Richard C. Meininger Receives ASTM Award of Merit

Richard C. Meininger, vice-president of research for the joint associations of National Sand and Gravel Association, and the National Ready Mixed Concrete Association, Silver Spring, MD, was named a 1985 recipient of the Award of Merit by ASTM.

Meininger, a resident of Mad River Lane, Columbia, MD, received the award at ceremonies hosted by ASTM Committee C-9 on Concrete and Concrete Aggregates, held 26 June 1985 in Los Angeles. He was cited for outstanding technical and administrative contributions to the work of ASTM committees responsible for standards related to testing and uses of aggregates.

The Award of Merit, and the accompanying honorary title of Fellow of the Society, were established in 1949 by ASTM. The award recognizes distinguished service to the cause of voluntary standardization through productive service to ASTM, marked leadership, outstanding contribution, or publication of papers.

An active member of Committee C-9 since 1967, Meininger is currently chairman of Group C09.01 on Administration, Subcommittee C09.01.06 on Coordination of Methods of Test, and Subcommittee C09.03.05 on Methods of Testing and Specifications for Physical Characteristics of Concrete Aggregates. He is also a member of the Executive Subcommittee and Subcommittee C09.02.07 on Pore Structure of Aggregates and Concrete. In addition, Meininger is a member of Committee D-4 on Road and Paving Materials and Committee E-17 on Traveled Surface Characteristics. He is a 1979 recipient of the Sanford E. Thompson Award for a paper pertinent to the objectives of Committee C-9, and a 1983 recipient of the Dudley Award for writing an ASTM Special Technical Publication (STP).

A native of Washington, DC, Meininger received a B.S. in civil engineering and an M.S. in engineering from the University of Maryland in 1962 and 1964, respectively. His professional background includes work as a technician and engineer with the U.S. Department of Agriculture, 1959–1962, and the Arizona Department of Transportation as a district materials engineer, 1972–1974. He joined NSGA-NRMCA in 1962 and received his present title in 1983, when he was promoted from director of engineering.

In addition to his contributions to ASTM, Meininger is also a member of the American Concrete Institute, the Association of Asphalt Paving Technologists, the American Society of Civil Engineers, and is a registered engineer in Maryland and Arizona.

Current Masonry Research Presented in ASTM Publication

A new Special Technical Publication (STP) on current masonry research, with solutions to field application problems, is now available from ASTM.

STP 871, Masonry: Research, Application, and Problems, was developed through ASTM Committees C-7 on Lime, C-12 on Mortars for Unit Masonry, and C-15 on Manufactured Masonry Units and was edited by John C. Grogan of the Brick Institute of America and John T. Conway of the Santee Cement Company. It is the third in a series of publications that provides the masonry industry with never before published information on test methods, field application, and field problems in masonry as well as current research information on masonry assemblages. The book contains 15 peer-reviewed papers.

Six areas of major concern covered in this book are

- masonry mortar composition and the differences in behavior for different combinations of masonry materials
- mortar performance and methods of evaluation
- masonry product studies under service conditions in a structure, and test methods to determine structure safety and durability
- current research on masonry assemblages
- methods of evaluating and preventing nonperformance in brick masonry walls
- literature review on the durability of brick masonry

STP 871 will benefit anyone involved in the masonry industry, including brick, cement, lime, sand and masonry contractors, masonry researchers, material manufacturers, engineers, and architects. To order, contact ASTM Customer Service, 1916 Race St., Philadelphia, PA 19103, 215/299-5585.

New Books on Concrete

Three books on concrete are available from ASTM.

Temperature Effects on Concrete (Special Technical Publication 858) describes the effects of different temperatures on the strength
development, static and cyclic behavior, elasticity, maturity functions, and permeability of various concretes and mortars. The volume contains ten peer-reviewed papers that will enable the reader to deal with the effects of high and low temperatures on concrete performance.

ASTM standard specifications, test methods, practices, and definitions comprise Volumes 04.01 and 04.02 of the 1985 Annual Book of ASTM Standards. Volume 04.01 contains 110 standards for cement (portland, hydraulic, air-entraining, pozzolan, slag, masonry, and natural); lime (quick, hydrated, and hydraulic); and gypsum and related building materials and systems. Volume 04.01 also contains the Manual of Cement Testing.

Volume 04.02 contains 166 standards for aggregates; concrete and related materials; curing materials and expansion joint fillers; and reinforcing steel; and also includes the Manual of Aggregates and Concrete Testing.

To order STP 858 or Volumes 04.01 or 04.02 of the 1985 Annual Book of ASTM Standards, contact ASTM Customer Service Department, 1916 Race Street, Philadelphia, PA 19103, 215/299-5585.

