

Correction

Correction: Fang et al. Study on Dispersion, Adsorption, and Hydration Effects of Polycarboxylate Superplasticizers with Different Side Chain Structures in Reference Cement and Belite Cement. *Materials* 2023, 16, 4168

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Error in Table

In the original publication [1], there were some minor mistakes in the Tables 1, 3, 6 and 8 because of the authors' negligence. The correct Tables 1, 3, 6, and 8 appear below:

Table 1. Chemical composition of the cement (wt%).

Cement	CaO	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MgO	SO ₃	Na ₂ O	K ₂ O	MnO	TiO ₂	LOI *
RC	63.79	19.80	5.12	3.65	2.30	2.49	0.30	0.31	0.12	0.16	1.85
LC	58.98	21.72	5.60	3.53	2.55	2.10	0.31	0.38	0.15	0.14	4.00

* Loss of ignition.

Table 3. Mineral compositions of the cement (wt%).

Cement	C ₃ S	C ₂ S	C ₃ A	C ₄ AF	CaSO ₄
RC	62.78	9.40	7.60	7.25	4.23
LC	26.49	42.28	8.87	7.02	3.57

Table 6. Fitting results of Bingham, Herschel–Bulkley, and modified Bingham models for the rheological curves of different PCE in two types of cement slurry.

Sample	Bingham			Herschel–Bulkley			Modified Bingham				
	τ /mPa	η /(mPa·s)	R ²	K/(Pa·sn)	τ /mPa	n	R ²	μ	τ /mPa	a	R ²
RC-PC-1	11.173	1.8547	0.9995	3.185	2.793	0.836	0.998	1.602	10.060	−0.0017	0.9974
RC-PC-2	15.477	1.3696	0.9957	1.766	12.008	1.010	0.999	1.807	12.285	0.0004	0.9995
LC-PC-1	2.153	1.0020	0.9948	3.290	−7.503	0.715	0.999	1.028	−0.075	−0.0021	0.9994
LC-PC-2	6.571	0.7431	0.9900	0.586	6.684	1.106	0.995	0.834	6.057	0.0012	0.9964

Table 8. Parameters of hydration heat-release curves of different PCEs in two types of cement.

Sample	t ₀ (h)	q ₀ (mW/g)	Q ₀ (J/g)	t ₂ (h)	K ₂ (mW/(g·h))	q ₂ (mW/g)	t ₃ (h)	q ₃ (mW/g)	Q ₃ (J/g)	Q ₀₋₃ (J/g)
RC-Blank	1.68	0.36	2.92	5.60	0.38	1.38	12.15	2.77	80.41	77.49
LC-Blank	2.15	0.24	3.10	6.70	0.49	1.60	12.36	3.38	92.85	89.75
RC-PC-1	4.33	0.28	7.15	10.37	0.33	1.39	15.77	2.68	94.59	87.44
RC-PC-2	3.21	0.30	3.50	13.95	0.34	1.56	18.59	2.67	99.56	95.78
LC-PC-1	2.90	0.13	1.46	12.12	0.51	1.65	16.93	3.55	97.81	96.35
LC-PC-2	2.16	0.24	1.81	15.40	0.43	1.73	19.60	3.19	109.27	107.46



