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# FALL CONVENTION PROGRAM



# October 24-29, 1976 Mexico, D. F., Mexico

Registration fees cover attendance at all ACI technical and educational committee meetings, general session, and symposia.

# contents

page

Breakfasts for program participants 4
Schedule
Special events 4
Committee meetings 7
Floor plan of meeting rooms
General Session
Limit Design
International Symposium on Polymers in Concrete 15 & 17
Research on Plain and Reinforced Concrete
First Panamerican Symposium on Concrete Education 20
Concrete in Mexico
International Symposium on Accelerated Strength Testing 25
Douglas McHenry International Symposium on Concrete
and Concrete Structures
Program for Family Members
Future ACI Conventions
ACI-IMCYC Mexico City Convention Committee
ACI Educational Seminar Schedule for Fall, 1976
Post Convention Trips
Student Activities Session



# SCHEDULE

# SUNDAY, OCTOBER 24 2:00 p.m.-6:00 p.m.

Administrative committee meetings

# MONDAY, OCTOBER 25

8:30 a.m.-9:30 p.m. Administrative and technical committee meetings

# **TUESDAY, OCTOBER 26**

8:30 a.m.-9:30 p.m. Administrative, technical, and educational committee meetings

# WEDNESDAY, OCTOBER 27

8:30 a.m.-6:00 p.m. Administrative, technical, and educational committee meetings
9:00 a.m.-12:00 noon Limit Design (Committee 428)
9:00 a.m.-12:00 noon International Symposium on Polymers in Concrete (Committee 548) (1st of 2 sessions)
10:00 a.m.-12:30 p.m. Student Activities Session
2:00 p.m.-5:00 p.m.
International Symposium on Polymers in Concrete Interactional Symposium on Polymers in Concrete

- International Symposium on Polymers in Concrete (2nd of 2 sessions)
- 2:00 p.m.-5:00 p.m. Research on Plain and Reinforced Concrete (Committee 115)
- 2:00 p.m.-5:30 p.m. First Panamerican Symposium on Concrete Education

# THURSDAY, OCTOBER 28

9:00 a.m.-12:00 noon General Session

- 2:00 p.m.-6:00 p.m.
- Concrete in Mexico
- 2:00 p.m.-6:00 p.m. International Symposium on Accelerated Strength Testing (Committee 214)
- 2:00 p.m.-6:00 p.m. Administrative, technical, and educational committee meetings

7:00 p.m.-9:00 p.m. Concrete Mixer

# FRIDAY, OCTOBER 29

9:00 a.m.-12:30 p.m. Douglas McHenry International Symposium on Concrete and Concrete Structures (1st of 2 sessions)

12:30 p.m.-2:00 p.m. Symposium Luncheon (Tickets to be purchased) 2:00 p.m.-5:30 p.m.

Douglas McHenry International Symposium on Concrete and Concrete Structures (2nd of 2 sessions)

# SPECIAL EVENTS

Publications Display...in the registration area in the lobby. All the current ACI publications are there. Orders are taken at the Registration Desk.

**Expo Concrete 76...**The Local Committee has organized an exposition of products of concrete and related materials which is open throughout the week. In the Calder Salon.

Film Presentation... Monday, Tuesday, and Wednesday at 8:30 a.m. These films exhibit various concrete structures erected recently in Mexico City. In the Taxco room.

Education at the Convention...the First Panamerican Symposium on Concrete Education is scheduled on Wednesday afternoon in the Molino del Rey. It is hoped that this Symposium will be the beginning of the correlation and expansion of the efforts of the various cement and concrete organizations in the Americas toward the on-going education of all those working in the concrete industry.

Also — for the first time — a short session has been scheduled on Wednesday morning for the attending student. It starts at 10:00 a.m. and is a must for those students who are currently studying concrete in design and construction.

"Concrete Mixer"...Thursday, October 28, 7:00 to 9:00 p.m., in the Chapultepec. Please wear your badge.

# Breakfasts (by invitation only):

Tuesday, October 26, 7:00 a.m.

Breakfast for program participants in the First Panamerican Symposium on Concrete Education. Fouquet's de Paris room.

# Wednesday, October 27, 7:00 a.m.

Breakfast for program participants in the session on Limit Design, the International Symposium on Polymers in Concrete, and the session on Research on Plain and Reinforced Concrete. Fouquet's de Paris room.

# Thursday, October 28, 7:00 a.m.

Breakfast for program participants in the General Session, the session on Concrete in Mexico, and the International Symposium on Accelerated Strength Testing. Fouquet's de Paris room.

# Friday, October 29, 7:00 a.m.

Breakfast for program participants in both sessions of the Douglas McHenry International Symposium on Concrete and Concrete Structures and the Luncheon program. Fouquet's de Paris room.

Special tours....have been planned by the Local Convention Committee. Be sure to check the Family Members' Program in the back of this booklet for tours of interest to you. There will be at least one and probably several. Don't miss them!

# COMMITTEE MEETINGS

During this Fall Convention in Mexico City, some one hundred technical committees will be in session for a week. The average number of committee members is twenty, and the majority of their working sessions is open to interested observers.

In addition to the committee work, several international symposiums have been programmed, for which simultaneous translation equipment will be available (English-Spanish and Spanish-English).

# TECHNICAL VISIT TO THE INNER CIRCUIT FREEWAY

This visit will be made in collaboration with the Public Works Office of the Department of the Federal District on Friday, October 29, and includes a tour of the different stages of this project, an important part of the solution to Mexico City's traffic problem. Interested delegates may obtain a detailed program of the tour at the Convention's Information Desk.

# **KNOW THE MEXICANS**

On Tuesday, October 26, the foreign delegates will have an opportunity to meet the Mexican professionals in concrete, who will open their homes to the ACI delegates previously registered with their wives for a **Noche Mexicana**.



# Mexican tax

Mexicans must still pay their country's 15% tax on food and drink at nightclubs and restaurants. But foreign visitors can now avoid the levy by showing their passport or tourist card. The tax was first imposed in 1974 to funnel more money into Mexico's impoverished rural areas. Meanwhile, Mexicans and tourists alike must still pay the regular 4% sales tax on bills.

# MEXICO CITY

The city of Tenochtitlan was founded in 1325 by a Nahua tribe, the Aztecs, who had come from the northwest on a pilgrimage. They were obeying a divine order to "establish a city in the place where they found an eagle perched on a cactus plant devouring a serpent." That happy discovery occurred on an island in Lake Texcoco, where the Nahua people devoted themselves to the task of building

When the Spaniards arrived in 1519, this small tribe and its island capital had developed into a formidable empire and the first great city on the American Continent known to the West. The Spanish chronicles tell us that it was a city constructed with an extraordinary sense of planning. At its heart were the temples of the great ceremonial center, and the island was communicated with the mainland by three broad causeways.

Modern Mexico City is constructed over what was Tenochtitlan and, as a vast metropolis, is transformed at an accelerated rhythm that has converted it in only a few years from a tranquil and provincial city into a modern, dynamic capital with tall buildings, broad avenues, extensive residential areas, and an industrial development that faithfully reflects its progress.

# INFORMATION DESK

Bilingual personnel staffing the information desk of the Convention will be on permanent duty to attend the delegates throughout the week.

As a part of the hospitality program, each delegate will receive a "Concrete Survival Kit" designed to make his stay in Mexico City more interesting. The delegates will also be provided with information on shops, restaurants, bars, nightclubs, reviews of the week's spectacles, doctors of different specialties, etc., to assure them a pleasant visit.

