

## TESTING FORUM

### ASTM to Hold Symposium on Corrosion Rates of Steel in Concrete

ASTM is sponsoring the Symposium on Corrosion Rates of Steel in Concrete, to be held 29 June 1988 in Baltimore, MD. ASTM sponsoring committees are: Committee G-1 on Corrosion of Metals and its subcommittee G01.14 on Corrosion of Reinforcing Steel and Committee C-9 on Concrete and Concrete Aggregates and its subcommittees C.09.03.08 on Methods of Testing and Specifications for Admixtures and C.09.03.15 on Methods of Testing the Resistance of Concrete to its Environment.

The purpose of the symposium is to document techniques that are used to determine corrosion rates and the condition of reinforcing bars in concrete. Symposium chairmen will be: N. S. Berke, W. R. Grace, Cambridge, MA; V. Chaker, Port Authority of New York and New Jersey, Jersey City, NJ; and D. Whiting, Construction Technology Laboratories, Skokie, IL.

The program for the symposium follows:

#### Tuesday, June 28

<i>Introduction and Overview</i>	8:00 a.m.		
N. S. Berke, W. R. Grace, Cambridge, MA			
<i>The Threshold Value of Chloride Concentration Concrete for Initiation of Reinforcement Corrosion</i>	8:15 a.m.		
C. M. Hansson and B. Sorenson, The Danish Corrosion Centre, Denmark			
<i>Concrete Inspection: The Interpretation of Potential and Resistivity Measurements</i>	8:40 a.m.		
C. C. Naish, H. Harker, N. J. M. Wilkins, United Kingdom Atomic Energy Authority, United Kingdom			
<i>Development of Improved Half-Cell Potential Monitoring Techniques for Steel in Concrete</i>	9:05 a.m.		
P. Lambert, R. G. Hardon, and C. L. Page, Aston University, Birmingham, United Kingdom			
<i>Prediction of Corrosion Rates of Reinforcement in Concretes Incorporating Different Hydraulic Cements</i>	9:30 a.m.		
S. P. Khan, S. R. Yeomans, M. N. Hague, and A. Samarin, University College, Campbell, Australia			
Coffee Break	9:55 a.m.		
<i>Influence of Blast Furnace Slags in the Corrosion Rate of Steel in Concrete</i>	10:10 a.m.		
I. Alanis, L. Berado, C. Moina, and C. Valentini, Instituto Nacional de Tecnologia Industrial, Buenos Aires, Argentina			
			10:35 a.m.
<i>An Attempt to Use the Corrosion Rate Measurement for Estimating Rebar Durability</i>			
C. Andrade and C. Alonso, Institute of Construction and Cement; J. A. Gonzalez, National Centre of Metallurgical Research, Madrid, Spain			
<i>Comparison of the Polarization Resistance Technique to the Macrocell Corrosion Technique</i>			11:00 a.m.
N. S. Berke, D. F. Shen, K. M. Sundberg, and W. R. Grace, Cambridge, MA			
<i>Corrosion Rate Determinations on Repaired Reinforced Concrete Specimens</i>			11:25 a.m.
H. G. Wheat, The University of Texas at Austin, Austin, TX			
Lunch			11:50 p.m.
<i>Corrosion Measurements of Reinforcing Steel in Partially Submerged Concrete Slabs</i>			1:00 p.m.
A. Aguilar, A. Sagues, and R. Powers, University of South Florida, Tampa, Florida, and Florida DOT, Gainesville, FL			
<i>Measuring the Rate of Corrosion of Steel in Concrete</i>			1:25 p.m.
E. Escalante, National Bureau of Standards, Gaithersburg, MD			
<i>Electrochemical Corrosion Rate Measurements on Steel in Concrete—Practical Experience and Theoretical Analysis</i>			1:50 p.m.
J. L. Dawson, K. Hludky, and D. G. John, University of Manchester, Manchester, Great Britain			
<i>Corrosion Monitoring for Reinforcing Bars in Concrete</i>			2:15 p.m.
K. Matsuoka, H. Kihira, S. Ito and T. Marata, R&D Labs, Nippon Steel Corp., Kawasaki, Japan			
<i>Study of the Corrosion of Concrete Reinforcement by Electrochemical Impedance Measurements</i>			2:40 p.m.
L. Lemoine, F. Wenger, and J. Galland, Ifremer Centre deBrest, Cedex, France, and Ecole Central Paris, Lab, Paris, France			
Break			3:05 p.m.
<i>Potential Mapping and Corrosion of Steel in Concrete</i>			3:20 p.m.
B. Elsener and H. Bohni, Swiss Federal Institute of Technology, Zurich, Switzerland			

# TESTING FORUM

*The Use of A.C. Impedance Technique and Electrochemical Noise for the Study and Control of Corrosion of Steel in Concrete*

3:45 p.m.