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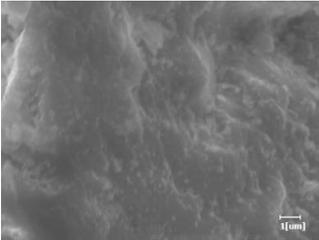
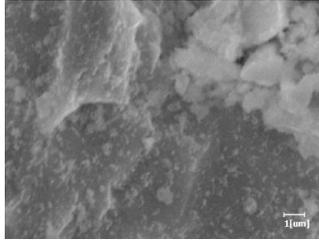
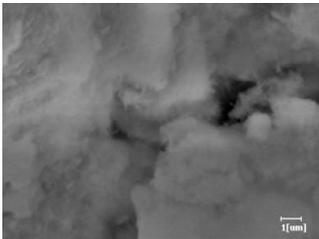
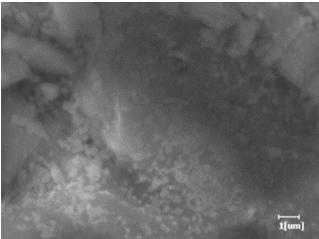
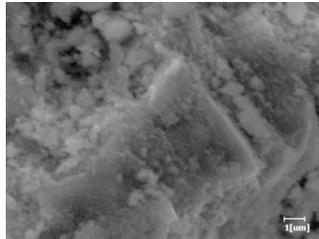
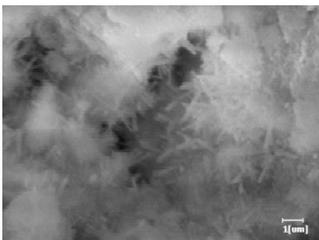
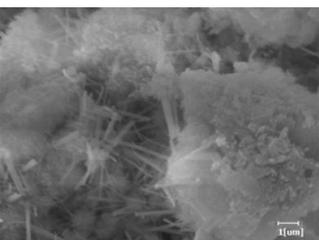
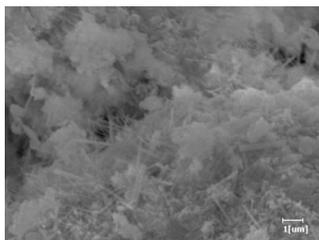
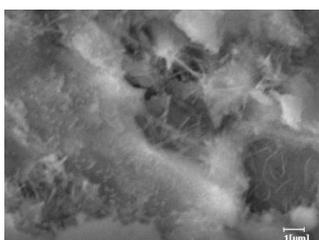
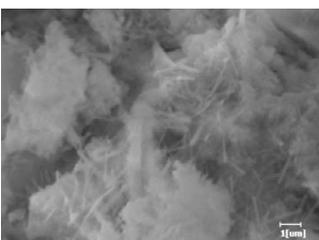
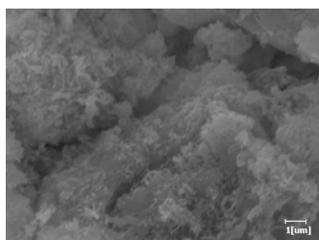
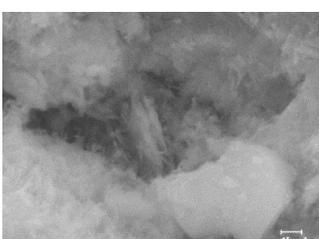
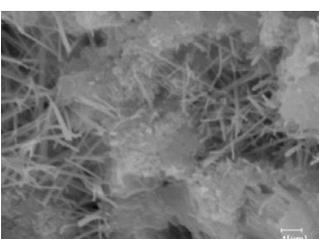
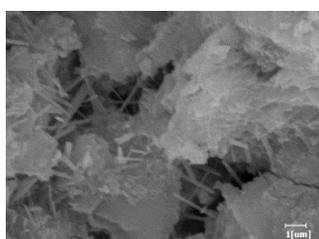
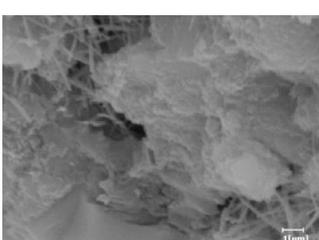
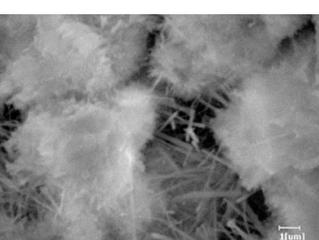
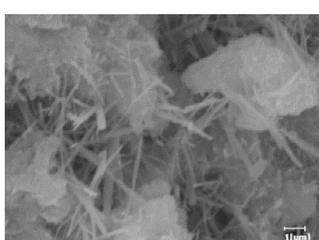
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There was a mistake in Table 10 as published. Four images were selected incorrectly, the time information was deleted from the SEM images, and the scale bars were consistently retained. The corrected Table 10 appears below:

Table 10. Morphological analysis of hydration products of RC and LC with different water reducers at 12 h and 3 d.