The Hospitality Committee will prepare a daily bulletin on activities of the participants, in order that they may appreciate the atmosphere in which the Convention develops.



# **COMMITTEE MEETINGS**

Be sure to check the bulletin board for last minute changes or added meetings.

COMMITTEE Sunda **Meeting Room** 

**OCTOBER 24 Technical Activities Committee** 

8:30 a.m. - 12:30 p.m. Oaxaca A

# Monda y

OCT	OBER 25 8:30	a.m 10:30 a.m.
	Technical Activities Committee	Oaxaca A
	Educational Activities Committee	Renoir
212	Admixtures	Taxco
318	Subcommittee D, Details and Develo	pment
	of Reinforcement	Lautrec
318	Subcommittee F, Serviceability	l'Opera
344	Circular Prestressed Concrete	
	Structures	Molino del Rey
352	Joints and Connections in Monolithi	С
	Concrete Structures	l'Etoile
531	Masonry Structures	Camelias
547	Refractory Concrete	Oaxaca B

# 8:30 a.m. - 12:30 p.m.

	FILM PRESENTATION See Page 4	Taxco
	<b>Technical Activities Committee</b>	Oaxaca A
	Educational Activities Committee	Renoir
	International Activities Committee	Chapultepec
	Planning Committee	Arco Iris
318	Subcommittee D, Details and Develop	oment
	of Reinforcement	Lautrec
318	Subcommittee F, Serviceability	l'Opera
344	Circular Prestressed Concrete	
	Structures	Molino del Rey
352	Joints and Connections in Monolithic	
	Concrete Structures	l'Etoile
531	Masonry Structures	Camelias
547	Refractory Concrete	Oaxaca B
	2:00	p.m 4:00 p.m.

	Technical Activities Committee	Oaxaca A
	Educational Activities Committee	Renoir
303	Architectural Concrete	Jardin
315	Details of Concrete Reinforcement	Chapultepec
318	Subcommittee B, Concrete Quality, M	ixing,
	and Placement	Lautrec

7

318	8 Subcommittee E, Analysis and Strength	
	Requirements	l'Opera
318	Subcommittee G, Flexure and Axial I	oads l'Etoile
318	Subcommittee I, Slab Systems	Champs Elysees
318		
	Concrete	Arco Iris
318	Subcommittee N, Earthquake Resist	ant Design
	Requirements	Taxco
344	Circular Prestressed Concrete	
	Structures	Molino del Rey
531	Masonry Structures	Camelias
547	Refractory Concrete	Oaxaca B
	4:00	p.m 6:00 p.m.

Technical Activities Committee	Oaxaca A
Research and Development	Molino del Rey
Architectural Concrete	Jardin
Details of Concrete Reinforcement	Chapultepec
Subcommittee B, Concrete Quality, M	lixing,
and Placement	Lautrec
Subcommittee E, Analysis and Streng	th
Requirements	l'Opera
Subcommittee G, Flexure and Axial Lo	oads l'Etoile
Subcommittee I, Slab Systems	Champs Elysees
Subcommittee K, Precast and Compos	site
Concrete	Arco Iris
Subcommittee N, Earthquake Resistan	nt Design
Requirements	Taxco
Residential Concrete Work	Renoir
Masonry Structures	Camelias
Refractory Concrete	Oaxaca B
	Research and Development Architectural Concrete Details of Concrete Reinforcement Subcommittee B, Concrete Quality, M and Placement Subcommittee E, Analysis and Streng Requirements Subcommittee G, Flexure and Axial Lo Subcommittee I, Slab Systems Subcommittee K, Precast and Compos Concrete Subcommittee N, Earthquake Resistan Requirements Residential Concrete Work Masonry Structures

7.50 p.m.	5.50 p.m.
Technical Activities Committee	Oaxaca A
Subcommittee A, General Building Code	Renoir
Subcommittee C, Framework, Embedded Pi	pes,
and Construction Joints	Lautrec

7.00

0.20 0

Camelias

318	Subcommittee H, Shear and Torsion	Oaxaca B
318	Subcommittee J, Footings	l'Opera
318	Subcommittee M, Shells and Folded	Plates l'Etoile
318	Task Group on Code Simplification	Jardin
318	Task Group on Composite Constructi	on Arco Iris
318	Task Group on Plain Concrete	Champs Elysees
318	Task Group on Progressive Collapse	Taxco
318	Task Group on Systems Building	Degas

Task Group on Systems Building Masonry Structures 318 531

----318 318



# Tuesday

OCT	OBER 26 8:30	a.m 10:30 a.m.
	Specifications Review Committee	Lautrec
201	Durability of Concrete	Molino del Rey
207	Mass Concrete	Chapultepec
211	Subcommittee 7, Proportioning Mas	S
	Concrete	Jardin
223	Expansive Cement Concrete	Chapultepec
318	Standard Building Code	Camelias
348	Structural Safety	Oaxaca A
426	Shear and Diagonal Tension	Arco Iris
439	Steel Reinforcement	Molino del Rey
512	Precast Structural Concrete	l'Etoile
523	Insulating and Cellular Concretes	l'Opera
546	Repair of Concrete	Molino del Rey
547	Refractory Concrete	Oaxaca B
E-60	Seminars and Workshops	Taxco
	8.30 a	.m 12:30 p.m.
	FILM PRESENTATION See Page 4	Taxco
	FILM PRESENTATION See Fage 4	Taxco
	<b>Specifications Review Committee</b>	Lautrec
118	Use of Computers	l'Etoile
201	Durability of Concrete	Molino del Rey
211	Proportioning Concrete Mixes	Jardin
214	Evaluation of Results of Tests Used	
	the Strength of Concrete	Chapultepec
318	Standard Building Code	Camelias
348	Structural Safety	Oaxaca A
426	Shear and Diagonal Tension	Arco Iris
439	Steel Reinforcement	Molino del Rey
503	Adhesives for Concrete	l'Opera
544	Fiber Reinforced Concrete	Chapultepec
547	Refractory Concrete	Oaxaca B
	2.00	p.m 4:00 p.m.
	Chapter Activities Committee	Chapultepec
	Convention Committee	Renoir
116	Nomenclature	Arco Iris
118	Use of Computers	l'Etoile
110	Use of Computers	TEtone

	Convention Committee	Renoir
116	Nomenclature	Arco Iris
118	Use of Computers	l'Etoile
215	Fatigue of Concrete	Molino del Rey
224	Cracking	Taxco
303	Architectural Concrete	Jardin
318	Standard Building Code	Camelias
350	Sanitary Engineering Structures	Lautrec
358	Concrete Guideways	l'Opera
408	Bond and Development of Reinforcemen	t Oaxaca B
442	Response of Buildings to Lateral	
	Forces	Molino del Rey
515	Coatings for Concrete	Oaxaca A
1.		