7th International Conference on Alkali-Aggregate Reaction

The Conference on Alkali Aggregate Reaction sponsored by the National Research Council of Canada and Canadian Standards Association Committee A-5 on Hydraulic Cements, Subcommittee on Alkali Aggregate Activity to be held on 18-22 Aug., 1986 at Carleton University, Ottawa, Ontario, Canada will deal with all aspects of research into the problems of alkali aggregate reactivity and its effects on concrete. Brief case histories will also be accepted. There will be a special session on alkali carbonate reactivity; “Type areas” for this type of reactivity will be visited during the Conference field trip. A petrographic exposition illustrating the various types of reactivity is also planned.

A prize of $200 will be offered for the paper presented by a student. Deadline for submission of abstracts is 31 Jan. 1986. For further information please call or write to Mr. L. Forget, Executive Secretary, 7th International Conference on Alkali-Aggregate Reaction, National Research Council of Canada, Montreal Road, Ottawa, Ontario K1A 0R6; Telephone (613) 993-9009; Telex: 053-3145.
Cement, Concrete, and Aggregates
Table of Contents
Volume 7, 1985

No. 1, Summer

Cementitious Properties of Nonferrous Slags from Canadian Sources—ESTHER DOUGLAS, V. MOHAN MALHOTRA, AND J. J. EMERY 3

Influence of Air Temperature on the Setting of Concrete Containing Set Retarding Admixtures—NIJAD I. FATTUHI 15

Fatigue Behavior of Superplasticized Concrete—DAH-YINN LEE, JEFF I. F. YANG, AND F. WAYNE KLAIBER 19

Neoprene Pads for Capping Concrete Cylinders—CELIK OZYILDIRM 25

Trade-off Gradation and Cost Requirements in Aggregate Blending—SAID M. EASA 29

Application of CCRl Data in the Formulation of Precision Estimates for Selected Cement Standards—JAMES H. PIELETR, JOHN W. HAVERFIELD, AND PETER A. SPELLERBERG 37

Technical Note: Durability of Concrete—LLOYD E. RODWAY 43

Technical Note: Improved Utilization of Fly Ash in Concrete Through a Chloride-Free Accelerator—SANLOR POPOVICS 49

Discussion of “Optimizing the Amount of Class C Fly Ash in Concrete Mixtures” by R. M. Majiko and M. F. Pistilli—W. BARRY BUTLER 52

Book Reviews 53

No. 2, Winter

Diagnostic Monitoring of the Physio-Chemical Processes in Hydrating Cement Paste—WILLIAM J. MCCARTER AND ALI B. AFSHAR 57

Mechanism of Pozzolanic Reactions and Control of Alkali Aggregate Expansion—MUHAMAD S. Y. BHATTY 69

Effect of Rheological Properties of Cement Pastes on Workability of Mortars—CIRILLO ATZENI, LUGI MASSIDDA, AND ULRICO SANNA 78

Assessing Fire Damage of Concrete by the Ultrasonic Pulse Technique—HUNG-WAN CHUNG AND KWAK SANG LAW 84

Nondestructive Combined Methods Applied to Structural Concrete Members—ANGELO A. DI MAIO, LUIS TRAVERSA, AND ALBERTO GIOVAMBATTISTA 89

Technical Note: Mathematical Evaluation of the Quality of Repairs on Concrete Specimens—ZLATKO KOSTRENČIĆ, DUBRAVKA BJEGOVIĆ, AND GOJKO BALABANIC 95

Technical Note: The Effect of Blast Furnace Slag Cement on Alkali Aggregate Reactivity: A Literature Review—FRANK J. HOGAN 100

Technical Note: Laboratory Examination of a High-Alumina Cement Concrete Column After 46-Years Exposure at Treat Island, Maine—ALAN D. BUCK AND J. PETE BURKES 108

Discussion of “The Maturity Method: Theory and Application” by N. J. Carion—GUNNAR M. IDORN 110

Testing Forum 112
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 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: W. L. Dolch, Purdue University, Office of the Dean of Engineering, ENAD Bldg., W. Lafayette, IN 47907
Vice-Chairman: C. D. Fehnel, Lone Star Industries, Inc., P.O. Box 2880 (411 Putnam Ave.), Greenwich, CT 06830
Secretary: R. A. Hines, Missouri Portland Cement Co., 7711 Carondelet Ave., St. Louis, MO 63105
Membership Secretary: J. W. Meusel, Atlantic Cement Co., Inc., P.O. Box 30, Stamford, CT 06904

ASTM Committee C-9 on Cement 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. M. Scanlon, Jr., U.S. Army Engineer Waterways Experiment Station, CH/CONC Tech. Div., P.O. Box 631 (WESSC), Vicksburg, MS 39180
Vice-Chairman: R. J. Schutz, Protex Industries, 1331 West Evans Ave., Denver, CO 80223
Secretary: G. S. Bobrowski, Master Builders, 23700 Chagrin Blvd., Cleveland, OH 44122
Membership Secretary: D. T. Smith, Marquette Cement Manufacturing Co., 2200 First American Center, Nashville, TN 37238