

11TH WORLD CONFERENCE ON EARTHQUAKE ENGINEERING – ACAPULCO, MEXICO, JUNE 1996

P J Moss¹

INTRODUCTION

The 11th World Conference on Earthquake Engineering held in Acapulco, Mexico from Monday June 24 to Friday June 29 will be remembered as an extremely successful conference by the 1500 or so who attended - including about 20 from New Zealand. From a technical and an organisational point of view the conference was a credit to the organising committee and those of us who were participants are grateful to all who assisted in making it such an undoubted success. The conference was hosted by the Mexican Society for Earthquake Engineering on behalf of the International Association for Earthquake Engineering. Those of us from New Zealand were proud to have "our" Tom Paulay at the conference as President of the International Association and to see the great esteem and high regard that he was held in worldwide.

The scale and diversity of the conference were highlighted by the 192 page Final Program containing all the conference details. There were 157 oral presentations and 1115 poster presentations. Up to eight concurrent sessions were required for the oral presentations and the poster presentations were spread over five days.

The conference schedule is shown in Figure 1. Following the Opening Ceremony on the Monday morning, Tom Paulay kicked off the conference sessions with an excellent Keynote Lecture. On the Friday afternoon, the conference concluded with a Keynote Lecture by Oscar de Buen, a noted Mexican structural engineer. This was followed by the Closing Ceremony which marked the end of a very enjoyable conference. In between these lectures, the daily schedule outlined in Figure 2 provided plenty of interest, so much so that it made for difficult choices when one would have liked to attend most, if not all, of the concurrent presentations each day!

TECHNICAL PROGRAM

The technical program was organised into two principal groups of activities: the main Technical Program and the Complementary Technical Program. The former consisted of the two Keynote Lectures, State-of-the-Art Reports, Poster Presentations, and Oral Presentations of specially selected papers. These latter papers were selected because they were considered to be of general interest, because they dealt with new problems or presented new approaches in earthquake engineering, or because they contained especially significant results. The Complementary Technical Program included

Seminars and Special Theme Sessions, organised in a panel format.

Keynote Addresses

In his excellent Keynote Lecture on the topic of *Seismic Design of Concrete Structures. The Present Needs of Societies*, Tom Paulay addressed his remarks primarily to design practitioners in order to promote the transfer of existing knowledge of the seismic design of engineering structures and thereby contribute to more effective disaster mitigation. In order to bring this about, Tom advocated the application of a rational deterministic design philosophy such as has been used successfully in New Zealand for a number of years. Following a critical review of common misconceptions, the principles of a design philosophy were presented covering the basic aims, the role of ductility, and the main issues involved in this design strategy.

The application of what has become known as *capacity design philosophy* was described in some detail. The method was illustrated by showing the major design steps relevant to ductile multi-storey reinforced concrete framed buildings as well as those in which lateral force resistance is provided by walls or combinations of frames and walls. The modifications needed when considering elastic response and limited ductility demands, and features such as diaphragm action and the effects of the elongation of inelastic flexural members which are not embodied in present codes were all discussed.

The presentation concluded with an appeal for the recognition of the importance of high quality in the detailing for construction of those parts of the structure where inelastic deformations are to be expected in the event of a major earthquake. Tom Paulay gave numerous examples covering beams, columns and structural walls. Shear strength, curvature ductility capacity, confinement of compressed concrete, anchorage of reinforcement, lapped splices, and beam-column joints were all illustrated. Throughout the lecture, Tom sought to show that the judicious detailing of potential plastic hinge regions whereby tolerant structural response could be imparted with respect to crudely predicted ductility demands is a design activity which is at least as important as the analytical work. Figure 3 shows Tom just after his lecture.

The Keynote Lecture on *Earthquake Resistant Design: A View from the Practice* that concluded the conference sessions was given by Oscar de Buen, a noted Mexican structural engineer who is an Emeritus Professor in the School of Engineering at the Autonomous University of Mexico and General Director of a firm of consulting engineers. He described the main stages of the design process for structures that will be built in seismic regions and discussed the differences to conventional design. Emphasis was given to the importance of all the members of the

¹ Department of Civil Engineering, University of Canterbury (Fellow)

