

THE THEORY OF ELECTROPHORESIS-CONVECTION

by

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ADDENDA AND CORRIGENDA

provided by the authors

For convenience the equations under each number are labelled a, b, c, --- in that order.

1. In third equation p. 301 change "2" to "4".
2. Last line p. 301 change a_{\min} to a_{\min} .
3. In equation 1-b insert minus sign before $\rho \nabla \cdot \vec{u}$
4. In equations 3-a, b, c, d, change "X's" and "Z's" to "x's" and "z's".
5. In line 9, p. 303 change α_k to α_K .
6. In lines 10 and 12, p. 303 change C_k to C_K .
7. In equation 5-b change "Z" to "z".
8. In lines 4 and 7, p. 304 change Eqs (4) to Eqs (3).
9. In equation 6-b change "X" to "x".
10. In equation 6-e delete "2" in the denominator.
11. In equation 6-f change "2" in parenthesis to "4".
12. In equation 7-a change $\frac{\partial x}{\partial \varphi_K}$ to $\frac{\partial \varphi_K}{\partial x}$
13. In equation 7-b change "X" to "x".
14. In equation 8-b delete ρ .
15. In equation 10-a insert minus sign between $\lambda_K(z)$ and $\frac{\mu^{(1)}}{\mu_K} \lambda \frac{d\lambda_K}{d\lambda}$
16. In line 7, p. 305 change α_k to α_K .
17. In equation 12 change "Z" to "z".
18. In equation 13-a change the exponent $4/5$ to $5/4$.
19. In equation 13-a, b change "Z" to "z".
20. In equation 14 change "Z" to "z", multiply first term on right hand side by λ/C_K° , insert "l" under summation sign, and insert minus sign before exponent $1/4$.

21. In equation 15 change $(\mu_K - \mu^{(1)}/\mu^{(1)})$ to $(\mu_K - \mu^{(1)})/\mu^{(1)}$
22. In line 3, p. 306 change J_k to J_K .
23. In equation 16-c change $\mu_1^{(0)}$ to $\mu_0^{(1)}$
24. In equation 17-a change " V " to " V_1 ".
25. In equation 17-c change " Z " to " z ".
26. In equation 18-d divide right hand side by $\sum_{K=1}^r a_K X_K^2$
27. In equation 19-a change " Z " to " z ".
28. In equation 20-a change $\omega'(\kappa)$ to $\omega'(\kappa_1)$
29. In equation 20-b change $\kappa^0 \mu_K / \mu_0^{(1)}$ to $\kappa_0 \mu_K / \mu_0^{(1)}$
30. In equation 21 change " Z " to " z ".
31. In equation 22-b change $\psi(\kappa) - \psi(\kappa)$ to $\psi(\kappa) - \psi(\kappa_0)$
32. In line 5, p. 308 change S_0 to κ_0 and S to κ
33. In equation 24-c change μ_K in the denominator to μ
34. In equation 26-a change " Z " to " z ", and change exponent $-3/5$ to $3/5$.
35. In equation 27-b change upper limit from $1 - \kappa$ to $1 - \kappa_1$
36. In equation 29-a change 8 to 4.
37. In equation 29-b change 546 to 459.
38. Change lines 7 and 8, p. 310 to read: $E = 1$, is 5.7 hours. The exhaust time from Table I is therefore 31.8 hours, the time for 90% transport 9.0 hours and the time for 20% transport 0.2 hours.
39. In equation 30-a change μ^1 to μ_1
40. In equation 30-b change $\int_1^X X^{-8/4}$ to $\int_X^1 X^{-8/5}$
41. In equation 30-c change μ_r to μ_2
42. In equation 32-c divide right hand side by $(a_1 X_1^0 + a_2 X_2^0)$
43. In equation 33-a change D to D_2 .
44. In equation 35-b change μ_2/μ_2 to μ_2/μ_1
45. In first line of heading-Table II change $f_1^{(2)}$ to $f_2^{(1)}$.
46. In first line p. 314 change λ , to λ_1
47. In equation 41-a change $14_2^0 \log \gamma_1$ to $24_2^0 \log \gamma_1$
48. In equation 41-b change " h " to " g " and " 8 " to " 4 ".
49. In equations 17-b, 18-f, 20-b, and 22-c change " 2 " on right hand side to $1 + V_0/V_1$.
50. In equation 31-a change $(n + 1)$ to (n) and exponent $-3/5$ to $-3/4$.
51. In equation 31-d change exponent " n " to " $n - 1$ ".
52. In last of equations 31 change exponent " $n + 1$ " to " n " and divide " 2 " by X_1^0 .
53. In denominator left hand side of equation 35-a change exponent $\mu_2/\mu_1 - 1$ to $1 - \mu_2/\mu_1$.
54. In equation 35-b change $X_2^0 \leq 1$ to $X_2^0 \ll 1$.
55. Replace Table II by the following table:

TABLE II

SEPARATION FACTORS, $f_2^{(1)}$, IN TOP RESERVOIR FOR THE TWO COMPONENT SYSTEM γ_1 = RESIDUAL FRACTION OF TOTAL PROTEIN IN TOP X_2^0 = INITIAL WEIGHT FRACTION OF COMPONENT 2

$$\beta = 1 - \mu_2/\mu_1$$

$X_2^0 = 0.1$					$X_2^0 = 0.4$				
$\gamma_1 \backslash \beta$	0.1	0.4	0.7	0.9	$\gamma_1 \backslash \beta$	0.1	0.4	0.7	0.9
0.1	1.27	2.65	6.9	22	0.1	1.27	3.24	29	$> 10^5$
0.2	1.18	1.98	3.59	6.2	0.2	1.18	2.24	7.7	560
0.3	1.13	1.66	2.54	3.68	0.3	1.13	1.82	4.06	23
0.4	1.10	1.47	2.03	2.62	0.4	1.10	1.57	2.77	6.5
0.5	1.07	1.34	1.70	2.05	0.5	1.08	1.40	2.09	3.43
0.6	1.05	1.23	1.48	1.68	0.6	1.06	1.28	1.69	2.27
0.7	1.04	1.16	1.32	1.43	0.7	1.04	1.19	1.43	1.73
0.8	1.02	1.09	1.18	1.26	0.8	1.02	1.12	1.26	1.40
0.9	1.01	1.04	1.08	1.12	0.9	1.01	1.05	1.11	1.17

$X_2^0 = 0.7$					$X_2^0 = 0.9$				
$\gamma_1 \backslash \beta$	0.1	0.4	0.7	0.9	$\gamma_1 \backslash \beta$	0.1	0.4	0.7	0.9
0.1	1.28	3.87	93	$> 10^7$	0.1	1.28	4.50	170	$> 10^8$
0.2	1.19	2.54	20	$> 10^4$	0.2	1.19	2.81	34	$> 10^5$
0.3	1.13	2.01	8.1	$> 10^3$	0.3	1.14	2.15	13.1	$> 10^4$
0.4	1.10	1.70	4.55	160	0.4	1.11	1.79	6.7	$> 10^3$
0.5	1.08	1.49	3.00	24	0.5	1.08	1.55	4.04	200
0.6	1.06	1.34	2.19	6.9	0.6	1.06	1.38	2.74	39
0.7	1.04	1.23	1.69	3.07	0.7	1.04	1.26	2.03	10.5
0.8	1.02	1.14	1.37	1.88	0.8	1.02	1.15	1.54	3.74
0.9	1.01	1.07	1.16	1.32	0.9	1.01	1.07	1.23	1.73