Program for the 57th Annual ACI Convention

Chase-Park Plaza Hotels
St. Louis, Missouri
February 20-23, 1961
BOARD OF DIRECTION

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Cedric Wilson

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TECHNICAL ACTIVITIES COMMITTEE
(In charge of convention program and of technical publications)

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William A. Maples, Secretary*
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Harry Ellsberg
E. A. Finney
Bryant Mather
Walter J. McCoy
Joseph J. Shideler

* Address
AMERICAN CONCRETE INSTITUTE
P.O. Box 4754, Redford Station
Detroit 19, Michigan

CONVENTION REGISTRATION

Monday — Thursday
February 20–23, 1961
9:00 a.m. — 5:00 p.m. Daily in Main Lobby of Chase
Registration Fee — $5.00

All ladies and registered nonmember visitors are welcome to attend technical sessions, Awards Luncheon, and social activities.

See bulletin board in Chase lobby for special notices

NOTES FOR PROGRAM PARTICIPANTS

8:00 a.m. Tuesday — Breakfast for Technical Committee Progress program participants (by invitation) Stockholm Room, Park Plaza.

8:00 a.m. Wednesday — Breakfast for General Program participants (by invitation) Hunt Room, Chase.

8:00 a.m. Thursday — Breakfast for Research Session participants (by invitation) Colonial Room, Chase.

Upon recognition by the Chairman, a discusser will please state his name distinctly and go to the nearest microphone so that he may be heard by all.

A "Convention Review" will be published in the News Letter section of the ACI JOURNAL.

ACI CONVENTION AND PRESS HEADQUARTERS—VARIETY CLUB
# TECHNICAL COMMITTEE MEETINGS

(Visitors welcome at all meetings except at executive and closed sessions.)

## Monday Morning, February 20

9:00 a.m. — 12:00 Noon

<table>
<thead>
<tr>
<th>Committee</th>
<th>Meeting Room</th>
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<tbody>
<tr>
<td>116</td>
<td>Regency, Park Plaza</td>
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<tr>
<td>201</td>
<td>Georgian, Park Plaza</td>
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<tr>
<td>207</td>
<td>Hunt, Chase</td>
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<td>208</td>
<td>Colonial, Chase</td>
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<td>216</td>
<td>Park, Chase</td>
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<tr>
<td>318</td>
<td>Embassy, Chase</td>
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<tr>
<td>323</td>
<td>Lacquer, Park Plaza</td>
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<tr>
<td>332</td>
<td>ACI Hdqtrs. Suite, Chase</td>
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<td>403</td>
<td>Swedish, Park Plaza</td>
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<td>505</td>
<td>Zodiac, Chase</td>
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<td>612</td>
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<td>Embassy, Chase</td>
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<td>623</td>
<td>Palladian, Chase</td>
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<td>712</td>
<td>Lido, Chase</td>
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<td>716</td>
<td>Georgian, Park Plaza</td>
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<td>805</td>
<td>Zodiac, Chase</td>
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<td>Venetian, Park Plaza</td>
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## Monday Afternoon, February 20

2:00 — 5:00 p.m.

<table>
<thead>
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<th>Committee</th>
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<tbody>
<tr>
<td>214</td>
<td>Park, Chase</td>
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<td>215</td>
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<td>323</td>
<td>Regency, Chase</td>
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<td>331</td>
<td>Hunt, Chase</td>
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<td>Colonial, Chase</td>
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<td>Swedish, Park Plaza</td>
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<td>Zodiac, Chase</td>
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<td>612</td>
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<td>Embassy, Chase</td>
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<tr>
<td>716</td>
<td>Georgian, Park Plaza</td>
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</tbody>
</table>

## Monday Evening, February 20

7:00 p.m.