SUNDAY, JUNE 23		MONDAY, JUNE 24		TUESDAY, JUNE 25			
8:00		Registration at Centro Acapulco and at Conference hotels from 7:00 h to 17:00 h		Registration at Centro Acapulco until 17:00 h			
9:00	Registration at Centro Acapulco	Registration at Conference hotels	Opening Ceremony Teatro Juan Ruiz de Alarcón		State-of-the-Art Lectures SoA		
10:00			Keynote Lecture K-1 Teatro Juan Ruiz de Alarcón		Oral Sessions O	Emilio Rosenblueth Seminar Part I	Special Theme Sessions STS
11:00			Coffee Break (Salón Cholula)		Poster Session P-2 Salón Chichén-Itzá (11:30 - 13:30)		
12:00			Poster Session P-1 Salón Chichén-Itzá (11:30 - 13:30)		Lunch Salón Teotihuacán (13:00 - 14:30)		
13:00			Lunch Salón Teotihuacán (13:00 - 14:30)		Lunch Salón Teotihuacán (13:00 - 14:30)		
14:00			Oral Sessions	Special Theme Sessions	Oral Sessions	Emilio Rosenblueth Seminar	Special Theme Sessions
15:00			Coffee Break (Salón Cholula)		Coffee Break (Salón Cholula)		
16:00			O	STS	O	Part II	STS
17:00			Welcome Party at Conference Hotels		Welcome Reception South Terrace Salón Teotihuacán		
18:00							
19:00							
20:00							
21:00							
22:00							
23:00							

CONFERENCE SCHEDULE

WEDNESDAY, JUNE 26			THURSDAY, JUNE 27			FRIDAY, JUNE 28			
8:00	Registration at Centro Acapulco until 17:00 h			Registration at Centro Acapulco until 14:00 h			Registration at Centro Acapulco until 14:00 h		
9:00	State-of-the-Art Lectures SoA			State-of-the-Art Lectures SoA			State-of-the-Art Lectures SoA		
10:00	Oral Sessions O	AIBIS Seminar Part I	Special Theme Sessions STS	Oral Sessions O	Umemura Kubo Seminar Part I	Special Theme Sessions STS	Oral Sessions O	Julio Borges Seminar	Special Theme Sessions STS
11:00	Poster Session P-3 Salón Chichén-Itzá (11:30 - 13:30)			Poster Session P-4 Salón Chichén-Itzá (11:30 - 13:30)			Poster Session P-5 Salón Chichén-Itzá (11:30 - 13:30)		
12:00	Lunch Salón Teotihuacán (13:00 - 14:30)			Lunch Salón Teotihuacán (13:00 - 14:30)			Lunch Salón Teotihuacán (13:00 - 15:00)		
13:00	Oral Sessions	AIBIS Seminar	Special Theme Sessions	Oral Sessions	Umemura Kubo Seminar	Special Theme Sessions	Keynote Lecture K-2 Teatro Juan Ruiz de Alarcón		
14:00	Coffee Break (Salón Cholula)			Coffee Break (Salón Cholula)			Closing Ceremony Teatro Juan Ruiz de Alarcón		
15:00	O	Part II	STS	O	Part II	STS			
16:00									
17:00									
18:00									
19:00									
20:00	Mexican Party Plaza Mexicana			Conference Dinner Salón Teotihuacán					
21:00									
22:00									
23:00									

CONFERENCE SCHEDULE

FIGURE 1 Conference schedule

MONDAY, JUNE 24

TUESDAY, JUNE 25

	San Francisco	Tokyo-Kyoto	Auckland - Wellington	Santiago	Rome	New Delhi	Istanbul	Madrid
9:00	Opening Ceremony Teatro Juan Ruiz de Alarcón							
10:00	Keynote Lecture K-1 Teatro Juan Ruiz de Alarcón Seismic Design of Concrete Structures. The Present Needs of Societies; Thomas Paulay							
11:00	Coffee Break Salón Cholula							
11:30	Poster Session P-1 Salón Chichén-Itzá (11:30 - 13:30) 1. ENGINEERING SEISMOLOGY. <i>Seismicity: Ground Motion (Records and Models - I); Seismic Hazard and Risk Analysis; Seismic Hazard Analysis, Zonation and Aterozonation, Vulnerability and Risk</i> 3. STRUCTURAL MATERIALS, ELEMENTS AND SYSTEMS. <i>Experimental Techniques and Facilities.</i> 5. ACTIVE AND PASSIVE CONTROL OF STRUCTURAL RESPONSE. <i>Passive Control: General Concepts in Passive Control, Seismic Isolation, Tuned-Mass Dampers</i> 6. SPECIAL STRUCTURES AND SYSTEMS. <i>Earth Structures: Earth Dams and Embankments, Natural Slopes, Tunnels and Underground Structures. Dams.</i>							
12:00								
13:00	Lunch Salón Teotihuacan (13:00 - 14:30)							
13:30	Oral Session O-1 Topic 1 Oral Session O-2 Topic 3 Oral Session O-3 Topic 4 Oral Session O-4 Topics 3,4,8 Special Theme Session STS-1 Special Theme Session STS-2 Special Theme Session STS-3 Special Theme Session STS-4							
14:00								
14:30	Coffee Break Salón Cholula							
15:00								
16:00	Seismicity, Ground Motion and Site Effects I	Experimental Techniques, Precast Concrete, Composite	Foundation Response and Soil Structure Interaction	Seismic Design Criteria and Probabilistic Methods	Low Seismicity Regions	Hazard Scenarios	Concrete Dams	Northridge Earthquake
16:30	Coffee Break Salón Cholula							
17:00								

