51st Annual Convention

American Concrete Institute

HOTEL SCHROEDER
Milwaukee, Wisconsin
February 21-24, 1955
BOARD OF DIRECTION

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†Address

AMERICAN CONCRETE INSTITUTE
18263 W. McNichols Road, Detroit 19, Michigan

PROGRAM TIME TABLE

Saturday, February 19, and Sunday, February 20
Meetings of Finance Committee, Executive Committee, Technical Activities Committee, and Board of Direction

Monday, February 21

9:00 a.m.—Technical committee meetings (see p. 6)
Registration opens — 4th Floor Foyer
10:00 a.m.—Exhibits open—5th Floor Foyer and Pere Marquette Room (see p. 19)
Coffee for Ladies—East Room (see p. 18)
2:00 p.m.—Technical committee meetings (see p. 6)

Tuesday, February 22

8:00 a.m.—Institute Officers' reception and breakfast for scheduled program participants (by prior invitation)—Parlor D
9:00 a.m.—Registration continues—4th Floor Foyer
10:00 a.m.—First General Session—Crystal Ballroom
Ladies' bus trip to Jewish Welfare Center and Layton School of Art—Parlors B & C (see p. 18)
2:00 p.m.—Lightweight Aggregate Concrete Session—Crystal Ballroom
8:00 p.m.—Motion pictures on concrete—Crystal Ballroom

Wednesday, February 23

9:00 a.m.—Pavement Session—Crystal Ballroom
Construction Session—East Room
9:30 a.m.—Ladies' bus trip to Robert A. Johnston Co.—Parlors B & C
12:15 p.m.—Awards Luncheon—Crystal Ballroom
1:00 p.m.—Ladies' Luncheon—Empire Room
2:30 p.m.—Design and Research Session—Crystal Ballroom
Construction Equipment Session—East Room
6:00 p.m.—Cocktails
7:00 p.m.—Dinner—Crystal Ballroom

Thursday, February 24

8:30 a.m.—Tour of concrete equipment manufacturing plants
10:00 a.m.—Ladies' Coffee—Parlors B & C
2:00 p.m.—Annual Research Session—Crystal Ballroom
MILWAUKEE CONVENTION COMMITTEE

Committee on General Arrangements

ROBERT A. BURMEISTER, Chairman
ARTHUR W. DEVOS
ROBERT H. HOPWOOD
ROBERT C. JOHNSON
W. D. KIMMEL
O. NEIL OLSON
J. W. POULTER
WALTER H. TACKE
J. W. TANGHE
GEORGE TEWS
JAMES G. VAN VLEET
KURT F. WENDT
M. O. WITHEY

Exhibits Committee

HAROLD S. HAIN, Chairman
FRED BARTHEL
GENE GOEB
PAUL MUELLER

"First-Timers" Committee

GLENWAY MAXON, Chairman
A. W. BIGOTT
WESLEY BLIFFERT
F. N. MENEFEE
WILLARD SCHUNCK

Ladies' Committee

MRS. R. A. BURMEISTER, Chairman
MRS. W. D. KIMMEL and MRS. J. TANGHE, Co-Chairmen
MRS. E. BARTHEL
MRS. P. BRONSON
MRS. A. DEVOS
MRS. G. GOEB
MRS. H. HAIN
MRS. R. JOHNSON
MRS. O. N. OLSON
MRS. C. S. WHITNEY

9 a.m.—5 p.m., DAILY
MONDAY, TUESDAY, and WEDNESDAY
FEBRUARY 21, 22, 23, 1955

CONVENTION REGISTRATION

Registration fee—$2.00

(All ladies and registered nonmember visitors are welcome at technical sessions, Awards Luncheon, and Dinner)

Buy your tickets for the Wednesday noon AWARDS LUNCHEON at time of registration.

Tickets for Wednesday evening Cocktails and Dinner must be purchased by 2:00 p.m. Wednesday.

See bulletin board for special notices.

8 a.m. sharp, Tuesday—Breakfast for all scheduled program participants in the general convention sessions. (By invitation)

TECHNICAL COMMITTEE MEETINGS

See pp. 6 and 7 and bulletin board at registration desk for time and location.

NOTES FOR PROGRAM PARTICIPANTS

- Participants in the program should not fail to leave with the stenotype reporter manuscripts from which papers or discussions are presented. The ACI Secretary will later provide opportunity for manuscript revision before consideration for JOURNAL publication.