<table>
<thead>
<tr>
<th>Committee</th>
<th>Meeting Room</th>
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<tbody>
<tr>
<td>115</td>
<td>English, Chase</td>
</tr>
</tbody>
</table>
Tuesday Morning, February 21
9:00 a.m. — 12:00 Noon

212 Admixtures (Revised report and possible preparation of Recommended Practice) Park, Chase

318 Standard Building Code—Subcommittee 8, Shear and Diagonal Tension (Code revisions) ACI Hqtrs. Suite, Chase

323 Prestressed Reinforced Concrete, Joint ACI-ASCE (See also schedule for Feb. 20) Regency, Chase

333 Composite Construction, Joint ACI-ASCE Lacquer, Park Plaza

334 Concrete Shell Structures (See also p.m. Feb. 20 and 21) Colonial, Chase

336 Combined Footings (Review of committee work) Embassy, Chase

339 Allowable Stresses in Reinforcement Hunt, Chase

609 Consolidation of Concrete Regency, Park Plaza

611 Inspection of Concrete (Discussion of Recommended Practice) Georgian, Park Plaza

613 Proportioning Concrete Mixtures Zodiac, Chase

616 Coatings for Concrete (Discussion of two pending reports) Swedish, Park Plaza

622 Formwork for Concrete—Subcommittee on Formwork Manual Venetian, Park Plaza

Tuesday Afternoon, February 21
2:00 p.m. — 5:00 p.m.

335 Concrete Shell Structures (See also p.m. Feb. 20 and a.m. Feb. 21) Colonial, Chase

Tuesday Evening, February 21
7:00 p.m.

— Chapter Problems and Procedures Palladian, Chase

318 Standard Building Code (Closed Session) Regency, Chase

TECHNICAL COMMITTEE PROGRESS SESSION

Tuesday Afternoon, February 21
2:00 p.m. — 5:00 p.m.
Khorassan Room, Chase

Chairman: Kenneth D. Cummins, Technical Director, American Concrete Institute, Detroit, Michigan

This session is a new ACI convention feature planned to familiarize ACI members with committee work of the Institute, to secure help for technical committees, and to suggest to interested parties opportunities for direct research or sponsorship of research projects. The following members will give 10–15 minute reports on their committee work:

TAC Committee on Monographs
G. E. BURNET, Chairman

Committee 115
Research
S. J. CHAMBERLIN, Secretary

Committee 116
Nomenclature
D. L. BLOEM, Chairman

Committee 212
Admixtures
B. E. FOSTER, Chairman
SPECIAL EVENTS

Exhibits ... Monday through Thursday in Chase Exhibit Hall
Design competition for advanced architectural students at
Washington University of St. Louis and University of
Illinois. Design models on display in Exhibit Hall.

Ladies Program (see schedule) ..................... Daily

Awards Luncheon ........ Starlight Roof, Chase, 12:15 p.m.,
Wednesday, Feb. 22.

Cocktails and Dinner (informal dress) ...... Khorassan Room,
Chase, 6:30 p.m. Wednesday, Feb. 22.

Speaker: Waldo G. Bowman, Editor,
Engineering News-Record

LADIES PROGRAM

The ladies activities lounge is located in the Pony
Express Room of the Chase

Monday, February 20

2:30 — 4:00 p.m. Coffee and reception in ladies activities lounge. Information available regarding amusements, points of interest, shopping, etc.

Tuesday, February 21

9:45 a.m. Board Grayline busses for tour that will include the Climatron, world's only Geodesic dome greenhouse; annual Orchid Show at Shaw's Garden; and "style show" at the Jefferson Memorial featuring high fashions of old St. Louis.

1:05 p.m. Luncheon in the Tea Room of the St. Louis Art Museum, followed by tour of the galleries.

3:30 p.m. Return to hotel lounge for informal entertainment or rest period.

Wednesday, February 22

8:30 a.m. Board Public Service busses for downtown St. Louis.

9:00 a.m. "Hawaiian Breakfast" in the Missouri Room of Stix, Baer & Fuller's department store followed by shopping.

10:45 a.m. Board busses at the Sixth Street door for Barr's department store for further shopping.