	San Francisco	Tokyo-Kyoto	Auckland - Wellington	Santiago	Rome	New Delhi	Istanbul	Madrid
9:00	State-of-the-Art SoA-1: Soil Dynamics				State-of-the-Art SoA-2: Seismology		State-of-the-Art SoA-3: Bridges	State-of-the-Art SoA-4: Evaluation of Buildings
9:30								
10:00	Oral Session O-5 Topics 1,4 Seismicity, Ground Motion and Site Effects II	Oral Session O-6 Topics 3,6 Earth Structures and Dams		Emilio Rosenbluth Seminar ERS Part I	Special Theme Session STS-5 Green's Functions	Special Theme Session STS-6 European Code Development Part I	Special Theme Session STS-7 Design of Bridges	Special Theme Session STS-8 Design of Steel Frames Part I
11:00	Poster Session P-2 Salón Chichén-Itzá (11:30 - 13:30) 1. ENGINEERING SEISMOLOGY. <i>Intensity Attenuation, Ground Motion (Instrumentation and Data Processing)</i> 2. SOILS AND FOUNDATIONS. <i>Laboratory Tests, In Situ Tests, Constitutive Modeling, Numerical Modeling, Liquefaction.</i> 3. STRUCTURAL MATERIALS, ELEMENTS AND SYSTEMS. <i>Steel.</i> 5. ACTIVE AND PASSIVE CONTROL OF STRUCTURAL RESPONSE. <i>Passive Control, Structures with Dissipation Devices, Experimental Studies.</i> 6. SPECIAL STRUCTURES AND SYSTEMS. <i>Bridge Structures</i> 9. SEISMIC EVALUATION AND REHABILITATION OF STRUCTURES. <i>Seismic Assessment.</i>							
11:30								
12:00	Lunch Salón Teotihuacan (13:00 - 14:30)							
13:00	Oral Session O-7 Topics 5,8 Oral Session O-8 Topic 8 Emilio Rosenbluth Seminar ERS Part II							
13:30								
14:00	Coffee Break Salón Cholula							
14:30								
15:00	Passive Control and Energy Dissipation	Seismic Codes and Standards		ERS Part II	Geotechnical Lessons: Northridge-Kobe	European Code Development Part II	Major Steel Bridges	Design of Steel Frames Part II
16:00	Coffee Break Salón Cholula							
16:30								
17:00								

FIGURE 2 Daily schedule - Monday and Tuesday

WEDNESDAY, JUNE 26

	San Francisco	Tokyo-Kyoto	Auckland - Wellington	Santiago	Rome	New Delhi	Istanbul	Madrid
9:00			State-of-the-Art SoA-5: Architectural Aspects	State-of-the-Art SoA-6: Concrete Structures		State-of-the-Art SoA-7: Ground Shaking Scenarios	State-of-the-Art SoA-8: Structural Control	State-of-the-Art SoA-9: Design Criteria
9:30								
10:00	Oral Session O-9 Topic 3	Oral Session O-10 Topic 6	Oral Session O-11 Topics 6,7,10	AIBIS Seminar		Special Theme Session STS-11	Special Theme Session STS-12	Special Theme Session STS-13
11:00	Reinforced Concrete and Masonry	Secondary Systems	Architectural Heritage, Hazard and Socioeconomic Issues	Part I		Site Effects Part I	Control of Seismic Response Part I	Design Criteria Part I
11:30	Poster Session P-3 Salón Chichén-Itzá (11:30 - 13:30)							
12:00	1. ENGINEERING SEISMOLOGY. Ground Motion (Records and Models - II). 3. STRUCTURAL MATERIALS, ELEMENTS AND SYSTEMS. New Materials. Concrete.				5. ACTIVE AND PASSIVE CONTROL OF STRUCTURAL RESPONSE. Experiences of Structural Control. Active Control. 7. EXTENDED SYSTEMS. Urban Systems. 8. STRUCTURAL DESIGN CRITERIA AND METHODS. Seismic Codes and Standards. Architectural Design to Resist Earthquakes. 9. SEISMIC EVALUATION AND REHABILITATION OF STRUCTURES. Seismic Evaluation of Existing Buildings.			
13:00	Lunch Salón Teotihuacan (13:00 - 14:30)							
14:00								
14:30								
15:00	Oral Session O-12 Topic 2	Oral Session O-13 Topics 6,9	Oral Session O-14 Topics 1,9	AIBIS Seminar		Special Theme Session STS-11	Special Theme Session STS-12	Special Theme Session STS-13
16:00	Coffee Break Salón Cholula							
16:30								
17:00	Soils and Foundations	Rehabilitation of Structures	Hazard, Risk Analysis and Seismic Assessment	Part II		Site Effects Part II	Control of Seismic Response Part II	Design Criteria Part II