Fiber Reinforced Concrete 544

no del Rey Oaxaca A Chapultepec



	4:00 p	.m 0:00 p.m.
	Convention Committee	Renoir
118	Use of Computers	,l'Etoile
213	Lightweight Aggregates and Lightweig	iht
	Aggregate Concrete	Molino del Rey
224	Cracking	Taxco
303	Architectural Concrete	Jardin
318	Standard Building Code	Camelias
350	Sanitary Engineering Structures	Lautrec
358	Concrete Guideways	l'Opera
408	Bond and Development of Reinforceme	
435	Deflection of Concrete Building	
	Structures	Chapultepec
442	Response of Buildings to Lateral	
	Forces	Molino del Rey
515	Coatings for Concrete	Oaxaca Á
544	Fiber Reinforced Concrete	Chapultepec
548	Polymers in Concrete	Molino del Rey
E-701	Materials for Concrete Construction	Chapultepec
	7:30 p	.m 9:30 p.m.
318	Standard Building Code	Camelias



OCT	OBER 27	8:30 a.m 10:30 a.m.
120	History of Concrete	Taxco
305	Hot Weather Concreting	Champs Elysees
311	Inspection of Concrete	Oaxaca A
347	Formwork for Concrete	Oaxaca B
349	Concrete Nuclear Structures	Lautrec
349	Concrete Nuclear Structures	Arco Iris
437	Strength Evaluation of Existin	ig Concrete
	Structures	Renoir
443	Concrete Bridge Design	l'Etoile
E-70	2 Designing Concrete Structure	s l'Opera

9:00 a.m. - 12:00 noon LIMIT DESIGN (Sponsored by ACI Committee 428) See Page 14 Molino del Rey INTERNATIONAL SYMPOSIUM ON POLYMERS IN CONCRETE(Sponsored by ACI Committee 548) (first session) See Page 15 Chapultepec Board of Direction Camelias

10:00 a.m. - 12:30 p.m. STUDENT ACTIVITIES SESSION (Sponsored by ACI Educational Activities Committee) See Page 16 Jardin



	104	Notation	Renoir
	305	Hot Weather Concreting	Champs Elysees
	311	Inspection of Concrete	Oaxaca A
	347		Oaxaca B
	349	Concrete Nuclear Structures	Lautrec
	349	Concrete Nuclear Structures	Arco Iris
	443	Concrete Bridge Design	l'Etoile
	517	Accelerated Curing of Concrete at Atr	mospheric
		Pressure	l'Opera
		A DESCRIPTION OF THE OWNER OF THE OWNER OF THE	
		2:00	p.m 4:00 p.m.
		Board of Direction	Camelias
	306	Cold Weather Concreting	Taxco
-	307	Reinforced Concrete Chimneys	l'Opera
	311	Inspection of Concrete	Oaxaca A
	340	Strength Design Handbook	Renoir
	347	Formwork for Concrete	Oaxaca B
	349	Concrete Nuclear Structures	Lautrec
1	349	Concrete Nuclear Structures	Arco Iris
	438	Torsion	l'Etoile
	506	Shotcreting	Champs Elysees
		2:00	p.m 5:00 p.m.
		INTERNATIONAL SYMPOSIUM ON P	OLYMERS IN
		CONCRETE (Sponsored by ACI Comr	mittee 548)
		(second session) See Page 17	Chapultepec
		RESEARCH ON PLAIN AND REINFO	RCED
		CONCRETE (Sponsored by ACI Comr	
		See Page 22	Jardin
			PROPERTY OF THE OWNER.
		2:00	p.m 5:30 p.m.
		FIRST PANAMERICAN SYMPOSIUM	ON CONCRETE
		<b>EDUCATION</b> (Sponsored by American	Concrete
		Institute, Mexican Cement and Concr	ete Institute.
		and Panamerican Federation of Engin	
		Associations) See Page 20	Molino del Rey
		riccontailerie, ecci age	
		4:00	p.m 6:00 p.m.
		Board of Direction	Camelias
	306	Cold Weather Concreting	Taxco
1	307	Reinforced Concrete Chimneys	l'Opera
	347	Formwork for Concrete	Oaxaca B
	349	Concrete Nuclear Structures	Lautrec
	349	Concrete Nuclear Structures	Arco Iris
1	356	Industrialized Concrete Construction	Oaxaca A
	428	Limit Design	Renoir
	438	Torsion	l'Etoile
	506	Shotcreting	Champs Elysees
		Chloton othing	enampe anyeare
			Alle
			New York

11

FILM PRESENTATION See Page 4

8:30 a.m. - 12:30 p.m.

Taxco

# Thursday

OCT	OBER 28 9:00 a	.m 12:00 noon
	GENERAL SESSION See Page 23	Molino del Rey
	2:00	p.m 4:00 p.m.
	Standards Board	Renoir
209	Subcommittee V (Creep and Shrinkag	e in
-	Concrete)	l'Etoile
309	Consolidation of Concrete	Oaxaca B
345	Concrete Bridge Construction and	
-	Maintenance	Lautrec
421	Design of Reinforced Concrete Slabs	Taxco
441	Reinforced Concrete Columns	Oaxaca A
504	Joint Sealants	Champs Elysees
	Student Concrete Projects	l'Opera
	A BANK & CARLEN AND A SHARE AND AND A SHARE AND	and the second second

2:00 p.m. - 6:00 p.m. CONCRETE IN MEXICO (Sponsored by the Mexican Cement and Concrete Institute) Molino del Rey See Page 24

INTERNATIONAL SYMPOSIUM ON ACCELERATED STRENGTH TESTING (Sponsored by ACI Committee 214) See Page 25 Salon del Sol

	4:00 p.m 6:00 p.m.	
	Board Metric Study Group	Oaxaca A
209	Creep and Shrinkage in Concrete	l'Etoile
309	Consolidation of Concrete	Oaxaca B
345	Concrete Bridge Construction and	
	Maintenance	Lautrec
421	Design of Reinforced Concrete Slabs	Taxco
E-703	Concrete Construction Practices	Renoir
	Student Concrete Projects	l'Opera



OCT	OBER 29 8:30 a	.m 10:30 a.m.	
210	Erosion of Concrete in Hydraulic Struc	ctures Lautrec	
222	Corrosion of Metals in Concrete	l'Etoile	
225	Hydraulic Cements	Renoir	
301	Specifications for Structural Concrete	Taxco	
423	Prestressed Concrete	l'Opera	
516	High Pressure Steam Curing	Oaxaca A	
		m 12:30 p.m.	
	DOUGLAS MCHENRY INTERNATIONAL SYMPOSIUM		

# **ON CONCRETE AND CONCRETE STRUCTURES** (first session) See Page 27 Salon del Sol 10.20 a m 12.20 a m

	10.30 a.m 12.30 p.m.	
221	Aggregates	Renoir
301	Specifications for Structural Concrete	Taxco
423	Prestressed Concrete	l'Opera
516	High Pressure Steam Curing	Oaxaca A

12:30 p.m. - 2:00 p.m. SYMPOSIUM LUNCHEON See Page 28 Molino del Rey

2:00 p.m. - 5:30 p.m. DOUGLAS MCHENRY INTERNATIONAL SYMPOSIUM **ON CONCRETE AND CONCRETE STRUCTURES** (second session) See Page 29 Salon del Sol



12



Wednesday, October 27 9:00 a.m. - 12:00 noon

# LIMIT DESIGN

sponsored by ACI Committee 428

Molino del Rey

Session Chairman: Richard W. Furlong, professor of civil engineering, University of Texas at Austin, Austin, Texas

#### Nonlinear Seismic Design of Multistory Frames

V. V. Bertero, professor, Department of Civil Engineering, University of California, Berkeley, California

# Limit Design of Prestressed Concrete Bridges

Herbert A. Sawyer, Jr., professor, and Ching-Long Sheih, graduate student, Department of Civil Engineering, University of Florida, Gainesville, Florida