12:30 p.m. Board busses at Sixth Street door to return to Chase-Park Plaza.

1:00 p.m. Washington's Birthday luncheon in Stockholm Room, Park Plaza.

2:30 p.m. Card party, with table prizes, in ladies activities lounge, or shopping in exclusive Maryland Avenue district.

4:00 p.m. Coffee served in the lounge.

Thursday, February 23

Free day

VISIT THE EXHIBITS DAILY . . .

to learn how to do a better job in concrete
<table>
<thead>
<tr>
<th>CO-CHAIRMEN</th>
<th>Report on 1961 meeting of Comité Européen du Béton</th>
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<tbody>
<tr>
<td>Joe W. Kelly, Professor</td>
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<td>Engineering Materials</td>
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<td>Laboratory</td>
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<td>University of California</td>
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<td>Berkeley, California</td>
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<td>Howard A. Coleman</td>
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<td>Vice President</td>
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<td>Missouri Portland Cement</td>
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<td>Company</td>
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<tr>
<td>St. Louis, Missouri</td>
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<tr>
<td>Welcome to St. Louis</td>
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<tr>
<td>The Honorable Raymond R. Tucker</td>
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<td>Mayor of St. Louis</td>
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<td>President's Address</td>
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<tr>
<td>Professor Joe W. Kelly</td>
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<tr>
<td>Appointment of Tellers to canvass ballots</td>
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<tr>
<td>Report on Sixth Congress of the International Association for Bridge and Structural Engineering</td>
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<tr>
<td>Douglas McHenry</td>
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<td>Director of Development</td>
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<td>Research and Development</td>
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<td>Laboratories</td>
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<td>Portland Cement Association</td>
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<td>Skokie, Illinois</td>
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<td>Report on RILEM Symposium on Steam Cured Light Weight Concrete</td>
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<td>John K. Selden</td>
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<td>Retiring Technical Director</td>
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<td>Autoclave Building Products Association</td>
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<td>Toledo, Ohio</td>
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<td>Concrete Construction in Russia — 1960</td>
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<td>A. Allan Bates</td>
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<td>Vice President</td>
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<td>Portland Cement Association</td>
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<td>Skokie, Illinois</td>
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<tr>
<td>Report on Meeting of Third International Congress of Precast Concrete Industry</td>
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<td>Arsham Amirikian</td>
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<td>Special Structures</td>
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<td>Consultant</td>
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<td>Bureau of Yards and Docks</td>
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<td>U.S. Department of the Navy</td>
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<td>Washington, D. C.</td>
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ACI CONVENTION AREA
CHASE-PARK PLAZA HOTELS

The Zodiac Room and the Starlight Roof, not shown in these floor plans, are located on the 10th floor of the Chase. Note that there are two Regency Rooms, one on the first floor of the Chase, the other on the mezzanine floor of the Park Plaza.

The Exhibit Hall is located on the lower level of the Chase, below the Khorassan Room.

Inquire at the convention registration desk for location of ACI Headquarters Suite.
Wednesday, February 22

AWARDS LUNCHEON

12:15 p.m.

STARLIGHT ROOF, CHASE HOTEL

Presentation of Awards

by

President Kelly on behalf of the
Board of Direction

HENRY C. TURNER MEDAL to

STANTON WALKER

"For his many contributions to the basic knowledge of concrete through published literature and active participation in the work of technical committees of the Institute."

HENRY L. KENNEDY AWARD to

A. ALLAN BATES

"For untiring efforts as chairman and member of the ACI Building Committee, successfully culminated in the outstanding architectural masterpiece housing the Institute Headquarters."

ALFRED E. LINDAU AWARD to

ANTON TEDESKO

"For his numerous and outstanding contributions to the development and use of long-span concrete structures as exemplified by the thin-shelled arch."

LEONARD C. WASON MEDAL for
"Noteworthy Research" to

HENRY T. TOENNIES

for the work reported in his paper, "Artificial Carbonation of Concrete Masonry Units," published in the February, 1960 ACI JOURNAL.