THURSDAY, JUNE 27

	San Francisco	Tokyo-Kyoto	Auckland - Wellington	Santiago	Rome	New Delhi	Istanbul	Madrid
9:00			State-of-the-Art SoA-10: Lifelines	State-of-the-Art SoA-11: Torsion	State-of-the-Art SoA-12: Safe Communities	State-of-the-Art SoA-13: Secondary Structures		State-of-the-Art SoA-14: Rehabilitation of Buildings
9:30								
10:00	Oral Session O-15 Topic 5	Oral Session O-16 Topic 5	Oral Session O-17 Topics 6,7,10	Umemura-Kubo Seminar	Special Theme Session STS-14	Special Theme Session STS-15	Special Theme Session STS-16	Special Theme Session STS-17
11:00	Active Control of Structural Response	Passive Control: Seismic Isolation	Lifelines, Nuclear Power Plants and Tanks	UKS Part I	Foundation and Soil-Structure Interaction Part I	Nonstructural Components	Test Sites	Rehabilitation of Buildings Part I
11:30	Poster Session P-4 Salón Chichén-Itzá (11:30 - 13:30)							
12:00	2. SOILS AND FOUNDATIONS. Ground Improvement. Foundation Capacity and Permanent Displacements. 4. STRUCTURAL RESPONSE. Analysis of Structures and System Identification: Numerical Algorithms, Structural Modeling, Analysis of Structures. Foundation Response and Soil-Structure Interaction.				5. ACTIVE AND PASSIVE CONTROL OF STRUCTURAL RESPONSE. Passive Control: Rehabilitation of Structures. 6. SPECIAL STRUCTURES AND SYSTEMS. Secondary Systems and Building Equipment. Off-shore Structures. Special Structures. 7. EXTENDED SYSTEMS. Lifelines: Earthquake Damage, Response Analysis and Design, Risk Assessment. 9. SEISMIC EVALUATION AND REHABILITATION OF STRUCTURES. Rehabilitation of Structures.			
13:00	Lunch Salón Teotihuacan (13:00 - 14:30)							
13:30								
14:00								
14:30								
15:00	Oral Session O-18 Topic 3	Oral Session O-19 Topics 3,4	Oral Session O-20 Topic 8	Umemura-Kubo Seminar	Special Theme Session STS-14	Special Theme Session STS-18	Special Theme Session STS-19	Special Theme Session STS-17
16:00	Coffee Break Salón Cholula							
16:30								
17:00	Steel Members and Joints	Analysis of Structures	Reliability Based Design	UKS Part II	Foundation and Soil-Structure Interaction Part II	Building Pounding	Lifelines	Rehabilitation of Buildings Part II

FIGURE 2 (cont.) Daily schedule - Wednesday and Thursday



	San Francisco	Tokyo-Kyoto	Auckland - Wellington	Santiago	Rome	New Delhi	Istanbul	Madrid
9:00				State-of-the-Art SoA-15: System Identification	State-of-the-Art SoA-16: Seismic Analysis	State-of-the-Art SoA-17: Masonry Structures		State-of-the-Art SoA-18: Social Aspects
9:30								
10:00	Oral Session O-21 Topic 1	Oral Session O-22 Topic 6		Julio Borges Seminar	Special Theme Session STS-20	Special Theme Session STS-21	Special Theme Session STS-22	Special Theme Session STS-23
11:00	Ground Motion, Site Effects and Microzonation	Bridge Structures		JBS	European Macroseismic Scale	Early Warning	Historic Buildings	Reconstruction
11:30	Poster Session P-5							
12:00	Salón Chichén-Itzá (11:30 - 13:30)				4. STRUCTURAL RESPONSE. Analysis of Structures and System Identification. Field Observations and Experimental Studies. Probabilistic Methods.			
	1. ENGINEERING SEISMOLOGY. Ground Motion (Records and Models - III).				6. SPECIAL STRUCTURES AND SYSTEMS. Architectural Heritage			
	2. SOILS AND FOUNDATIONS. Probability Methods, System Identification				8. STRUCTURAL DESIGN CRITERIA AND METHODS. Reliability Based Design			
	3. STRUCTURAL MATERIALS, ELEMENTS AND SYSTEMS. Masonry Precast Concrete, Composites.				10. EXPERIENCES DERIVED FROM RECENT EARTHQUAKES. Behavior of Man-Made and Natural Systems. Socioeconomic Issues.			
13:00								
13:30								
14:00	Lunch Salón Teotihuacan (13:00 - 15:00)							
15:00								
16:00	Keynote Lecture K-2  Teatro Juan Ruiz de Alarcón Earthquake Resistant Design: A View from the Practice; Oscar de Buen							
17:00	Closing Ceremony  Teatro Juan Ruiz de Alarcón							