# Re-examination of Maximum Strain and Rotation Criteria for Tied Columns

J. Stephen Ford, assistant professor, School of Civil Engineering and Environmental Science, University of Oklahoma, Norman, Oklahoma; and John E. Breen, professor, Department of Civil Engineering, University of Texas at Austin, Austin, Texas

# Probabilistic Limit Design of Concrete Structures

M. K. Ravindra, senior engineering analyst, Sargent and Lundy, Chicago, Illinois

# Limit Design of Unbraced Frames

Franz N. Rad, associate professor, Department of Engineering and Applied Science, Portland State University, Portland, Oregon

The Significance of Structural Serviceability in Reinforced Concrete Limit Design

Eric F. P. Burnett, associate professor, and M. M. Ali, graduate student, Department of Civil Engineering, University of Waterloo, Waterloo, Ontario Wednesday, October 27 9:00 a.m. - 12:00 noon

# INTERNATIONAL SYMPOSIUM ON POLYMERS IN CONCRETE

# sponsored by ACI Committee 548

Chapultepec

Session Chairman: George C. Hoff, chief, Materials Properties Branch, Concrete Laboratory, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

# Session I

# Field Evaluation of the Polymer Impregnation of New Bridge Deck Surfaces

John P. Hallin, contract manager, Implementation Division, Federal Highway Administration, Washington, D.C.

Polymer Impregnated Concrete Repairs at Dworshak Dam Ernest K. Schrader and Richard A. Kaden, civil engineers, U.S. Army Engineer District, Walla Walla, Washington; David W. Fowler, director of architectural engineering, University of Texas at Austin, Austin, Texas; and Rod Stebbins, Premier Waterproofing, Denver, Colorado

# Structural Applications of Polymer-Impregnated Concrete

W. F. Chen, professor of civil engineering, Purdue University, West Lafayette, Indiana; H. C. Mehta, research assistant, Fritz Engineering Laboratory, John A. Manson, director, Polymer Laboratory, and J. W. Vanderhoff, director, Center for Surface and Coatings, Lehigh University, Bethlehem, Pennsylvania

# Building Structural Restoration Using Monomer Impregnation

Albert O. Kaeding, structural engineer, Breyer-Nermyr and Associates, Bismarck, North Dakota

## Polymer-Impregnated Concrete Pipe Prepared by Centrifugal Force Impregnation Technique

Toshifumi Sugama, chemical engineer, Tokyo Concrete Industry Company, Ltd., Tokyo, Japan



Wednesday, October 27 10:00 a.m. - 12:30 p.m.

# STUDENT ACTIVITIES SESSION sponsored by ACI Educational Activities Committee

Jardin

# **Opening Remarks**

Emery Farkas, chairman, ACI Educational Activities Committee, and general manager, Rock Processing Chemicals, Construction Products Division, W. R. Grace and Company, Cambridge, Massachusetts

Student Activities in the American Concrete Institute Boyd C. Ringo, professor, Department of Civil and Environmental Engineering, University of Cincinnati, Cincinnati, Ohio

The American Concrete Institute in Continuing Education William J. Wilhelm, chairman, Department of Civil Engineering, West Virginia University, Morgantown, West Virginia

# Discussion

#### Break

# New Developments in Concrete Design

Raul Alamo Neidhart, head, Industrial Research Department, Mexican Cement and Concrete Institute, Mexico, D.F.

# New Developments in Concrete Construction

Alvaro Sanchez, professor, Graduate Division, School of Architecture, National Autonomous University of Mexico, Mexico, D.F.

# Discussion

#### **Closing Remarks**

Raul Diaz Gomez, head, Education Department, Mexican Cement and Concrete Institute, Mexico, D.F.



Wednesday, October 27 2:00 p.m. - 5:00 p.m.

# INTERNATIONAL SYMPOSIUM ON POLYMERS IN CONCRETE

# sponsored by ACI Committee 548

Chapultepec

Session Chairman: George C. Hoff, chief, Materials Properties Branch, Concrete Laboratory, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

# Session II

Investigation on Concrete Impregnated with Sulphur at Atmospheric Pressure

S. P. Shah, professor of civil engineering, A. E. Naaman, assistant professor of structural design, and R. H. Smith; research assistant, Department of Materials Engineering, University of Illinois at Chicago Circle, Chicago, Illinois

Long-Term Strength and Durability of Sulphur-Infiltrated Concrete

V. M. Malhotra, director, George G. Carette and James A. Soles, research engineers, Mineral Sciences Laboratory, CANMET, Department of Energy, Mines and Resources, Ottawa, Ontario

Furane Resin Concrete and Its Applications for Large Diameter Sewer Pipes

Richard A. Bares, chief research scientist, Institute of Theoretical and Applied Mechanics, Czechoslovak Academy of Sciences, Prague, Czechoslovakia. Presented by Fernando Favela Lozoya, vice-president, ICA International, Mexico, D.F.

#### An Investigation of the Properties of Polymer Concretes

Constantine D. Armeniades, associate professor of chemical engineering and master of Will Rice College, Rice University; Chalmers G. Long, Jr., associate professor of Architecture, Rice University, and practicing architect; Nat W. Krahl, professor of civil engineering and architecture and chairman, Civil Engineering Department, Rice University, and principal, Nat W. Krahl and Associates, Houston, Texas; and J. Douglas Burleson, field architect, I. M. Pei and Partners, Dallas, Texas



# FLOOR PLAN

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CONFERENCES REGISTRATION

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FAMILY PROGRAM.

ENTAINCE

INFORMATION

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COMMITTEE MEETINGS

1 = Renoir 2 = Lautrec

MARIANO ESCOBEDO BLIVO

540

# **Polymer Concrete**

Richard C. Prusinski, president, Architectural Research Corporation, Livonia, Michigan

Time-Dependent Characteristics of Polymer Mortars for Bonding Precast Concrete Members

Harald Schorn, chief engineer, Building Research Institute, Technical University of Aachen, Aachen, Germany

Polymer-Portland Cement Concrete and Mortars: State of Knowledge George C. Hoff, session chairman

Wednesday, October 27 2:00 p.m. - 5:30 p.m.

# FIRST PANAMERICAN SYMPOSIUM ON CONCRETE EDUCATION sponsored by American Concrete Institute, Mexican Cement and Concrete Institute, and Panamerican Federation of Engineering Associations

Molino del Rey

#### Introduction

Cutberto Diaz-Gomez, director, Mexican Cement and Concrete Institute, Mexico, D. F.

# SECTION I: WORKERS AND TECHNICIANS

- Chairman: Gilbert E. Seeley, director of education, American Concrete Institute, Detroit, Michigan
- Speakers: Edward L. Kawala, director, Educational Services Department, Portland Cement Association, Skokie, Illinois Enrique Rivas, professor, Engineering School, National University, Lima, Peru

# Discussion

# SESSION II: ENGINEERS

- Chairman: Luis Esteva, research professor and subdirector, Engineering Institute, National Autonomous University of Mexico, Mexico, D. F.
- Speakers: James G. MacGregor, professor of civil engineering, University of Alberta, Edmonton, Alberta Francisco de Assis Basilio, president, Technical Board, Brazilian Portland Cement Association, Sao Paulo, Brazil

Discussion

#### SECTION III: ARCHITECTS

- Chairman: Hernan Rodas-Andrade, professor, Engineering School, National University of Cuenca, Cuenca, Ecuador
- Speakers: Raul Diaz-Gomez, professor, School of Architecture, National Autonomous University of Mexico, Mexico, D.F. Alfredo Cilento-Sarli, professor, School of Archi-

tecture and City Planning, Central University of Venezuela, Caracas, Venezuela

# Discussion

# SECTION IV: CONSTRUCTION

Chairman: Jose Meza-Cuadra, professor, Engineering School, National University, Lima, Peru

Speakers: Ben C. Gerwick, professor of civil engineering, University of California, Berkeley, California Luis Fernando Meyer, director, Group Parana-Hidroservice, Itaipu Project, Asuncion, Paraguay.