- Upon recognition by the Chairman a discusser will please state his name and convention registration number distinctly and go to a microphone so he may be heard by all. If presented from manuscript, it should be left with the stenotype reporter.

- A "Convention Review" will be published in the Newsletter section of the April ACI JOURNAL.
MONDAY, FEBRUARY 21

9:00 a.m.—Registration—4th Floor Foyer

TECHNICAL COMMITTEE MEETINGS

9:00 a.m.—COMMITTEE MEETINGS
Committee 203, Bond Stress Parlor F
Committee 209, Volume Changes & Plastic Flow Parlor B
Committee 210, Resistance to Erosion of Hydraulic Structures Parlor H
Committee 315, Detailing R/C Structures Parlor A
Committee 324, Precast Concrete Parlor E
Committee 327, Ultimate Load Design Parlor D
Committee 604, Winter Concreting Room 507
Committee 613, Proportioning Mixes Parlor C

10:00 a.m.—COMMITTEE MEETINGS
Committee 323, Prestressed Concrete (Steering Committee only) Parlor G

10:00 a.m.—EXHIBITS OPEN—5th Floor Foyer and Pere Marquette Room

2:00 p.m.—COMMITTEE MEETINGS
Committee 214, Evaluation of Compression Tests Parlor D
Committee 215, Fatigue of Concrete Parlor F
Committee 323, Prestressed Concrete Club-Rooms
Committee 326, Shear and Diagonal Tension Parlor C
Committee 327, Ultimate Load Design Room 508
Committee 332, Concrete for Residential Work Parlor G
Committee 611, Inspection of Concrete Parlor B
Committee 612, Curing Practices Parlor E
Committee 617, Pavements and Bases Room 507
Committee 716, High-Pressure Steam Curing Parlor A

3:00 p.m.—COMMITTEE MEETINGS
Committee 711, Precast Floor Systems Committee Room

7:00 p.m.—COMMITTEE MEETINGS
Committee 318, Standard Building Code Parlor C
Subcommittee 7
Committee 318 (Executive Session) Club Rooms

10:00 a.m., TUESDAY, FEBRUARY 22

Crystal Ballroom

President C. H. Scholer, Presiding

Opening remarks

Appointment of tellers to canvass annual election ballots

GENERAL SESSION

Correlation of the Results of Laboratory Tests with Field Performance under Natural Freezing and Thawing Conditions

F. H. Jackson
Engineering Consultant, Washington, D. C.

European Precast Concrete

Douglas McHenry, Thor Germundsson, and Eivind Hognestad
Portland Cement Association, Chicago, Ill.

Concrete Facts and Fiction

Robert C. Johnson
Stiegel Construction Co., Milwaukee, Wis.

COMMITTEE MEETINGS

9:00 a.m.—Steering Committee, Joint Committee Report Parlor A

7:00 p.m.—Committee 318, Standard Building Code (Executive Session) Club Rooms
2:00 p.m., TUESDAY, FEBRUARY 22
Crystal Ballroom
G. W. Washa, Chairman

LIGHTWEIGHT AGGREGATES AND LIGHTWEIGHT AGGREGATE CONCRETE

Lightweight Aggregates and Concrete
G. W. Washa
University of Wisconsin, Madison, Wis.

Lightweight Structural Concrete
R. W. Kluge
University of Florida, Gainesville, Fla.

Lightweight Precast Concrete and Masonry Units
G. C. Carlson
Portland Cement Association, Chicago, III.

Insulating Concrete
R. C. Valore, Jr.
National Bureau of Standards, Washington, D. C.

8:00 p.m., TUESDAY, FEBRUARY 22
MOTION PICTURES
Crystal Ballroom

“New Breakwater Construction Techniques”
“Prestressed Concrete Over Tampa Bay”
“Power from Niagara”
“Pumped Concrete”

Time permitting, the two ACI-PGA films, “The Making of Quality Concrete” and “The Mixing, Handling, Transporting, Finishing, and Curing of Quality Concrete,” will be shown to those interested in viewing them.
9:00 a.m., WEDNESDAY, FEBRUARY 23

Concurrent sessions morning and afternoon in Crystal Ballroom and East Room

Crystal Ballroom

President C. H. Scholer, Chairman

PAVEMENTS

Design and Control of Paving Concrete

R. A. Burmeister

City of Milwaukee Testing Laboratory, Milwaukee, Wis.