M. R. L. Salta, and M. G. S. Ferreira, Laboratorio Nacional de Engenharia Civil, Lisboa, Portugal, and Institute Superior Tecnico, Lisboa, Portugal.

*The Mechanics of Corrosion of Steel in Concrete*

4:10 p.m.

B. Borgard, C. Warren, S. Somayaji, and R. Heidersbach, California Polytechnic University, San Luis Obispo, CA

## Conference on Advances in Cement Manufacture and Use

The Engineering Foundation is sponsoring a conference on "Advances in Cement Manufacture and Use," to be held July 31-Aug. 5, 1988, at New England College, Henniker, NH. The chairman is Ellis Gartner, W. R. Grace & Co. Cochairmen are Vagn Johansen, F. L. Smidth & Co., and F. M. Miller, Ideal Basic Industries. This will be the fourth in a series of conferences on "Cement Manufacture and Use," which have been held triennially since 1979.

The conference will include sessions in the subject areas listed below. It should be noted that the term "cement" in the titles is intended to include any calcium silicate-based cement, including portland cements, pozzolanic cements, etc. It is thereby recognized that cementitious materials other than portland cement clinker are of equal importance to the discussions. Papers may be offered on the following subjects.

- The Materials Science of Cement and Concrete
- Advances in Cement Clinker Manufacturing
- Advances in Concrete Technology
- Advances in the Theory of Cement Hydration
- Advances in Cement Production Technology
- Advances in Concrete Construction Practice
- Influence of Cement Composition on Concrete Properties
- Durability and Reliability of Concrete
- The Past and the Future of Cement and Concrete Technology

In addition to the formal sessions in the mornings and evenings, there will be four afternoons free for ad hoc sessions to be organized by the participants.

Engineering Foundation conferences were established in 1962 to provide an opportunity for the exploration of problems and issues of concern to engineers from many disciplines. The format of the conferences, providing morning and evening sessions in which major presentations are made but with time available during the afternoons for ad hoc meetings or informal discussions, is designed to enhance rapport among participants and promote dialog on the

developments of the meeting. It is believed that the conferences have been instrumental in generating ideas and disseminating information to a greater extent than is possible through more conventional forums. It is intended that all participants will contribute actively to the discussions.

New England College is located in Henniker, NH, which is on U.S. Route 202 approximately 16 miles west of Concord and approximately 90 miles northwest of Boston. Full transportation details are provided with registration material.

Attendance at conferences is by invitation or application. Conference fees, which include registration, meals, and either single or double occupancy accommodations, are as follows:

Participant (double or single occupancy)	\$415
Adult guest (sharing room with participant)	\$225
Children 6-11 years (none younger)	\$150

To request an invitation or application, contact the Engineering Foundation, 345 East 47th Street, New York, NY 10017. USA Telephone: (212) 705-7835. Cable: ENGFOUND NEW YORK, Telex: 126022.

## ASTM to Hold Symposium on Carbonate Additions to Cement

ASTM is sponsoring the Symposium on Carbonate Additions to Cement, to be held 29 June 1988 in Baltimore, MD. The ASTM sponsoring committee is Committee C-1 on Cement. Symposium chairmen will be Paul Klieger, Consultant, Box 2275, Northbrook, IL 60065-2275, and R. Doug Hooton, Ontario Hydro Research Division, KR 163, 800 Kipling Ave., Toronto, Ontario, Canada M 8Z 5S4.

The program for the symposium follows:

### Wednesday, June 29

<i>Introduction</i>	5:00 p.m.
Paul Klieger	
<i>Overview</i>	5:05 p.m.
Doug Hooton	
<i>Methods for Studying the Hydration Chemistry of Carboaluminates</i>	5:15 p.m.
K. Daugherty, J. Huang, M. Poslusny, K. Ingram, and W. Rowe, North Texas State University, Denton, TX	
<i>The Reactivity of Carbonate Additions</i>	5:35 p.m.
Maria Alba Cincotto, Jose do Rio, Jairo de Sant'Anna Taddeo, Institute de Pesquisas Tecnologicas, Sao Paulo, Brazil	
<i>The Influence of Calcium Carbonate Additions on Optimum SO<sub>3</sub> Content in Portland Cement</i>	5:55 p.m.