FIGURE 2 (cont.) Daily schedule - Friday

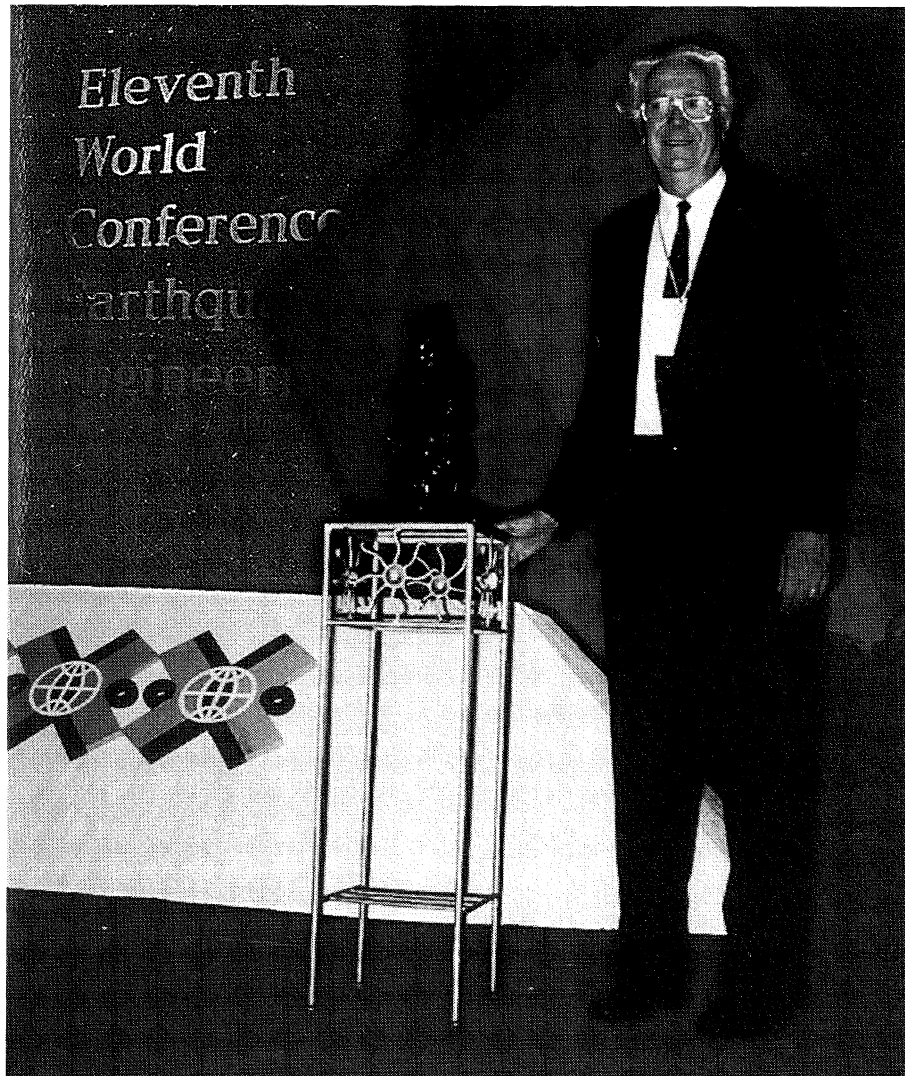


FIGURE 3 IAEE President Tom Paulay and Ruaumoko, Acapulco 24 June 1996, immediately following his keynote lecture to the Opening Plenary Session [Photo: David Hopkins]

multi-disciplinary team that is necessary in the design and construction process. This was followed by comment on the methods used for seismic analysis and design and outlined their limitations. The importance of observation and study of building behaviour during strong earthquakes on the development of contemporary building codes was outlined, with the Mexico City Building Code being taken as an example. The 1994 Northridge earthquake was used to show the uncertainties of the available analysis and design methods. Finally, Oscar De Buen suggested several points that would improve the design and construction of buildings in seismic areas.