Design of Joints for Pavements

E. A. Finney

Michigan State Highway Department, Lansing, Mich.

Design of Steel Reinforcement for Crack Control in Concrete Pavements

Bengt F. Friberg

Consulting Engineer, St. Louis, Mo.

Prestressed Concrete Pavements

Thomas Cholnoky

Frederick Harris, Inc., New York, N. Y.

CONSTRUCTION

Two Million Gallon Prestressed Concrete Tank in Dallas, Texas

J. J. Glosner and T. Carlweitz

Preload Co., Inc., and B. M. Heede Co., Inc., respectively, New York, N. Y.

Prepakt Concrete Backfill of Alcan Project Penstock and Turbine Pit Liner

R. E. Davis, Jr., G. E. Wendell, and G. D. Johnson

Prepakt Concrete Co., Cleveland, Ohio, and British Columbia International Engineering Co., respectively

Youtz-Slick Method of Construction

B. H. Miller

Skyhook Lift Slab Corp., Kansas City, Mo.

St. Louis Municipal Airport Terminal — Problems of Design and Construction

Anton Tedesco and William C. E. Becker

Roberts and Schaefer Co., New York, N. Y., and Consulting Engineer, St. Louis, Mo., respectively
12:15 p.m., WEDNESDAY, FEBRUARY 23

AWARDS LUNCHEON

Crystal Ballroom

Presentation of Awards

by President Scholer on behalf of the Board of Direction

Henry C. Turner Medal (posthumously) to

Roderick B. Young

"for notable achievements in the development and application of methods of field control of concrete, the development of methods of producing frost resistant concrete, and the development of cold weather concreting techniques"

Leonard C. Wason Medal for the "Most Meritorious Paper" of ACI Proceedings V. 50 (May and June 1954 Journal) to

Rudolph C. Valore, Jr.

for his paper

"Cellular Concretes"

Leonard C. Wason Medal for "Noteworthy Research" to

Thomas B. Kennedy and Katharine Mather

for the work reported in their paper (Proceedings V. 50, October 1953 Journal)

"Correlation Between Laboratory Accelerated Freezing and Thawing and Weathering at Treat Island, Maine"

Announcement of Election to Honorary Membership:

Frank H. Jackson

Thomas E. Stanton

Presentation of Plaques to Past Presidents

Report of Tellers and Introduction of New Officers

Recognition of Retiring Directors and Officers

Retiring President's Address

C. H. Scholer
Kansas State College, Manhattan, Kans.

2:30 p.m., WEDNESDAY, FEBRUARY 23

Concurrent sessions in Crystal Ballroom and East Room

Crystal Ballroom

Vice-President Charles S. Whitney, Chairman

DESIGN AND RESEARCH

Shear Strength of Reinforced Concrete Beams

K. G. Moody, L. M. Viest, R. C. Elstner, and

E. Hognestad

Respectively, Bridge Division, Country Roads Board, Victoria, Australia; University of Illinois, Urbana, Ill.; and Portland Cement Association, Chicago, Ill.

Strength of Lap Splices in Tension

J. Chinn, P. M. Ferguson, and J. N. Thompson

University of Texas, Austin, Texas

Strength of Reinforced Concrete T-Beams under Combined Direct Shear and Torsion

Earl I. Brown, II

Alabama Polytechnic Institute, Auburn, Ala.

Live Load and Temperature Moments in Shells of Rotation Built into Cylinders

M. G. Salvadori

Columbia University, New York, N. Y.
2:30 p.m., WEDNESDAY, FEBRUARY 23
Concurrent sessions in Crystal Ballroom and East Room

East Room

WALTER H. PRICE, Chairman

CONSTRUCTION EQUIPMENT

More Efficient Concrete Manufacture

GLENWAY MAXON
Consulting Engineer, Milwaukee, Wis.

Better Concrete in Slope Paving by Use of Slip-Forms

WILLIAM J. ROBINSON and LEWIS H. TUTHILL
U. S. Bureau of Reclamation, Denver, Colo.

Use of an Electrical Resistance Moisture Meter
at Reservoir Dam 22, Denver

C. B. VAN ALSTINE
Concrete Engineer, Board of Water Commissioners, Denver, Colo.

Testing of Batching Controls and Recorders
for Concrete Plants

W. L. BURGESS and C. H. WILLETS
Office Chief of Engineers, Washington, D. C.

8:30 a.m., THURSDAY, FEBRUARY 24
Tour of concrete equipment manufacturing plants in Milwaukee area. Arrangements by Milwaukee convention committee. See bulletin board for details.