LEONARD C. WASON MEDAL for
"The Most Meritorious Paper" to

ROBERT A. WILLIAMSON

for his paper, "Performance and Design of Special Purpose Blast Resistant Structures," published in the May, 1960 ACI JOURNAL.

Announcement of Election to Honorary Membership

TREVAL C. POWERS

Report of Tellers and Introduction of New Officers

Presentation of Student Awards

Presentation of Memento to Retiring President

Cocktails and Dinner
6:30 p.m., Khorassan Room

Dress for this affair is informal. Guest speaker will be Waldo G. Bowman, editor of Engineering News-Record.

VISIT THE EXHIBITS DAILY . . .

to learn how to do a better job in concrete
<table>
<thead>
<tr>
<th>CONCURRENT SESSIONS</th>
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<tbody>
<tr>
<td>2:30 p.m. — 5 p.m.</td>
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</table>

(1) **DESIGN AND CONSTRUCTION**

**Chairman**
Raymond C. Reese
R. C. Reese and Associates
Toledo, Ohio

**Full Scale Testing**
Develops Efficient Pre-Loaded Concrete Pillars

John J. Reed
Professor of Mining Engineering
Colorado School of Mines
Golden, Colorado

C. David Mann
St. Joseph Lead Company
Bonne Terre, Missouri

**Precast Complex**
Conoidal Horticultural Domes

W. J. Hufschmidt
President
Hufschmidt Engineering Company
Milwaukee, Wisconsin

**Analysis of Stresses and the Load Carrying Capacity of the Lincoln Boulevard Bridge over Lost River, Idaho**

Reynold K. Watkins
Professor and Head, Mechanical Engineering Department
William A. Cordon, Professor
Elliot Rich, Professor
College of Engineering
Utah State University
Logan, Utah

**Supporting Structure for Retractable Roof of Pittsburgh Public Auditorium**

Edward Cohen
Associate Engineer
Ammann and Whitney
New York, New York

(2) **MATERIALS**

**Chairman**
Lewis H. Tuthill
Concrete Engineer
Division of Design and Construction
California Department of Water Resources
Sacramento, California

**Khorassan Room, 1st Floor, Chase**

**Water-Cement Ratio versus Strength — Another Look**

Herbert J. Gilkey
Professor of Theoretical and Applied Mechanics
Iowa State University
Ames, Iowa

**Chemical Pre-stressing of Concrete Elements Using Expanding Cements**

T. Y. Lin
Professor of Civil Engineering

Alexander Klein
Research Engineer

**How Good is Good Enough?**

Tsevi Karby
Graduate Student
University of California
Berkeley, California

**Load Tests of Patterned Concrete Masonry Walls**

Edward A. Abdun-Nur
Consulting Engineer
Denver, Colorado

R. O. Hedstrom
Development Engineer
Research and Development Laboratories
Portland Cement Association
Skokie, Illinois
## Thursday Morning  February 23