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## TESTING FORUM

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Vicente Coney Campiteli and Maria Cecilia Florindo, Institute de Pesquisas Tecnologicas, Sao Paulo, Brazil

*Effect of Limestone Additions Upon Drying Shrinkage of Portland Cement Mortar*

L. D. Adams and R. M. Race, Southwestern Portland Cement Co., Victorville, CA

*The Effects of Low Percentage Limestone Additions on Cement and Concrete Physical Properties*

Eugene M. Kulesza and John Mahon, Riverside Cement Co., Riverside, CA

*The Effect of Steam Curing on HES Portland Cement Containing Carbonate Addition*

Marc Bergeron and Kevin M. Cail, Lafarge Corp., Research and Technical Center, Montreal, Quebec, Canada

*Alternate Presentation*

*Effects of Carbonate Additions on Heat of Hydration and Sulfate Resistance of Portland Cements*

R. D. Hooton, University of Toronto, Ontario, Canada

### Call for Papers

ASTM announces a call for papers for the Symposium on Petrography Applied to Concrete and Concrete Aggregates, sponsored by ASTM Subcommittee C09.02.06 of ASTM Committee

C-9 on Concrete and Concrete Aggregates. The symposium will be held in June 1989 in St. Louis, MO.

Papers should be submitted that relate to: the history of petrography as associated with concrete and concrete aggregates; petrography as applied in ASTM and other standards and documents; factors influencing concrete performance as determined using methods of ASTM Practice for Petrographic Examination of Hardened Concrete (C 856); use of ASTM C 856 methods in resolving concrete and concrete aggregate problems; case histories where ASTM C 856 methods were the primary investigative techniques.

Prospective authors are requested to submit a title, a 200-400 word abstract, and the ASTM paper submittal form by Oct. 1, 1988 to Theresa Smoot, ASTM, 1916 Race Street, Philadelphia, PA 19103, 215/299-5413. ASTM paper submittal forms are available from Ms. Smoot.

A special technical publication (STP) based on this symposium is anticipated by ASTM. Main authors will receive a complimentary copy of the volume(s) containing their papers. The main author is the author corresponding with the ASTM publication staff. All published authors may purchase reprints of the papers at cost.

Manuscripts in ASTM format are due February 1, 1989. This deadline will be rigidly enforced. If a paper is submitted after the deadline, it may be forwarded to the appropriate ASTM journal to be considered for publication. Please contact Theresa Smoot or the symposium co-chairpersons if you cannot meet the deadline. ASTM may print and distribute accepted abstracts with the approval of the co-chairpersons.

The symposium chairmen are: Bernard Erlin, CEO—Petrographer, Testwell Craig Erlin Associates, Inc., 47 Hudson Street, Ossining, NY 10562; and David Stark, Portland Cement Assoc., 5420 Old Orchard Rd., Skokie, Ill 60077.

6:15 p.m.

6:35 p.m.

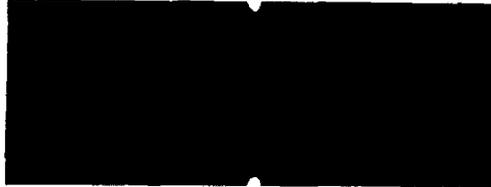
6:55 p.m.



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# ASTM Committee C-1 on Cement

## Scope

The development of specifications, methods of test, recommended practices, and definitions of terms for hydraulic-cements, including portland, natural, pozzolanic, masonry and slag cements, and modifications of the foregoing, and combinations during manufacture thereof; the investigation of the properties of hydraulic cements and the promotion of improvement and uniformity of testing and using these materials; joint sponsorship, with ASTM Committee C-9 on Concrete and Concrete Aggregates, of the Cement and Concrete Reference Laboratory, a cooperative project of the Government and ASTM.

## Officers

**Chairman:** R. E. Philleo, 7420 Annanwood Court, Annandale, VA 22003

**Vice-Chairman:** R. E. Galer, Galer Co., Inc., P.O. Box 7014, Hanover Park, IL 60103

**Secretary:** Karl Hauser, Edward C. Levy Co., 9300 Dix Ave., Dearborn, MI 48120

**Membership Secretary:** Ronald F. Gebhardt, Lehigh Portland Cement Co., 718 Hamilton Mall, Allentown, PA 18105

# ASTM Committee C-9 on Concrete and Concrete Aggregates

## Scope

The assembling and study of data pertaining to the properties of portland cement concrete and its constituent materials, including the study of effect of characteristics of materials and mixtures upon the properties of concrete; the development of methods of test for concrete and for the constituent materials of concrete (except cement), as well as for certain related materials, such as materials used in curing; the formulation of standard specifications for the constituent materials of concrete (except cement) and for concrete itself (subject to suitable interpretation of the term "concrete"). The scope of Committee C-9 does not include the field of design and construction of concrete structures except insofar as references need to be made to construction methods in special cases of concrete as "over-the-counter" materials.

## Officers

**Chairman:** J. E. Galloway, Jr., Virginia Department of Highways, 1221 East Broad St., Richmond, VA 23219

**Vice-Chairman:** R. J. Schutz, Protex Industries, 1331 West Evans Ave., Denver, CO 80223

**Secretary:** R. D. Hooton, Ontario Hydro Research, 800 Kipling Ave., Toronto, Ont., Canada M8Z 5S4

**Membership Secretary:** J. S. Pierce, 8815 West Quarto Circle, Littleton, CO 80123