Cement	Hydration Time	Blank	PC-1	PC-2
RC	12 h			
				
LC	1 d			
				
RC	3 d			
				

Error in Figure

In the original publication [1], there were some minor mistakes in Figures 5, 7a, and 13 as published because of the authors' negligence. The corrected Figures 5, 7a, and 13 appear below:

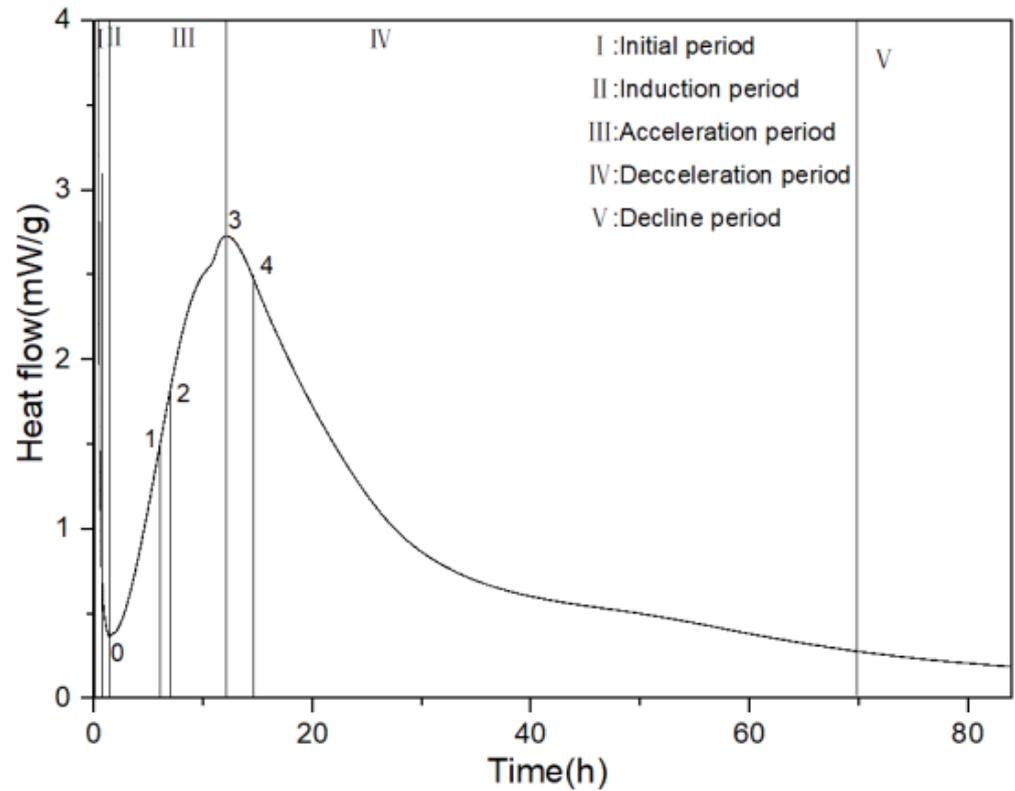


Figure 5. Five stages of hydration heat release.