Discussion

# SECTION V: CONTINUING EDUCATION

- Chairman: Jorge Ignacio Paz, executive director, Colombian Institute of Cement Producers, Medellin, Colombia
- Speakers: Pedro Elias Olivares, technical director, Venezuelan Association of Cement Producers, Caracas, Venezuela

Victor Levi, general director, Politechnical Institute, University of Panama, Panama, Republic of Panama

# Discussion

CONCLUSIONS: Emery Farkas, chairman, ACI Educational Activities Committee, and general manager, Rock Processing Chemicals, Construction Products Division, W. R. Grace and Company, Cambridge, Massachusetts

CLOSING: Russell S. Fling, President, American Concrete Institute, Columbus, Ohio

> Carlos Lopez-Rivera, President, Panamerican Federation of Engineering Associations, Mexico, D. F.

Gerardo Bueno-Zirion, Director General, National Council for Science and Technology, Mexico, D.F.

# Wednesday, October 27 2:00 p.m. - 5:00 p.m.

# RESEARCH ON PLAIN AND REINFORCED CONCRETE

# (Brief and confidential unpublished reports) sponsored by ACI Committee 115

Jardin

Session Chairman: Boris Bresler, chairman, ACI Committee 115, and professor, Department of Civil Engineering, University of California, Berkeley, California

Secretary:

M. A. Ward, secretary, ACI Committee 115, and professor, Department of Civil Engineering, The University of Calgary, Calgary, Alberta

Model for Deformation and Cracking of Plain Concrete David Darwin, Department of Civil Engineering, University of Kansas, Lawrence, Kansas

Strength and Ductility of Reinforced Concrete Columns with Rectangular Ties

Shamin Sheikh and S. M. Uzumeri, Department of Civil Engineering, University of Toronto, Toronto, Ontario

Moment Transfer to Columns in Prestressed Concrete Slabs Neil M. Hawkins, Department of Civil Engineering, University of Washington, Seattle, Washington

Interaction of High-Rise Steel Frame Buildings with Reinforced Concrete Shear Walls

Celal N. Kostem and J. M. Notch, Fritz Engineering Laboratory, Lehigh University, Bethlehem, Pennsylvania

Bond Strength of Deformed Bars and the Effect of the Deformation Pattern

Anders Losberg, Chalmers University of Technology, Goteborg, Sweden

Complete Stress-Strain Curves for Normal Weight and Lightweight High Strength Concrete

F. Wang, S. P. Shah, and A. E. Naaman, Department of Materials Engineering, University of Illinois at Chicago Circle, Chicago, Illinois

Reinforced Concrete Coupling Beams Subjected to Reversing Loads

B. G. Rabbat, G. B. Barney, and Anthony E. Fiorato, Portland Cement Association, Skokie, Illinois

Field Performance of 9,000-11,000 PSI Concrete Columns Jaime Moreno, Material Service Corporation, Chicago, Illinois; Henry G. Russell, Structural Development Section; and W. Gene Corley, Engineering Development Department, Portland Cement Association, Skokie, Illinois

Moment Transfer in Slab-Column Connections: Static and Dynamic Responses

Walter Dilger, Amin Ghali, and M. Elmasri, Civil Engineering Department, University of Calgary, Calgary, Alberta

A Study of the Basic Polymerization Process in Polymer Impregnated Concrete Using Dielectric Analysis

Z. Sanjana and Muthian Gunasekaran, Ceramics and Glasses Department, Westinghouse Research Laboratories, Pittsburgh, Pennsylvania



Thursday, October 28 9:00 a.m. - 12:00 noon

# GENERAL SESSION

Molino del Rey

Session Chairman: Cutberto Diaz-Gomez, general chairman, 1976 Fall ACI-IMCYC Convention, and director, Mexican Cement and Concrete institute. Mexico. D. F.

# Address

Russell S. Fling, President, ACI, and president, R. S. Fling & Partners, Inc., Columbus, Ohio

Address

Manuel Mariscal, Chairman of the Board, Mexican Cement and Concrete Institute, Mexico, D. F.

#### **Keynote Address**

Luis E. Bracamontes, Secretary of Public Works, México, D.F.

Raymond E. Davis Lecture: Games People Play with Concrete Lewis H. Tuthill, concrete engineering consultant, Sacramento, California

Acknowledgment of Chapter Officers

Equivalent Frames Stiffness Solution for Lateral and Gravity Loads

Domenico Parma, president, Domenico Parma and Associates, Bogota, Colombia

Presentation of Proposed Revision of "ACI 214-65, Recommended Practice for Evaluation of Strength Test Results of Concrete"

V. M. Malhotra, chairman, ACI Committee 214, and director, Mineral Sciences Laboratory, CANMET, Department of Energy, Mines and Resources, Ottawa, Ontario

Presentation of Proposed ACI Standard: "Recommended Practice for the Use of Shrinkage-Compensating Concrete" Robert E. Price, chairman, ACI Committee 223, and supervisor, Engineering Materials, Interspace Corporation, Parsippany, New Jersey



# Thursday, October 28 2:00 p.m. - 6:00 p.m.

# CONCRETE IN MEXICO sponsored by the Mexican Cement and **Concrete Institute**

# Molino del Rev

Session Chairman: Jesus Aguirre-Cardenas, director. School of Architecture, National Autonomous University of Mexico, Mexico, D. F.

Welcome Jesus Aquirre-Cardenas, session chairman

Introduction Jose Maria Gutierrez, president, College of Architects of Mexico, Mexico, D. F.

Bernardo Quintana, president, College of Civil Engineers of Mexico, Mexico, D. F.

The Mexican Cement Industry Gordon A. Payne, president, National Chamber of the Cement Industry, Mexico, D. F.

**Concrete in Mexican Architecture** Enrique Landa, professor of architectural engineering, University of Mexico, Mexico, D.F.

**Concrete in the Public Works of Mexico City** Joaquin Alvarez-Ordonez, general director of public works, Federal District Department, Mexico, D. F.

First Years of Concrete in Mexico Cutberto Diaz-Gomez, director, Mexican Cement and Concrete Institute, Mexico, D. F.

**Construction Procedures in Concrete in Mexico** Fernando Favela Lozoya, vice-president, ICA International, Mexico, D. F.

#### **Concrete Codes in Mexico**

Roberto Meli, research professor, Engineering Institute, National Autonomous University of Mexico, Mexico, D. F.

**Concrete Seismic Design in Mexico** Emilio Rosenblueth, research professor, Engineering Institute, National Autonomous University of Mexico, Mexico, D.F.

# **Prestressed Concrete in Mexico**

Aurelio Zugasti, past president, National Association of Precast and Prestressed Concrete Producers, Mexico, D.F.