### Concurrent Sessions

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<th>Time</th>
<th>Section</th>
<th>Chairmen</th>
<th>Speakers</th>
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</thead>
<tbody>
<tr>
<td>9 a.m. — 12 Noon</td>
<td>(1) COMMITTEE 216 SYMPOSIUM ON FIRE RESISTANCE</td>
<td><strong>Chairman</strong>&lt;br&gt;Clifton C. Carlson&lt;br&gt;Manager, Fire Research Section&lt;br&gt;Research and Development Laboratories&lt;br&gt;Portland Cement Association&lt;br&gt;Skokie, Illinois</td>
<td><strong>John E. Goldberg</strong>&lt;br&gt;Professor of Structural Engineering&lt;br&gt;<strong>K. S. Mahmoud</strong>&lt;br&gt;Graduate Student&lt;br&gt;School of Civil Engineering&lt;br&gt;Purdue University&lt;br&gt;Lafayette, Indiana</td>
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<td></td>
<td>Fire Resistance of Reinforced Concrete</td>
<td><strong>Irwin A. Benjamin</strong>&lt;br&gt;Director of Research&lt;br&gt;Granco Steel Products Company&lt;br&gt;Granite City, Illinois</td>
<td><strong>Eivind Hognestad</strong>&lt;br&gt;Manager, Structural Development Section&lt;br&gt;<strong>Ladislav B. Kriz</strong>&lt;br&gt;Associate Development Engineer&lt;br&gt;<strong>Alan H. Mattock</strong>&lt;br&gt;Senior Development Engineer&lt;br&gt;Research and Development Laboratories&lt;br&gt;Portland Cement Association&lt;br&gt;Skokie, Illinois</td>
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<tr>
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<td>Fire Resistance of Building Construction Protected by Concrete</td>
<td><strong>Robert R. Sheridan</strong>&lt;br&gt;Structural Engineering Consultant&lt;br&gt;Eastman Kodak Company&lt;br&gt;Rochester, New York</td>
<td><strong>Boris Bresler</strong>&lt;br&gt;Professor of Civil Engineering&lt;br&gt;<strong>P. Gilbert</strong>&lt;br&gt;Department of Civil Engineering&lt;br&gt;University of California&lt;br&gt;Berkeley, California</td>
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<td>Fire Resistance of Prestressed Concrete</td>
<td><strong>G. E. Troxell</strong>&lt;br&gt;Professor of Civil Engineering&lt;br&gt;University of California&lt;br&gt;Berkeley, California</td>
<td></td>
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</table>
| Influence of Cement Composition on the Effectiveness of Water Reducing-Retarding Admixtures | Howard Newlon, Jr.  
Highway Research Engineer  
Virginia Council of Highway Investigation and Research  
Charlottesville, Virginia |
|---|---|
| Extremely Lean Mass Concrete with Pozzolans | Thomas B. Kennedy  
Chief, Concrete Division  
U. S. Army Engineer  
Waterways Experiment Station  
Vicksburg, Mississippi |
| Mechanism of Fatigue Failure in Concrete | John W. Murdock  
Research Assistant  
Department of Theoretical and Applied Mechanics  
University of Illinois  
Urbana, Illinois |
| Dynamic Behavior of Continuously Reinforced Concrete Slabs | A. D. M. Lewis  
School of Civil Engineering  
Purdue University  
Lafayette, Indiana |
| Mechanism of Tension Cracking in Reinforced Concrete | Bengt B. Broms  
School of Civil Engineering  
Cornell University  
Ithaca, New York |
| Ultimate Strength of Reinforced Concrete Beams in Combined Torsion, Bending, and Shear | Hans Gesund  
Associate Professor of Civil Engineering  
University of Kentucky  
Lexington, Kentucky |
| Effect of Shrinkage Cracking in Diagonal Tension Strength | J. Neils Thompson  
Professor of Civil Engineering  
University of Texas  
Austin, Texas |
| Prestressing Concrete with Fiber Glass Tendons | David P. Billington  
Associate Professor of Civil Engineering  
Princeton University  
Princeton, New Jersey |
| Protection of Steel Reinforcement from Corrosion in Concrete Contaminated with Salt | Charles H. Scholer  
Professor of Applied Mechanics  
Kansas State University  
Manhattan, Kansas |
ST. LOUIS CONVENTION COMMITTEE

GENERAL COMMITTEE
Hon. Raymond B. Tucker, Honorary Chairman
Howard A. Coleman, General Chairman
Robert A. Willis, Secretary
August A. Lamack, Treasurer

Clarence Ax
Albert H. Baum
William C. E. Becker
Sidney Bierman

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Howard A. Coleman
A. Carl Weber
Carl J. Chappell
Paul K. Nichols

EXHIBITS
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William Miller
Carl J. Chappell, ex officio