2:00 p.m., THURSDAY, FEBRUARY 24
Crystal Ballroom

ANNUAL OPEN SESSION OF ACI
COMMITTEE 115, RESEARCH

STEPHEN J. CHAMBERLIN, Chairman
GEORGE W. WAHSA, Secretary

This convention feature differs from general sessions in that the information is not released for publication. Request is made that proceedings be regarded as CONFIDENTIAL. A group of short papers will be presented on research techniques and preliminary results of investigations now in progress.

- Loading test of a continuous two-span prestressed beam
- Concrete containing set retarding admixtures
- Test apparatus and methods for determining abrasion resistance and spark resistance of industrial concrete floors
- Factors affecting measured flexural strength of concrete
- Deep beams — theory and tests
- Diffusion of water vapor in hardened paste
- Transformation in crystal structure of binder as related to drying shrinkage
- Properties and uses of initially retarded concrete
- Eccentrically loaded columns subjected to high sustained loads
- Tests of Carlson stress meters
LADIES' PROGRAM

All ladies please register as soon as possible for the events you plan to attend. Registration slips are at ladies' reception room.

The reception room is for your convenience — each morning coffee and Danish pastry will be served at an informal coffee hour — come meet your old friends and make new ones.

MONDAY, FEBRUARY 21
East Room
Registration 9:00 a.m. to 4:00 p.m.

TUESDAY, FEBRUARY 22
Parlors B and C
9:00 a.m.—Coffee hour
10:00 a.m.—Bus trip to fabulous new Jewish Welfare Center on the shores of Lake Michigan.
1:00 p.m.—Luncheon at the Center. Sister Thomasita, Art Director of Cardinal Stritch College, will be guest speaker.
—Following luncheon there will be a visit to the Layton School of Art

WEDNESDAY, FEBRUARY 23
Parlors B and C
9:00 a.m.—Coffee hour
9:30 a.m.—Bus trip to renowned Robert A. Johnston Co.
1:00 p.m.—Luncheon—Empire Room. Style show sponsored by Hixons. Miss Edith Quade, of Milwaukee Public Museum, will be guest speaker. The topic will be "Wisconsin Folkways and Byways."
6:00 p.m.—Cocktails
7:00 p.m.—Dinner—Crystal Ballroom

THURSDAY, FEBRUARY 24
Parlors B and C
9:00 a.m.—"See You in Philadelphia in '56" Farewell Coffee Hour

Don't fail to examine the exhibit area — a 1955 convention feature sponsored by the Milwaukee Convention Committee

EXHIBITORS

1955 ACI CONVENTION

American Concrete Pressure Pipe Assn.
Baldwin-Lima-Hamilton Corp.
Butler Bin Co.
Calcium Chloride Institute
Cen-Vi-Ro Manufacturing Co.
Chain Belt Co.
Chicago Fly Ash Co.
Copperweld Steel Co.
Gar-Bro Manufacturing Co.
Hunt Process Co.
Master Builders Co., The
Prestressing, Inc.
Pumice, Inc.
John A. Roebling's Sons Corp.
Sika Chemical Corp.
Sonoco Products Co.
Superior Concrete Accessories, Inc.
Symons Clamp and Manufacturing Co.
Techkote Co., Inc.
Water Seals, Inc.
Webrib Steel Corp.
The AMERICAN CONCRETE INSTITUTE

is a nonprofit, nonpartisan organization of engineers, architects, scientists, builders, manufacturers and representatives of industries associated in their technical interest with the field of concrete, dedicated to the public service. Its primary objective is to assist its members and the engineering profession generally, by gathering and disseminating information about the properties and applications of concrete and reinforced concrete and their constituent materials.

It is self-supported by membership dues and the sale of its publications. Since 1905 its primary objective has been achieved by the combined membership effort. Individually and through committees, and with the cooperation of many public and private agencies, members have correlated the results of research, from both field and laboratory, and of practices in design, construction and manufacture.

The work of the Institute has become available to the engineering profession in annual volumes of ACI Proceedings since 1905. Beginning 1929 the Proceedings have first appeared periodically in the Journal of the American Concrete Institute and in many separate publications.

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