Flexible Formwork for Erosion Control Jobs Mauricio Porraz, president, Control de Erosion, S. A., Mexico, D. F.

# **Closing Remarks**

Martin Luis Gutierrez, director, Design Division, Azcapotzalco Unit, Metropolitan Autonomous University, Mexico, D. F.

Thursday, October 28 2:00 p.m. - 6:00 p.m.

# INTERNATIONAL SYMPOSIUM ON ACCELERATED STRENGTH TESTING sponsored by ACI Committee 214

Salon del Sol

Session Co-Chairmen: Robert E. Philleo, chief, Concrete Branch, Engineering Division, Office. Chief of Engineers, Washington, D.C.

> Raymundo Rivera Villarreal, chief of the laboratories, School of Civil Engineering, University of Nuevo Leon, Monterrey, Nuevo Leon

# **Opening Remarks**

V. M. Malhotra, chairman, ACI Committee 214, and director, Mineral Sciences Laboratory, CANMET, Department of Energy, Mines and Resources, Ottawa, Ontario

Why Accelerated Testing? Edward A. Abdun-Nur, consulting engineer, Denver, Colorado

Experience on the Use of the Accelerated Testing Procedure (Boiling Water Method) for the Control of Concrete During the Construction of the Tunnel, "Emisor Central" in Mexico City

Roberto Sanchez-Trejo, associated consultant, and Lorenzo Flores-Castro, CONSULTEC, Ingenieros Asociados S. C., Mexico, D. F.

Accelerated Tests - Field Experience in the Use of Polystyrene Moulds

Andre Bisaillon, president, Laboratoire de Beton Ltee., Montreal, Quebec

Adaptation of Accelerated Strength Testing Methods for **Concrete Quality Control and Quanty Assurance** 

Tarun R. Naik, assistant professor of structural engineering, Mechanics Department, University of Wisconsin-Milwaukee. Milwaukee, Wisconsin

#### Accelerated Tests for Controlling the 90-Day Strength of **Concrete for the Alto Forno Project in Brazil**

L. A. Falcao Bauer, director, and Lucy I. Olivan, concrete technologist, L. A. Falcao Bauer Centro Tecnologico da Construcao, Sao Paulo, Brazil

**Quality Control of Concrete by Means of Short-Termed Tests** at La Angostura Hydro Electric Project, State of Chiapas, Mexico

Manuel Mena-Ferrer, Comision Federal de Electricidad, Mexico, D.F.

ASTM Accelerated Strength Tests for Quality Control of Concrete

V. Ramakrishnan, professor of civil engineering, South Dakota School of Mines and Technology, Rapid City, South Dakota

BREAK

Session Co-Chairmen: Peter Smith, director, Engineering Research Development Branch, Ministry of Transportation and Communications - Ontario, Downsview, Ontario

> Roberto Sanchez-Trejo, associated consultant, CONSULTEC, Ingenieros Associados S. C., Mexico, D. F.

Concrete Quality Control - 28 Days - 24 Hours - 15 Minutes Paul A. Howdyshell, principal investigator, U. S. Army Construction Engineering Research Laboratory, Champaign, Illinois

Prediction of Potential Strength of Concrete from Early Tests H. S. Lew, structural research engineer, and T. W. Reichard, research physicist, Center for Building Technology, National Bureau of Standards, Washington, D. C.

A New Method and Apparatus for Accelerated Strength Testing of Concrete

K. W. Nasser, associate professor of civil engineering, University of Saskatchewan, Saskatoon, Saskatchewan

# **Testing a Predictor of 28-Day Strength**

Michael A. Taylor, associate professor, Department of Civil Engineering; and John K. Moore, statistical analyst, School of Veterinary Medicine, University of California at Davis, Davis, California

Use of Modified Boiling Method for Predicting Splitting Tensile Strength of Concrete

V. M. Malhotra, director, Mineral Sciences Laboratory, CAN-MET, Department of Energy, Mines and Resources, Ottawa, Ontario



# Friday

Friday, October 29 9:00 a.m. - 12:30 p.m.

# DOUGLAS MCHENRY INTERNATIONAL SYMPOSIUM ON CONCRETE AND CONCRETE STRUCTURES

Salon del Sol

Session Co-Chairmen: Eivind Hognestad, director, Technical and Scientific Development, Portland Cement Association, Skokie, Illinois

> Emilio Rosenblueth, research professor, Engineering Institute, National Autonomous University of Mexico, Mexico, D. F.

# Welcome, Introduction

Cutberto Diaz-Gomez, director, Mexican Cement and Concrete Institute, Mexico, D. F.; and Boris Bresler, professor, Department of Civil Engineering, University of California, Berkeley, California

Tribute to Douglas McHenry Roy W. Carlson, consulting engineer, Berkeley, California

# Session I: Concrete Structures

Time-Dependent Behavior of Columns in Water Tower Place Henry G. Russell, manager, Structural Development Section; and W. Gene Corley, director, Engineering Development Department, Portland Cement Association, Skokie, Illinois

**Deformation in Service of Reinforced Concrete Columns** R. N. Swamy, lecturer, Department of Civil and Structural Engineering, The University, Sheffield, England

Nonuniform Drying Shrinkage in Concrete Structures Robert Iding and Boris Bresler, Department of Civil Engineering, University of California, Berkeley, California

# Fire-Exposed Hyperstatic Concrete Structures: An Experimental and Theoretical Study

Yngve Anderberg, research assistant, Division of Structural Mechanics and Concrete Construction, Lund Institute of Technology, Lund, Sweden

Destructive Vibration Test of a 4-Story Concrete Structure C. K. Chen, R. Martin Czarnecki, and Roger E. Scholl, URS/John A. Blume & Associates, Engineers, San Francisco, California

# Prediction of Response of Concrete Buildings to Severe Earthquake Motion

Sigmund A. Freeman, structural engineer and associate, URS/John A. Blume & Associates, Engineers, San Francisco, California

# SYMPOSIUM LUNCHEON 12:30 p.m. - 2:00 p.m.

Molino del Rey

Co-Chairmen: Josep H. Walker, Past President, ACI, and consultant, Green Valley, Arizona

Cutberto Diaz-Gomez, General Chairman, 1976 Fall ACI-IMCYC Convention, and director, Mexican Cement and Concrete Institute, México, D.F.

Guest Speaker: Guillermo Soberon, rector, National University of Mexico, Mexico, D.F.

Friday, October 29 2:00 p.m. - 5:30 p.m.

# DOUGLAS MCHENRY INTERNATIONAL SYMPOSIUM ON CONCRETE AND CONCRETE STRUCTURES

Salon del Sol

Session Co-Chairmen: Robert E. Philleo, chief, Concrete Branch, Engineering Division, Office, Chief of Engineers, Washington, D.C.

