

información bibliográfica

El pasado mes de julio tuvo lugar en la localidad de Durham -New Hampshire- (USA) el 6º Congreso "Advances in Cement and Concrete" que, con carácter trianual, organiza la Engineering Foundation.

Se facilita a continuación la relación completa de los temas, así como de los autores que asistieron a dicho Congreso.



Engineering Foundation Conference ADVANCES IN CEMENT AND CONCRETE

New England Center,
University of New Hampshire,
Durham, NH

July 24-29, 1994

Organized by:

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CEMENT AND CONCRETE - PAST AND PRESENT

A Tribute to D.M. Roy and P.K. Mehta
M. Grutzeck and S. Sarkar
Conference Co-Chairs

Cement and Concrete: Their Interrelation in Practice
A. Neville
London, UK

Lightweight Concrete - A Proven Material for Two Millennia

T.W. Bremner
University of New Brunswick, Canada
T.A. Holm*
Solite Corporation, USA; and
V. Stepanova
Research Institute of Concrete and Reinforced Concrete, Russia

Durable Concrete

B. Mather
U.S. Army Engineer Waterways Experiment Station, USA

Recent Advances in Low Energy Cements

D.M. Roy
Pennsylvania State University, USA

CLINKER PROCESSING AND QUALITY

The Manufacturing of Pozzolans for Blended Cement Systems

G.S. Barger
Ash Grove Cement Co., USA

Mineralizers and Fluxes in Cement Clinker Production

M.T. Blanco-Varela, A. Palomo*, F. Puertas and T. Vázquez
Eduardo Torroja Institute of Construction Science, Spain

The Influence of Kiln Atmosphere on Clinker Quality

F. Sorrentino
Lafarge Coppee Recherche, France

Characterization of Cement Clinker by X-Ray Microanalysis and Backscattered Image Analysis

K. Scrivener
Imperial College of Science, Technology and Medicine, UK

The Use of Wastes as Fuels in the Cement Industry - Pros and Cons

F.D. Tamas* and M. Patkai-Horvath
University of Veszprem, Hungary

HYDRATION OF CEMENTITIOUS MATERIALS

Hydration Mineralogy of Cementitious Coal Combustion By-Products

G.J. McCarthy*
North Dakota State University, USA;
J. Solem-Tishmack
Purdue University, USA.

Hydration of Cement Clinker Phases - Limits and Scope of Solid State NMR Investigations

H.W. Wicker* and D. Heidemann
Central Institute of Inorganic Chemistry, Germany

Delayed Ettringite Formation

H.F.W. Taylor
Aberdeen, UK

Hydration of Aluminate Cements

P. Barret* and D. Bertrandie
Université de Bourgundy, France

Recent Advances in Understanding the Hydration of Cement

H.M. Jennings
Northwestern University, USA

Microstructure of the Paste - Aggregate Interface, Including the Influence of Minerals Additions

J.P. Ollivier* and M. Massat
Laboratoire Matériaux et Durabilité des Constructions,
Toulouse, France

Influence of Industrial Waste and Urban Garbage Used as Raw Material and Fuel on the Process, Cement Quality and Economy of Cement Manufacturing

Organized by H. Uchikawa
Participants: F.D. Tamas, F. Sorrentino, A.K. Chatterjee, W. Klemm and G. Barger

FRACTURE AND FIBER REINFORCEMENT

Characterizing Fracture Behaviour of Fiber-Reinforced Composites

S.P. Shah*, Y. Shao and Z. Li
Northwestern University, USA

Mechanical Properties, Microstructure and Durability of Micro-fiber Reinforced Cement Systems Containing Microreinforcement

N.M.P. Low
University of Ottawa, Canada;
I. Gagnon
University of Laval, Canada;
J.J. Beaudoin*
National Research Council of Canada, Canada

Fiber Reinforced Concrete - Myth and Reality

S. Mindess
University of British Columbia, Canada

Long Term Performance of Fiber Reinforced Cements and Concretes - Potential and Limitations

A. Bentur
National Building Research Institute, Israel

Micromechanics, Properties and Design of Engineered Cementitious Composites

V. Li, University of Michigan, USA

CHEMICAL AND MINERAL ADMIXTURES

Zeolite-based Cement Composites

M.W. Grutzeck* and J. LaRosa
Penn State University USA

Mineral Admixtures for Concrete - An Overview of Recent Developments

P.K. Mehta
University of California, USA

Advances in Chemical Admixtures for Concrete

M. Collepardi

University of Ancona, Italy

Mineral Admixtures - Reactions, Micro-structure, and Macroproperties

J. Bijen* and H. Pietersen
Delft University of Technology, Holland

Cementing Action in Non-Portland Cement Systems - Suphpozzolanic and Silicopozzolanic Reactivity