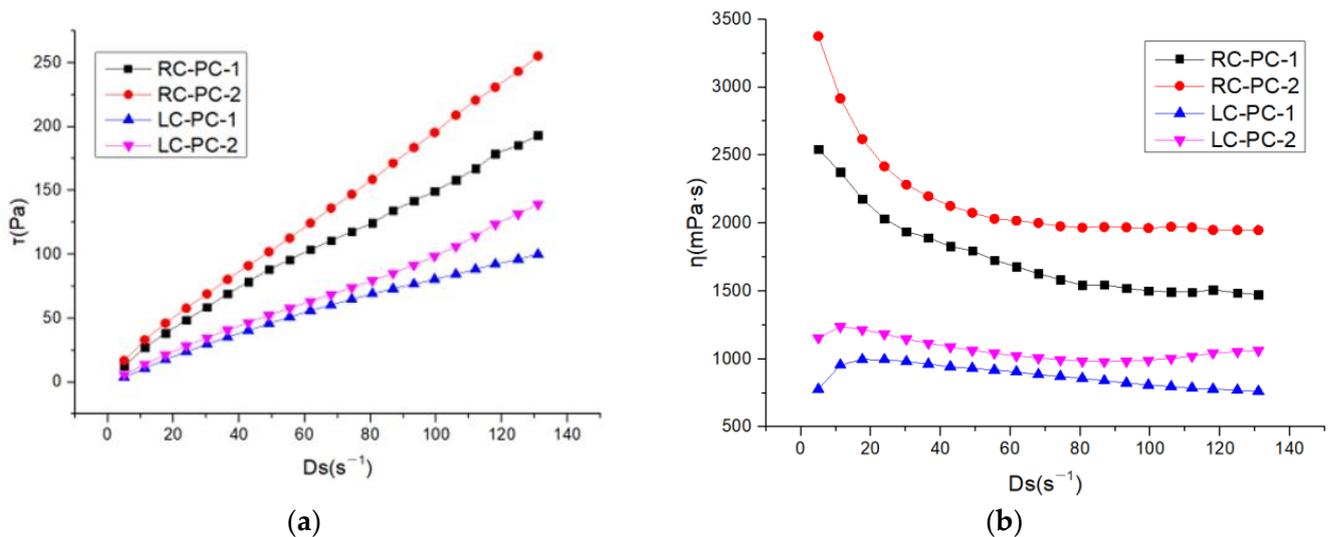


Figure 7. Rheological properties of different water reducers in two types of cement slurries: (a) shear rate–shear stress; (b) shear rate–apparent viscosity.