ENTERTAINMENT & HOSPITALITY
George N. Bishop, Jr., Chairman
M. N. Quint
L. L. Schwarz
Albert H. Baum
George S. Herbst
Raymond F. Powell
Paul K. Nichols, ex officio
A. Carl Weber, ex officio

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J. John Brouk, Chairman

Mrs. R. R. Tucker
Mrs. A. H. Lamack
Mrs. H. A. Coleman
Mrs. A. C. Weber
Mrs. R. A. Willis
Mrs. C. J. Chappell
Mrs. P. K. Nichols
Mrs. P. E. Macoon
Mrs. J. J. Brouk
Mrs. B. Kester
Mrs. A. H. Brust
Mrs. F. B. Schulenberg
Mrs. Clarence Ax
Mrs. Albert H. Baum
Mrs. G. N. Bishop, Jr.
Mrs. W. C. E. Becker
Mrs. S. Bierman
Mrs. N. J. Campbell
Mrs. G. J. Herbst, Jr.
Mrs. R. F. Powell
Mrs. G. W. Simms

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Bruce Kester, Chairman

W. G. Beck
Wm. C. E. Becker
C. B. Genmer
Sidney Bierman
D. J. Stocker
C. J. Chappell, ex officio

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A. H. Brust, Chairman
Henry M. Reitz
Wm. C. E. Becker
Harold M. Telthorst
Neal J. Campbell
Clarence Ax

PUBLICITY
Fred B. Schulenberg, Chairman
Neal J. Campbell
A. C. Weber, ex officio
Frank A. Beets
P. E. Macoon, ex officio

AMERICAN CONCRETE INSTITUTE

GLAD to be of help. Here are some prospects who should be interested in knowing more about A.C.I.

name
address

city zone state (or country)

name
address

city zone state (or country)

name
address

city zone state (or country)

My name
Address

☐ You may mention my name.
☐ Do not mention my name.
ST. LOUIS CONVENTION EXHIBITORS

Visit the Exhibits daily, Monday through Thursday, in the Exhibits Hall of the Chase.

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<tr>
<th>Booth No.</th>
<th>Company</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Sika Chemical Corporation</td>
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<td>3</td>
<td>Water Seals, Inc.</td>
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<tr>
<td>4</td>
<td>Granco Steel Products Company</td>
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<tr>
<td>5-6</td>
<td>Maginniss Power Tool Company</td>
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<tr>
<td>7-8</td>
<td>Leschen Wire Rope Division, H. K. Porter Company, Inc.</td>
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<td>9</td>
<td>Calcium Chloride Institute</td>
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<td>10</td>
<td>Rex-Spanall, Inc.</td>
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<td>13-14</td>
<td>Sonoco Products Company</td>
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<td>15</td>
<td>The Prescon Corporation</td>
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<td>19-20</td>
<td>Autolene Lubricants Company</td>
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<td>25-26</td>
<td>American Steel &amp; Wire Division, U.S. Steel Corporation</td>
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<td>27-29</td>
<td>The Master Builders Company, Division of American-Marietta Company</td>
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<td>Missouri Association Prestressed Concrete</td>
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<td>41</td>
<td>Expanded Shale Clay &amp; Slate Institute</td>
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<td>42</td>
<td>Johns-Manville Corporation</td>
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<td>47</td>
<td>Chicago Fly Ash Company</td>
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<td>Detroit Edison Company</td>
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<td>Walter N. Handy Company, Inc.</td>
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<td>McNeil Brothers, Inc.</td>
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<td></td>
<td>West Penn Power Company</td>
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<td>48</td>
<td>Laclede Steel Company</td>
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<td>Western Waterproofing Company</td>
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<td>50</td>
<td>R. L. Spillman Company</td>
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<tr>
<td>51</td>
<td>Portland Cement Association</td>
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<tr>
<td>52</td>
<td>Clipper Manufacturing Company</td>
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<tr>
<td>53</td>
<td>Contractors and Engineers, Buttenheim Publishing Corporation</td>
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<tr>
<td>54</td>
<td>C. K. Williams &amp; Company</td>
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