Poster Presentations

General reaction to the poster sessions was favourable. The sessions were well laid out and exceptionally well organised. Maps of the location of each poster were available each day and each poster position was clearly labelled with the paper reference number. Materials for setting up were readily available. The open format provided plenty of opportunity to talk with presenters and other conference participants. Each position was well screened from adjacent ones. It was however, unfortunate that not all listed poster papers were presented.

The main topics of the concurrent poster or oral sessions were:

1. Engineering Seismology (261 papers).
2. Soils and Foundations (71 papers).
3. Structural Materials, Elements and Systems (196 papers).
4. Structural Response (201 papers).
5. Active and Passive Control of Structural Response (148 papers).
6. Special Structures and Systems (153 papers).
7. Extended Systems (26 papers).
8. Structural Design Criteria and Methods (79 papers).
9. Seismic Evaluation And Rehabilitation of Structures (82 papers).
10. Experience Derived from Recent Earthquakes (55 papers).

State-of-the-Art Sessions

Each morning began with a brief half hour session devoted to four or five State-of-the-art reports. These were prepared by distinguished specialists in each selected theme and covered the following topics:

- Architectural aspects of seismic resistant design.
- System identification methods applied to measured seismic response.
- State-of-the-Art report on: design criteria.
- Accidental and natural torsion in the earthquake response and design of buildings.
- On the use of engineering seismology tools in ground shaking scenarios.
- Seismic evaluation of existing buildings: state of the practice.
- Structural control research issues arising out of the Northridge and Kobe earthquakes.
- Seismic analysis and design: current practice and future trends.
- Advances in seismology with impact on seismic hazard estimation.
- Recent advances in earthquake-resistant design of masonry buildings: European perspective.
- Earthquake resistant design of secondary structures: a report on the state of the art.

- Developing seismic resistant communities: creating safe communities for safe buildings - lessons for local governments.
- Advances in earthquake-resistant design of concrete structures.
- Lessons learned for lifeline engineering from major urban earthquakes.
- Soil dynamics.
- Seismic analysis of bridges.
- State of the art in techniques for rehabilitation of buildings.
- Social aspects of earthquake research.

Seminars

These were:

- Emilio Rosenblueth Seminar, on the Future of Earthquake Engineering, organised by the Steering Committee in honour of the late Prof. Rosenblueth.
- Association Iberoamericana de Ingenieria Sismica Seminar on Seismic HAZard and Code Harmonisation in IberoAmerican Countries .
- Hajime Uememura and Keizaburo Kubo Seminar on the 1995 Great Hanshin (Kobe) Earthquake in honour of the late Profs Uememura and Kubo.
- Julio F Borges Seminar organised to honour the late Prof. Borges.

Special Theme Sessions

The papers for these sessions were presented orally with the sessions being held in parallel with the standard oral presentation sessions. These sessions consisted of presentations and discussion by invited lecturers and panelists. The topics were:

- Seismic hazard assessment and design criteria in low-seismicity regions.
- Development of earthquake hazard scenarios.
- The January 1994 Northridge Earthquake.
- Use of empirical Green's functions in earthquake engineering.
- European research activity in support of code development.
- Seismic design of bridges.
- Seismic design of steel frames.
- Geotechnical lessons learned from Northridge and Kobe earthquakes.
- Seismic performance and retrofit of major steel bridges.
- Site effects.
- Control of seismic response of structures.
- Seismic design criteria.
- Foundation design and soil-structure interaction.
- Seismic performance of nonstructural components.
- Test sites.
- Rehabilitation of buildings.
- Building pounding problem.
- Lifeline earthquake engineering.
- European macroseismic scale (EMS-92): innovations and applications.
- Early warning and rapid response.
- Structural safety and protection of historic buildings in seismic areas.
- After-earthquake reconstruction.

Conference Proceedings

All the papers accepted for the conference have been published in the Conference Proceedings. For the first time in World Conferences on Earthquake Engineering, the Proceedings comprise one volume of extended abstracts printed on paper and a set of four CD-ROMs. The volume of abstracts, at 1500 pages, contains the abstracts of the Keynote Lectures, State-of-the-Art Reports, Oral and Poster Sessions, Seminars and Special Theme Sessions. The CDs contain over 11,000 manuscript pages and feature search capabilities of titles, authors' affiliation, and keynotes. They include the complete text of all papers presented at the Conference. The Volume of Abstracts serves as a reference to the papers on the CDs. The CD-ROMs contain the software necessary to operate under either the Windows (3.1 and 95) or Mac environments.