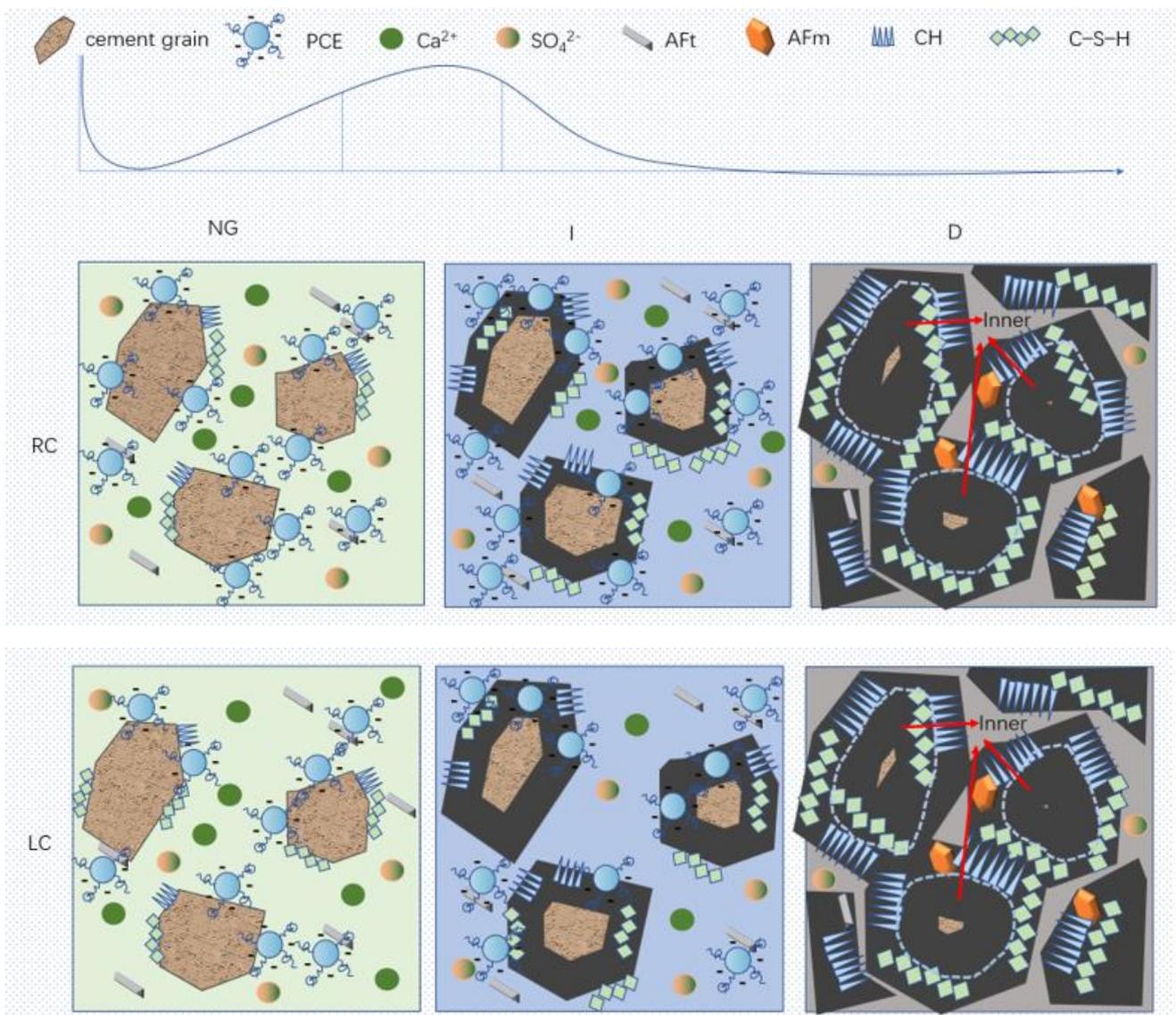


Figure 13. Schematic diagram of the hydration mechanism.

Text Correction

In the original publication [1], there were some mistakes because of the authors' negligence.

A correction has been made to Section 2.2.1. Gel Permeation Chromatography, Paragraph 1:

The temperature was maintained at 25 °C, and a 0.1 mol/L NaNO₃ aqueous solution with a pH of 7 was used as the eluent, with dextran of different molecular weights as the calibration standards. PCE was diluted to 5 mg/mL with a 0.1 mol/L sodium nitrate solution. GPC was performed using a Waters 1515 instrument (Waters, Milford, MA, USA) equipped with a differential refractive index detector. Additionally, a multi-detection system (Malvern Viscotek 270 Dual Detector) equipped with viscosity and low-angle laser light-scattering detectors was utilized.

A correction has been made to Section 2.1.1. Cement, Paragraph 3:

The content of C₃S, C₂S, C₃A, C₄AF, and CaSO₄ in the two types of cement was calculated based on the data in Table 1, and the results are presented in Table 3. A comparison of the mineral compositions of the two types of cement reveals that the content of C₃S, C₄AF, and CaSO₄ in the RC is higher by 36.3%, 0.23%, and 0.66%, respectively, while the C₂S content in the RC is lower by 33.9% compared to that in the LC.

The authors state that the scientific conclusions are unaffected. All the above corrections were approved by the Academic Editor. The original publication has also been updated.

Reference

1. Fang, Y.; Zhang, X.; Yan, D.; Lin, Z.; Ma, X.; Lai, J.; Liu, Y.; Ke, Y.; Chen, Z.; Wang, Z. Study on Dispersion, Adsorption, and Hydration Effects of Polycarboxylate Superplasticizers with Different Side Chain Structures in Reference Cement and Belite Cement. *Materials* **2023**, *16*, 4168. [[CrossRef](#)] [[PubMed](#)]

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