> Hubert Ruesch, professor, Department of Civil Engineering, Technical University of München, München, Germany



# **Tribute to Douglas McHenry**

J. A. Hanson, senior consultant, Wiss, Janney, Elstner and Associates, Northbrook, Iliinois

# Session II: Concrete

# Strength of Concrete Under Multiaxial Stress States

Kurt H. Gerstle and Hon-Yim Ko, University of Colorado, Boulder, Colorado; Roberto Bellotti, Paolo Bertacchi, and Pio Rossi, E.N.E.L., Milan, Italy; Diethelm Linse, Technical University, Munich, Germany; John Newman and M. D. Kotsovos, Imperial College, London, England; Gerald Schickert, B A M, Berlin, Germany; Michael A. Taylor, University of California, Davis, California; Roger Zimmerman and Leonard Traina, New Mexico State University, Las Cruces, New Mexico

#### Mechanism of Cyclic Creep of Concrete

G. A. Hirst, research student, and A. M. Neville, head, Department of Civil Engineering, University of Leeds, Leeds, England

#### A Constitutive Law for Concrete at Transient High Temperature Conditions

Yngve Anderberg, research assistant, and Sven Thelandersson, lecturer, Division of Structural Mechanics and Concrete Construction, Lund Institute of Technology, Lund, Sweden

# **Properties of Concrete at Very Low Temperatures**

Sho Yamane, H. Kasami, and T. Okuno, Technical Research Laboratory, Takenaka Komuten Company, Ltd., Tokyo, Japan

# Creep of Concrete Under Various Temperature, Moisture, and Loading Conditions

James E. McDonald, chief, Structures Branch, Concrete Laboratory, U. S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

#### **Creep and Shrinkage of Aging Concrete**

Karl S. Pister, professor, Department of Civil Engineering, University of California, Berkeley, California; J. H. Argyris and K. J. Willam, Institute for Static and Dynamics, University of Stuttgart, Stuttgart, Germany

#### Effect of Radiation on Concrete

H. K. Hilsdorf, o. professor, J. Kropp, cand. ing., Institute for Building Materials, University of Karlsruhe, Karlsruhe, Germany; and H. J. Koch, structural engineer, Philip Holzmann AG, Düsseldorf, Germany

#### **Closing Remarks**

Hubert Ruesch, session co-chairman, and professor, Department of Civil Engineering, Technical University of München, München, Germany

Russell S. Fling, President, ACI, and president, R. S. Fling and Partners, Inc., Columbus, Ohio

# **ACI FUTURE CONVENTIONS**

1977 Annual Convention San Diego, California March 13-18

1977 Fall Convention New Orleans, Louisiana October 16-21

1978 Annual Convention Toronto, Ontario, Canada April 9-14

**1978 Fall Convention** Houston, Texas October 29-November 3

1979 Annual Convention Milwaukee, Wisconsin April 1-6

**1979 Fall Convention** Washington, D.C. October 21-27

# ACI EDUCATIONAL SEMINARS

# SCHEDULE FOR FALL, 1976

# November 30-December 1 Lightweight Concrete

St. Louis, Missouri

# December 2-3

Designing and Constructing with High Strength Concrete New Orleans, Louisiana

# December 14-15

Quality Assurance and Quality Control in Concrete Construction King of Prussia, Pennsylvania

# POST CONVENTION TRIPS

Both trips – Cancun and Acapulco-start on Friday, October 29 and end on Monday, November 1, 1976 (4 days, 3 nights).

# CANCUN

#### Friday, October 29

Upon arrival at the Cancun Airport, you will be met and transferred to the Aristos Cancun Hotel, a deluxe property located on the beach, where you have been pre-registered and only need to pick up your key.

In the evening a welcome cocktail party with open bar for one hour will be offered to all participants to introduce them to this tropical paradise. Ask at the ACI Hospitality Desk for assistance with dinner reservations.

Saturday, October 30 Breakfast at leisure.

Early morning departure to the Mayan archeological zone of Tulum, with ample time to explore and then a visit to the Xel-Ha Lagoon, a natural aquarium, where you can swim and snorkel. Lunch enroute. Return to hotel in the late afternoon.

Sunday, October 31 Breakfast at leisure.

A drive through a most impressive jungle with exuberant vegetation will take us to Chichen Itza, with over six square miles of temples, courtyards, columns, sacrificial wells and other marvels. Many of the buildings have been completely restored. Lunch in Chichen Itza. Return to Cancun in the late afternoon.

Monday, November 1 Breakfast at leisure.

At the proper time, transportation will be provided to the airport to board the corresponding flight.

Price includes: Round trip transfers airport/hotel/airport in Cancun, including bag tips airport/hotel in Cancun; deluxe accommodations at the Aristos Cancun Hotel, including tax, breakfast each morning with gratuities to waiters; welcome reception with open bar for one hour; sightseeing as outlined with transportation and English speaking guides; lunch with gratuities to waiters on Saturday and Sunday tours; Trip Director in attendance to coordinate all activities and assist trip participants and ACI Hospitality Desk throughout the duration of the basic program.

# Price per person:

\$180.00 Sharing twin room. \$220.00 Single occupancy. \$170.00 Sharing triple room. Additional nights: (No meals included) including 4% tax, per room.

\$ 33.28 Single room.

- \$ 39.52 Twin room.
- \$ 45.76 Triple room.
- Not included: AIRFARE, meals or services other than those mentioned above and items of a personal nature. The Local Committee is holding seats on flight Aeromexico 245 on October 29 from Mexico City to Cancun, leaving at 11:50 a.m. and arriving at 1:35 p.m.

# ACAPULCO

# Friday, October 29

Upon arrival at the Acapulco Airport, you will be met and transferred to LA PALAPA Hotel, a deluxe property located on the beach, where you have been pre-registered and only need to pick up your key.

In the evening a welcome cocktail party with open bar for one hour will be offered to all participants to introduce them to this sophisticated spot.

Ask at the ACI Hospitality Desk for assistance with dinner reservations at one of Acapulco's many fine restaurants or night spots.

Saturday, October 30 Breakfast at leisure.

10:00 a.m. departure to the dock to board the Bonanza Yacht for a cruise of Acapulco Bay. Entertainment, refreshments and lunch are provided with time for swimming, so bring or wear your swimsuit. Return to hotel approximately at 3:30 p.m. with balance of day free. Perhaps a visit to downtown shopping area for Mexican Crafts, sun hats, sandals, straw bags, a Cabana set.

# Sunday, October 31 Breakfast at leisure.

Today is free for independent activities . . . swimming, sunning, strolling, whatever your pleasure. Perhaps you would enjoy one of the following optional activities:

Deep sea fishing - \$32.00 per person. Minimum of 6 persons per boat and includes license, transportation, full crew, bait and tackle. Golf at the Acapulco Princess - \$28.00 per person. Includes one way transportation to golf course, golf cart (based on two persons sharing), rental of clubs and greens fees. Return on your own at the hour you wish.

In the evening, at 7:45 p.m.,depart to La Perla Night Club for a cocktail of choice, dinner and the famous High Divers Show!! . . . where divers plunge from the cliffs of La Quebrada into the foaming Pacific Surf 130 feet below! Music is provided for your listening pleasure.

#### Monday, November 1 Breakfast at leisure.

At the proper time, transportation will be provided to the airport to board the corresponding flight.

Price includes: Round trip transfers airport/hotel/airport in Acapulco, including bag tips airport/hotel in Acapulco, deluxe accommodations at La Palapa Hotel including tax, breakfast each morning with gratuities to waiters, welcome reception with open bar for one hour, sightseeing as outlined with transportation and English speaking guides, lunch on board the Bonanza Yacht cruise and La Perla dinner with one cocktail of choice, gratuities and show, Trip Director in attendance to coordinate all activities and assist trip participants and ACI Hospitality Desk throughout the duration of the program.

#### Price per person:

\$140.00 Sharing Twin.

\$175.00 Single occupancy.

\$130.00 Sharing triple room.

Additional nights: (No meals included) including 4% tax, per room.