The CDs were to have been given to participants at Registration, but this did not turn out to be possible but have since been mailed out to participants. Nevertheless, several sets of the Volume of Abstracts and CDs were available at the Conference so that participants could peruse the Proceedings.

SOCIAL ACTIVITIES

Those conference participants who arrived on the Saturday in order to acclimatise (!?) before the conference began, were able to spend a leisurely Sunday looking around Acapulco with its historic areas, such as the old Fort, its Spanish architecture and the open-air markets and its beaches.

The weather was very pleasant for the duration of the conference but the heat and humidity during the day meant that we were grateful for air-conditioned buildings! No earthquakes occurred during the conference (!) but the night after the conference concluded, a hurricane some distance away caused Acapulco to be buffeted by very strong winds and torrential rain. The resulting flooding around Acapulco made it difficult to reach the airport on the Saturday and further helped to make our stay in Acapulco memorable!

While registration could be carried out at the Centro Acapulco (the conference venue), this could also be carried out at the Conference hotels on the Saturday evening and the Sunday before the conference started. This was most welcome with all conference materials being available at the hotel. Free handouts included an excellent satchel for participants, together with pen, pad, final program (192 pages!), and a bag for accompanying persons. On the Sunday evening there was a short Welcome Party at each of the Conference hotels.

The conference Welcome Reception was held on the South Terrace which gave a splendid view over the gardens of the Centro Acapulco, such as shown in Figure 4, while nearby was the magnificent sculpture shown in Figure 5.

The late morning break coincided with the start of the poster sessions and coffee, tea and mineral water were available near the poster displays. This helped to avoid any queues forming as participants could look at some of the posters and question their authors instead.

The afternoon break provided more opportunity to look at the posters or to meet up with other participants.

Buffet lunches were served in the vast Salon Teotihuacan. The lunch break overlapped with the poster sessions and after the first day or so, participants made use of this to avoid the build-up of lengthy queues. Any queues that did form served to enable one to meet new people or catch up with old friends.

The Mexican party on the Wednesday evening was fantastic, informal, and well organised. Entertainment went on non-stop for over three hours, and tequila and other liquid refreshments flowed on a hot and humid evening. Each person was welcomed with a souvenir tequila flask and a Mexican bandanna.

The Conference dinner on the Thursday evening was held in the Salon Teotihuacan which, as a single venue seating over 1500 people would be hard to match. The service of food and wine was good. The live entertainment was also good but somewhat distant from many diners. Some important presentations and speeches were made during the dinner - unfortunately the noise of tropical rain on the roof at one stage drowned out speeches and music.

NATIONAL ASSEMBLY OF DELEGATES

The IAEE General Assembly of (National) Delegates was held on the Thursday afternoon with business largely confined to formal reports and elections. Dr David Hopkins - who is the National Delegate for New Zealand - in a report to the NZNSEE Management Committee, reported that the highlights of the General Assembly were:

- Acceptance of Nepal, etc, as new members
- The election of Prof Bob Park as a Director of IAEE for another term
- Some changes were made to the Statutes, including the introduction of the office of Immediate Past President (Prof Tom Paulay)
- The election of Prof Sheldon Cherry of Canada as the new IAEE President
- Some concerns over the operation of the World Seismic Safety Initiative
- The selection of the host country for the next (12th) World Conference (see item below).

12WCEE

Members may or may not be aware that the Society submitted a bid to the IAEE to host the next World Conference in Auckland late January/early February 2000. The preparatory committee convened by Barry Davidson did a good job of preparing our case. A letter was sent to all National Delegates in April, followed by the Bid to Host document in May. This provided the essential information about our bid. At the Conference, Richard Buchanan of Convention Management brought a display on NZ including a video. He manned this display for four days and encouraged support for our case to hold the next WCEE (judging by the interest shown in the display, many participants would like to take an opportunity to visit NZ!). Indonesia also mounted a bid to host the next conference. **The outcome was that New Zealand was chosen to host the 12th WCEE in Auckland in from 29 January to 5 February 2000.**



FIGURE 4 A view from the South Terrace of the Centro Acapulco looking towards the main entrance to the grounds [Photo: Peter Moss]

