J.Mol.Evol.5,165-166 (1975)

Erratum

Disproportionation of Enantiomers by Precipitation

W. THIEMANN

J.Mol.Evol.4, 85-97 (1974)

Received February 24, 1975

Due to a mistaken specific rotation all the figures of the last column in table 1, p.91, are unfortunately wrong and must be replaced by the new figures as given.

Table 1. Summary of Results of Precipitation from Racemic Conditions[a]

c_o [Mol/l]	T [°C]	M_o/M_p	c_p [Mol/l]	α [m°]	$(c_L/c_D)_p$
0.191	0	12.3	0.265	- 10.0	0.988
0.218	0	4.3	0.340	- 59.0	0.947
0.191	0	13.5	0.238	- 8.3	0.989
0.291	0	1.2	0.700	- 0.8	0.999
0.249	0	2.2	0.367	- 12.6	0.989
0.297	0	1.7	0.732	- 1.3	0.999
0.297	5	2.2	0.626	- 10.1	0.995
0.254	7.5	4.5	0.343	- 3.0	0.997
0.191	7.5	475.6	0.006	- 2.1	0.896
0.349	7.5	1.7	1.011	- 5.6	0.998
0.349	7.5	1.6	0.499	+ 5.6	1.003
0.292	7.5	2.2	0.614	- 4.3	0.998
0.311	8	2.4	0.443	+ 78.7	1.057
0.291	8	2.8	0.575	+ 2.4	1.001
0.349	8	1.6	1.074	+ 11.1	1.003
0.299	8.5	1.2	0.639	+ 153.0	1.078
0.249	8.5	2.2	0.438	+ 15.2	1.011
0.267	8.5	3.8	0.380	+ 29.0	1.024
0.254	9	31.0	0.089	- 55.6	0.822
0.272	9	12.8	0.272	- 22.1	0.975
0.249	9	3.4	0.557	+ 13.2	1.007
0.299	9	2.0	0.706	+ 9.4	1.004
0.297	9	2.6	0.576	+ 6.4	1.003
0.272	10	197.7	0.018	+ 0.4	1.007
0.299	12.5	2.5	0.558	+ 14.8	1.008
0.374	12.5	1.6	0.885	+ 16.8	1.006

[a] Explanation of abreviations in the text

The ratio $(c_L/c_D)p$ is calculated in the following way (notation as previously given in the article):

$$c_{pL} = \left(c_p + \frac{\alpha}{[\alpha]}\right) \cdot \frac{1}{2}$$

$$c_{pD} = c_p - c_{pL}$$

whence

$$\left(\frac{c_L}{c_D}\right)_p = \frac{\left(c_p + \frac{\alpha}{[\alpha]}\right)}{2(c_p - c_{pL})}$$

The error was caused by the fact that the specific angle of rotation at 250 nm and pH=1,25 was taken in the calculation by a factor 10 too small. The correct value for $[\alpha]_{250nm}^{22,5^{\circ}}$ at pH=1,25 for asparagine is + 426.

Fortunately the revised values indicate considerably smaller enrichments of the enantiomers as previously given - without changing the qualitative interpretation! - which would be consistent with the hypothesis of the small asymmetry effects.

Dr.Wolfram Thiemann, Institut für Physikalische Chemie,
Kernforschungsanlage Jülich GmbH,
D-5170 Jülich, Postfach 365,
Federal Republic of Germany