# Third International Symposium on Developments in Fibre Reinforced Cement and Concrete

Following the successful symposia held in London (1975) and Sheffield (1978), this Symposium will be held *in Sheffield*, *England, from 13-17 July 1986*. The Symposium is supported by various international organisations and will include an International Workshop on Test Methods for FRC materials, Poster sessions and an Exhibition. Papers are invited for presentation at the Symposium and publication. The themes of the Symposium will include:

• Review of developments in FRC materials.

· Fracture processes in FRC materials.

• New fibres, new matrices, new composites and their properties.

- Theories.
- Natural fibres.
- Asbestos replacements.
- Durability and design life.
- Test methods.

• Quality control and non-destructive testing design.

- Applications.
- Other related topics.
- Performance in use.
- Performance criteria.

For further information apply to:

Mr. R. L. Wagstaffe, Conference Secretary, Material Research Ltd., Dell Road, Rochdale, Lancashire OL12 6BY, England, who will also provide further details of

the Symposium.

## ERRATA

Materials and Structures n° 106, vol. 18, July-August 1985.

Paper by Williamson: Methods for determining the water and cement content of fresh concrete.

Page 269: the author's initials are R. G. Right column, first line: read: "since this proved to" in place of... "provided to".

Page 270, captions of figures 2, 3, 4, read: "CQM" in place of "COM",

Page 271, left column, equation (2) read:

 $A = B \left( \frac{S_1}{S_2 - S_B} \right)^{-1}$ 

right column, 5th line, read "salt solution" in place of "air solution".

Under LABORATORY TEST RESULTS, 2nd §, 1st line, read "water content" in place of "water convent".

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Draft recommendation: "Determination of the fracture energy of mortar and concrete by means of threepoint bend tests on notched beams".

Page 287, right column, § 4.1, 4th line, read "if the load..." in place of "in the load..."

Page 289, right column, 9th line, read  $\delta o$  instead of  $\delta.$ 

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Paper by Alexander: Towards standard tests for abrasion resistance of concrete.

Page 297, left column. last line of 1st §, read: "different types" in place of "differents types".

2nd §, 8th line, read "to select from existing procedures" in place of to select form..."

Page 298, left column, point (iii), 4th line, read "abrasion-resistant toppings" in place of "abrasion-resistance...".

# BIBLIOGRAPHICAL INFORMATION/INFORMATIONS BIBLIOGRAPHIQUES

Concrete admixtures handbook Properties, Science, and Technology, edited by V. S. Ramachandran, Division of Building Research, National Research Council Canada.

This treatise on concrete admixtures is the concerted effort of internationallyknown experts to prepare *the reference source* on concrete admixtures, the first of its kind to present both technical and scientific aspects of all of the important admixtures. Intended for cement and material scientists, technologists, and practitioners, the book will be equally useful for the engineer, architect, manufacturer and user of concrete admixtures.

Various sections cover cement science, properties, specifications, dispensing, availability, limitations, and patents. Admixtures are ingredients added to the concrete batch immediately before or during mixing, which confer beneficial effects including enhanced frost and sulfate resistance, controlled setting and hardening, improved workability, increased strengths, etc. A condensed table of contents follows.

### 1. Cement science

#### V. S. Ramachandran, R. F. Feldman

Portland Cement Formation and Composition, Hydration Products, Hydration Mechanism, Workability, Setting, Bleeding and Segregation, Microstructure, Durability.

### 2. Accelarators

V. S. Ramachandran

Calcium Chloride Influence on Mineral Hydration, Physical Properties of Cement and Concrete, Mechanical Properties, Chemical Reactions, Corrosion of Steel, Use of Calcium Chloride in Other Cementitious Systems, Calcium Chloride Properties and Preparation, Standards and Practice, Estimation of Chlorides, Non-Chloride Accelerators.

# 3. Water reducers/retarders

# M. Collepardi

Preparation and Use, Effect on Hydration of Cement Compounds and Cement, Effect on Fresh and Plastic Concrete, Effect on Hardened Concrete, Standards and Codes of Practice.

## 4. Superplasticizers

V. S. Ramachandran, V. M. Malhotra Effect on Cement Paste, Fresh Concrete, Hardened Concrete.

# 5. Air Entraining admixtures

W. L. Dolch

Composition and Manufacture, Use in Concrete, Effect on Cement Hydration and Hydration Product, Effects on Plastic Concrete, Effects on Hardened Concrete, Admixture Estimation. 6. Mineral admixtures

#### P. K. Mehta

Classification of Mineral Admixtures; Natural Materials, Industrial By-Products; Test Methods for Evaluation of Mineral Admixtures; Ecological, Economic, and Energy Considerations.

# 7. Polymer-modified mortars and concretes

Y. Ohama

Principles of Polymer Modification for Cement Composites; Process Technology of Latex-Modified Systems; Properties of Latex-Modified Systems; Fabrication and Properties of Powdered Emulsion-Modified Systems, Water-Soluble Polymer-Modified Systems, Liquid Resin-Modified Systems, Monomer-Modified Systems.

#### 8. Antifreezing admixtures

V. B. Ratinov, T. I. Rozenberg

Preparation and Application, Effect on Cement and Cement Components, Effect on Physical Properties of Concrete Mixes, Mechanical Properties of Concrete, Durability, Standards.

#### 9. Miscellaneous admixtures

N. P. Mailvaganam

Expansion Producing Admixtures, Coloring Admixtures, Dampproofing and Waterproofing Admixtures, Alkali-Aggregate Reaction Inhibiting Admixtures,