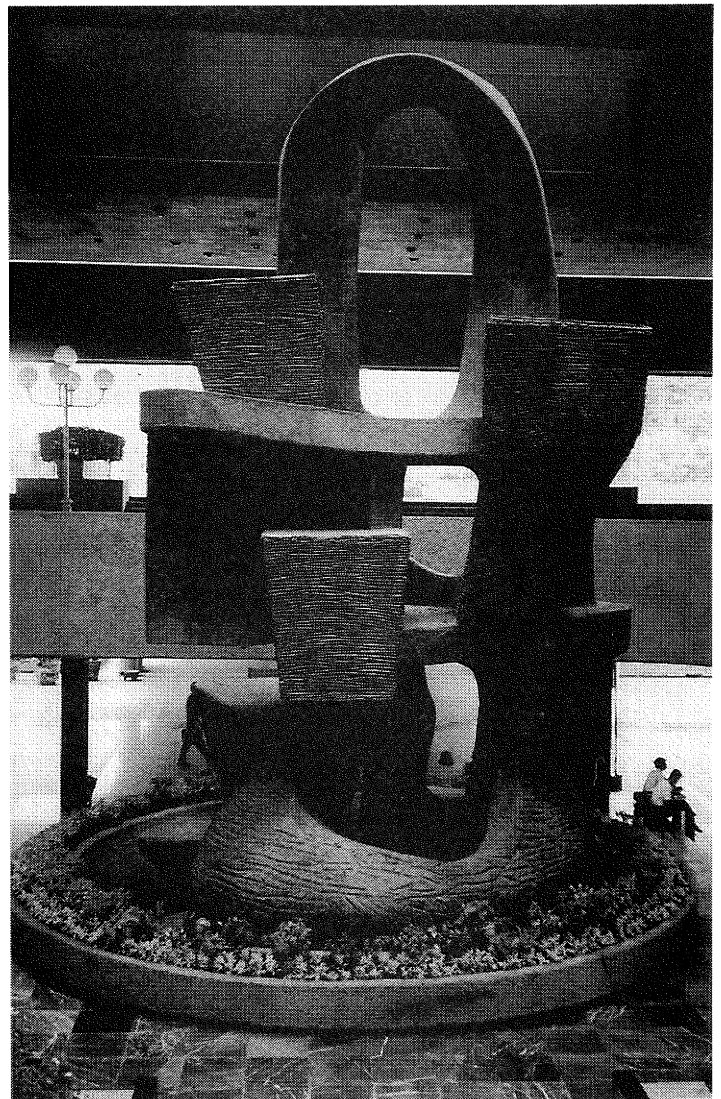


FIGURE 5 A large two storey high sculpture in the main lobby of the Centro Acapulco [Photo: Peter Moss]

ACKNOWLEDGEMENTS

The author is grateful to Dr David Hopkins, New Zealand National Delegate to the IAEE, for his helpful comments.

APPENDIX 1

Those from New Zealand who attended the 11WCEE included (E. & O.E.):

Darrin Bell
 Ian Billings
 Barry Davidson
 Kim Douglas
 David Dowrick
 Richard Fenwick
 David Hopkins
 Jason Ingham
 Andrew King
 Stephen Marks
 Nathan McKenzie
 Graeme McVerry
 Les Megget
 Peter Moss
 Bob Park
 Tom Paulay
 Mick Pender
 Jose Restrepo
 Pranjoto Satyawan
 Ivan Skinner

In acknowledging our selection, David Hopkins promised a balanced conference which reflected the status of earthquake risk throughout the world, mentioning particularly non-engineered buildings in less developed countries. At the closing ceremony, David, as our National Delegate, was asked to give an invitation to the delegates to come to Auckland in 2000. His invitation to attend 12WCEE in Auckland, January 2000 was:

Chairman, Distinguished Guests, Ladies and Gentlemen:

It is an exciting experience to be selected to host the next World Conference.

It is also a humbling experience and a daunting one, especially when we have experienced such an exceptionally well run, technically stimulating, and enjoyable 11WCEE in Acapulco over the last week.

Nevertheless, we have great pleasure in inviting you and your colleagues, and accompanying persons, to Auckland in 2000. We will aim to achieve an appropriate balance between research, design, and implementation, and to reflect the wide range of risks facing earthquake-prone communities in all parts of the world.

We guarantee you a unique South Pacific experience and hope that you will start planning to be there, and encouraging your colleagues and accompanying persons to do the same.

We look forward to hosting you all in Aotearoa-New Zealand, the land of Ruaumoko, the Maori God of Earthquakes.

Planning for 12WCEE in 2000 has already begun with a steering committee set up to make recommendations to the Management Committee. The Steering Committee could in time form the nucleus of the Organising Committee charged with planning and running the 12WCEE. We will hear more about the details as time goes on but for the meantime - plan to be there, think about contributing a paper or papers, and be prepared to help with the organisation of the conference in whatever ways you can.