

Erratum

# Erratum to “Predicting $\text{Ca(OH)}_2$ content and chemical shrinkage of hydrating cement pastes using analytical approach” [CCR 34 (2) (2004) 225–265]

Pierre Mounanga<sup>a,\*</sup>, Abdelhafid Khelidj<sup>a</sup>, Ahmed Loukili<sup>b</sup>, Véronique Baroghel-Bouny<sup>c</sup>

<sup>a</sup>Laboratoire Génie Civil de Nantes Saint-Nazaire, IUT de Saint-Nazaire, BP 420, 44606 Saint-Nazaire, France

<sup>b</sup>Ecole Centrale de Nantes, BP 92101, 44321 Nantes cedex 3, France

<sup>c</sup>Laboratoire Central des Ponts et Chaussées, 58 Bd Lefebvre, F-75732 Paris cedex 15, France

Received 13 July 2004

Parts of Table 2, Figs. 7 and 8 in the published version of this paper were incorrect. The correct version of Table 2, Figs. 7 and 8 are presented here.

Also, the density value of  $\text{FH}_3$  used is  $3.00 \text{ g/mm}^3$  (instead of the value of  $2.20 \text{ g/mm}^3$ , indicated in Table 1 of the published version).

Table 2  
Chemical shrinkage and  $\text{Ca(OH)}_2$  amount produced by the modelling hydration reactions

Equations	Chemical shrinkage ( $\Delta V$ )	$\text{Ca(OH)}_2$ content (CH)
	Per g of hydrating compound	Per g of hydrating compound
(1)	$40.2 \text{ mm}^3/\text{g}$ of hemihydrate	–
(2)	$52.5 \text{ mm}^3/\text{g}$ of $\text{C}_3\text{S}$	$0.4219 \text{ g/g}$ of $\text{C}_3\text{S}$
(3)	$40.9 \text{ mm}^3/\text{g}$ of $\text{C}_2\text{S}$	$0.1291 \text{ g/g}$ of $\text{C}_2\text{S}$
(4)	$281.4 \text{ mm}^3/\text{g}$ of $\text{C}_3\text{A}$	–
(5)	$24.8 \text{ mm}^3/\text{g}$ of ettringite	–
(6)	$175.3 \text{ mm}^3/\text{g}$ of remaining $\text{C}_3\text{A}$	–
(7)	$175.0 \text{ mm}^3/\text{g}$ of $\text{C}_4\text{AF}$	$0.1525 \text{ g/g}$ of $\text{C}_4\text{AF}$
(8)	$39.1 \text{ mm}^3/\text{g}$ of ettringite	$0.1181 \text{ g/g}$ of ettringite
(9)	$116.0 \text{ mm}^3/\text{g}$ of remaining $\text{C}_4\text{AF}$	$0.1525 \text{ g/g}$ of $\text{C}_4\text{AF}$

DOI of original article 10.1016/j.cemconres.2003.07.006.

\* Corresponding author. Tel.: +33 2 40 17 86 17; fax: +33 2 40 17 81 60.

E-mail address: [pierre.mounanga@iutsn.univ-nantes.fr](mailto:pierre.mounanga@iutsn.univ-nantes.fr) (P. Mounanga).

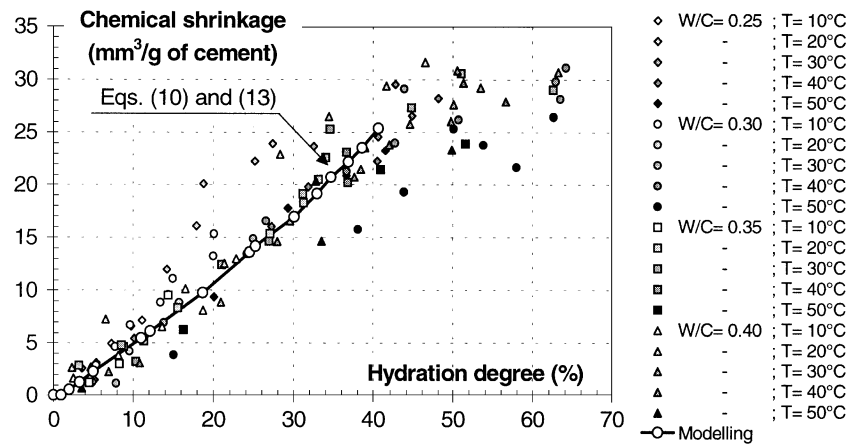


Fig. 7. Evolution of the chemical shrinkage of different cement pastes as a function of hydration degree—comparison between experimental and simulated results.

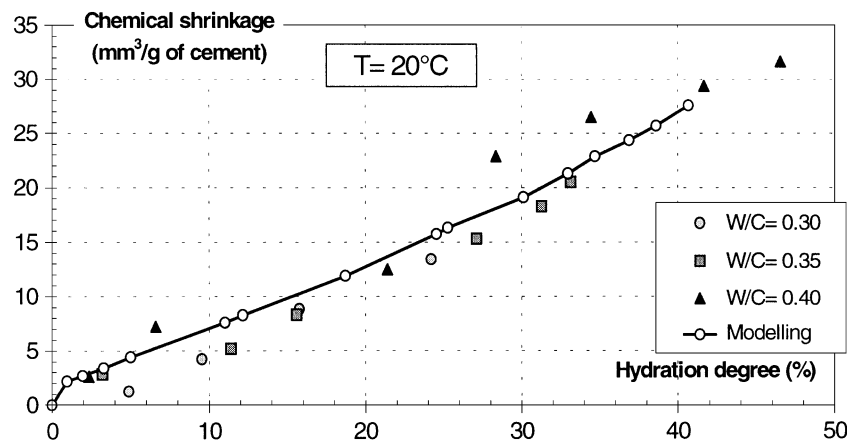


Fig. 8. Evolution of the chemical shrinkage of cement pastes with W/C=0.30, 0.35, 0.40 cured at 20 °C as a function of hydration degree—comparison between experimental and simulated results.

### Acknowledgement

Thanks are due to Dr. Dale P. Bentz for pointing out the mistakes in numerical values.