R.T. Hemmings* and E.E. Berry
Radian Canada, Inc., Canada

Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste

S. Diamond
Purdue University, USA

PERFORMANCE AND DURABILITY

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete

C.A. Rogers* and S.A. Senior
Ontario Ministry of Transportation, Canada

Permeability and Permeability Measurement - Are We Any Further Ahead?

D. Hooton
University of Toronto, Canada

Fly Ash and Alkali-Aggregate Reaction

M.D. Thomas
University of Toronto, Canada

Durability of Calcium Aluminate Cement Concrete

A. Capmas and C.M. George*
Lafarge Fondu International, USA and France

Performance of Portland Cement in Concrete

L.J. Struble*
University of Illinois, USA
P. Hawkins
California Portland Cement, Co., USA

ENVIRONMENTAL ISSUES AND WASTE MANAGEMENT

The Canadian Cement Industry - A Partner in Environmental Improvement

E. Fines
Canadian Portland Cement Association, Canada

Environmental Issues and Management of Concrete Waste in Japan

Y. Nojiri
Kajima Technical Research Institute, Japan

Environmental Technology Management of the Cement Industry in India and Neighboring Countries

A.K. Chatterjee
The Associated Cement Companies, Ltd., India

Waste Management - Utilization by the Cement Industry in Europe

H. Braun and Th. Lang
Holderbank Management and Consulting Ltd., Switzerland

The Present State-of-the-Art of Immobilization of Heavy Metals in Cement-Based Materials

D. Bonen* and S.L. Sarkar
Université de Sherbrooke, Canada

Environmental Uses of Cement in Waste Conditioning

F.P. Glasser
University of Aberdeen, Scotland

Next Major Breakthrough in Concrete Technology - When and Where!

Organized by V.M. Malhotra
Participants: A. Neville, P.K. Mehta, B. Mather, M. Collepardi and E. Sakai

FUTURE DIRECTIONS

High-performance Concrete Incorporating Large Volumes of

ASTM Class F Fly Ash
A. Bilodeau and V.M. Malhotra*
CANMET, Canada

Management Strategy of the Cement Industry in Technology

Toward the Next Century
H. Uchikawa

Onodo Cement, Co., Japan

Selected Properties of High-Performance Concrete

E. Sellevold*, H. Justnes, S. Smeplass and E.A. Hansen
Norwegian Institute of Technology and SINTEF Structures and
Concretes, Norway

New Concrete with Self-Placeability - Its Development, Applications and Prospects

K. Ozawa*, K. Maekawa and H. Okamura
University of Tokyo, Japan

Cementing with Imagination

J.F. Young
University of Illinois, USA

Predicting Service Life

G. Frohnsdorff
NIST, USA

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Publicación del Instituto Eduardo Torroja-CSIC

INSPECCION DE OBRAS DAÑADAS POR CORROSION DE ARMADURAS

El presente Manual va dirigido principalmente a técnicos especializados y laboratorios que tienen que intervenir en el dictamen de la situación de deterioro de estructuras de hormigón armado dañadas por corrosión de armaduras.

Comienza con un resumen recordatorio de los factores principales a los que se pueden deber los daños prematuros por corrosión de armaduras, para seguir con algunas indicaciones de cómo se deben realizar las inspecciones, y de los ensayos y la metodología que se recomienda realizar para poder dictaminar con precisión las causas de daño.

A continuación se hacen una serie de comentarios sobre la vida residual de estructuras dañadas, sobre el riesgo de corrosión futura, el seguimiento necesario de una estructura reparada y una breve enumeración de métodos de reparación y consideraciones básicas a tener en cuenta en la recomendación de un determinado método. Se aporta una breve relación bibliográfica.

Finalmente se incluyen en forma de ficha la descripción de algunos casos de corrosión de armaduras detectados en nuestro país.

manual

**inspección de obras
dañadas por corrosión
de armaduras**

programa temático del
Consejo Superior de Investigaciones Científicas
"Corrosión y protección de materiales"
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Centro Nacional de Investigaciones Metalúrgicas

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