{jk}$  should be  $\delta_{ik}$
- p 281  $\vec{\pi}_v$ : For the subscript use the same symbol  $\vec{v}$  as in eqn (1.1)
- p 282 c chemical contribution: c should be in roman style
- p 282, add line: “e energy”
- p 282, last line, make equal the sizes of letters D and t