- \$ 33.28 Single room.
- \$ 37.44 Twin room.
- \$ 45.76 Triple room.

Not included: AIRFARE, meals or services other than those mentioned above and items of a personal nature. The Local Committee is holding seats on flight Aeromexico 309 on October 29 from Mexico City to Acapulco, leaving at 12:45 p.m. and arriving at 1:30 p.m.



# FAMILY MEMBERS' PROGRAM

# Hospitality: Tamayo Lobby

The Local Committee has scheduled several tours that complement the technical program with relaxation and entertainment. Some of them have very limited availability so we suggest you buy your tickets **early** at the ACI Hospitality Desk in the Tamayo Lobby.

All tours will be conducted in air-conditioned motorcoaches with Mexican Government-licensed, English-speaking tour guides who will explain the points of interest. Tours will start and end at the Camino Real Hotel.

# SIGHTSEEING IN MEXICO CITY

- Ballet Folklorico of Mexico The famous Ballet Folklorico of Mexico is presented in the beautiful Palace of Fine Arts, where you will also admire the Tiffany glass curtain. Regional dances from all over Mexico will make this show an introduction to the music and folklore of this Country. A very limited number of tickets will be available for the evening performance of Wednesday, October 27, and will be sold on a first-come, first-served basis. Price of \$15.00 includes transportation, ticket to the Ballet, and English-speaking guides.
- Bullfights Tour A world of pageantry, sun and courage an inheritance of the Spanish art of bullfighting left in Mexico, performed in the largest bullring in the world, Plaza de Toros Mexico. Starts at 3:00 p.m. and returns at 6:30 p.m., on Sunday, October 24 only. Very limited capacity available. Price includes transportation, ticket to the Bullfights in the shady side and English speaking guides. \$12.00
- 3. City and Museum of Anthropology Tour Morning departure on a tour to this "City of Contrasts" visiting the National Palace with its frescoes by Diego Rivera depicting the history of Mexico; the Cathedral; Main Plaza or "Zocalo;" Chapultepec Park (Grasshopper hill in Nahuatl language) and Las Lomas residential area. Arrive at the magnificent Museum of Anthropology, winner of an International Award of Architecture, for a highlight tour. See the original Aztec Calendar, so accurate no leap year was needed; Tlaloc, the 162-ton Aztec Rain God; and the Mixtec Tombs. Truly a highlight of your trip! Starts at 9:00 a.m. and returns at 1:00 p.m., on Tuesday, October 26 only. This tour is offered by the Local Committee FREE OF CHARGE to family members of registered delegates only.



- 4. Mexican Handcrafts Exposition Enjoy a leisurely tea and pastries among Mexican Native Art . . . you are cordially invited by the Local Committee, on Wednesday, October 27 at 10:30 a.m., to the Main Garden of the Camino Real Hotel. Here you can witness the craftsmanship of the artisans turning raw material into exquisite masterpieces. Please join us. Wednesday, October 27, for family members of registered delegates only. Complimentary.
- 5. Shrine of Guadalupe and Pyramids Tour Visit the archeological zone of San Juan Teotihuacan and walk among the Pyramids of the Sun and the Moon, the Avenue of the Dead and many other fascinating structures and temples. Continue to the Shrine of Guadalupe, a living tribute to the Mexican faith. Admire the structure of the New Shrine. Starts at 9:00 a.m. and returns at 1:30 p.m., on Monday, October 25; Wednesday, October 27 and Thursday, October 28. Price includes transportation, admission to Pyramids museum and English speaking guides. \$8.50

6. Cuernavaca and Taxco Trip - A scenic drive to Cuernavaca — "the City of Eternal Spring" — with its native market, followed by visits to the main Plaza and historic Palace of Cortes. Continue to Taxco — the Silver City — considered a national monument and truly the most picturesque town in the Country. Walk through the narrow cobblestoned streets and shop in the many little stores offering a variety of remarkable work, famous all over the world. After a leisurely luncheon, visit the Zocalo and the beautiful Church of Santa Prisca of pure baroque style. Displayed in its interior is the main altar covered with gold leaf, Starts at 8:30 a.m. and returns at 6:30 p.m. on Monday, October 25, and Wednesday, October 27. Price includes transportation, lunch in Taxco with, tip, and English speaking guides. \$22.00

7. University City and Pedregal Residential Zone Tour - The University City of Mexico is one of the most extensive educational and research complexes in the world, designed and built by Mexican architects and engineers. The visit will include the various faculties, the sports facilities, the Olympic Stadium which was the site of the 1968 Olympic Games and large enough for 80,000 spectators, the Library building with gigantic mosaic murals built by Mexican artists and other interesting points. Continue to El Pedregal where homes and gardens are built on lava flows of a now-extinct volcano. The design, architecture, and decoration of these residences, make it one of the most exclusive residential areas of the City. Starts at 9:00 a.m. and returns at 1:00 p.m., on Monday, October 25, Wednesday, October 27, and Thursday, October 28. Price includes transportation and English speaking guides. \$6.50



Shopping shuttle - Will be available from the Camino Real Hotel with the following schedule:

Monday, October 25, Wednesday, October 27 and Thursday, October 28 departing from hotel at 9:30 a.m., 10:30 a.m., 11:30 a.m. and 12:30 p.m. Buses will return from Crafts center at 11:00 a.m., 12:00 noon, 1:00 p.m. and 2:00 p.m. to Camino Real Hotel.

Price includes transportation to two of the largest Mexican crafts centers and English speaking guides. Very limited capacity available. \$2.50

# PROGRAM SCHEDULE FOR FAMILY MEMBERS:

# Sunday, October 24

3:00 p.m.: Bullfights

# Monday, October 25

8:30 a.m.: Cuernavaca/Taxco Tour 9:00 a.m.: University/Pedregal Tour 9:00 a.m.: Guadalupe Shrine/Pyramids Tour 9:30 a.m.; 10:30 a.m.; 11:30 a.m.; 12:30 p.m.: Shopping Tours

# Tuesday, October 26

9:00 a.m.: City/Museum of Anthropology Tour

# Wednesday, October 27

8:30 a.m.:	Cuernavaca/Taxco Tour
9:00 a.m.:	University/Pedregal Tour
9:00 a.m.:	Guadalupe Shrine/Pyramids Tour
10:30 a.m.:	Mexican Handcrafts Exposition
evening:	Ballet Folklorico

# Thursday, October 28

9:00 a.m.: University/Pedregal Tour 9:00 a.m.: Guadalupe Shrine/Pyramids 7:00 p.m.: Concrete Mixer

# MEXICO CITY CONVENTION COMMITTEE

LUIS E. BRACAMONTES Honorary President

CUTBERTO DIAZ-GOMEZ General Chairman

JESUS AGUIRRE CARDENAS Technical Director

FERNANDO FAVELA-LOZOYA Finance Director

> RAUL DIAZ-GOMEZ Program and Facilities Director

RAUL ALAMO-NEIDHART Advertising Director

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> CLAUDIO CALZADO Hospitality Director

Social Activities Director

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ROBERTO DUOUE-RUIZ

The officers, staff, and Members of ACI would like to thank the Local Committee, the Hostesses, the Mexican Cement and Concrete Institute, and the Contributors for their part in the 1976 Fall Convention.



# AMERICAN CONCRETE INSTITUTE P.O. Box 19150, Detroit, Mich. 48219

Printed in Mexico