

PROGRAM

Monday, November 13, 2000

9:00-9:20 **Opening Session** Chair : H. Okada(Japan) Room 102
Opening Address

H. Yamanouchi, Director General of BRI, Japan

9:20-10:20 **Key Note Presentation** Chair : H. Okada(Japan)
G-1 Earthquake Countermeasures for Buildings in Japan -In View of the Great Hanshin-Awaji Earthquake
Disaster-

T. Okada, President of Architectural Institute of Japan

- Coffee break -

10:30-12:00 **Current Status of Japan** Chair : H. Ito(Japan)
10:30 G-2 Framework of Building Control on Building Structural Design and Provisions of Wind and Snow Loads
of New Building Code in Japan

H. Okada

11:00 G-3 Design Earthquake Load in the Revised Building Standard Law of Japan

M. Midorikawa

11:30 G-4 New Seismic Design Provisions in Japan

S. Otani

- Luncheon -

13:00-13:45 **Current Status of USA** Chair : H. Okada(Japan)
G-5 Challenges and Progress in Performance-Based Earthquake Engineering

H. Krawinkler

G-10 U.S.A. Performance-Based Seismic Design

R. D. Hanson/M. G. Mahoney

13:45-14:30 **Current Status of Canada** Chair : H. Okada(Japan)
G-6 Canadian Status in Objective-Based Structural Design

E. Karacabeyli

14:30-15:15 **Current Status of EU** Chair : H. Okada(Japan)
G-7 Performance Based Seismic Design of Buildings: Current Status of Practice/Research in the European
Union

D. P. Negro

15:15-15:30 **Commemorative Photo at Entrance Hall**

- Coffee break -

15:45-16:30 **Current Status of New Zealand** Chair : M. Teshigawara(Japan)
G-8
Performance Based Structural Engineering Design –The New Zealand Experience

A. B. King/R. D. Jury

16:30-17:15 **Current Status of Australia** Chair : M. Teshigawara(Japan)
G-9 Current Status of Performance-Based Building Design in Australia

J. Carson

17:30-19:30 **Banquet** Room 202

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9:30-15:00 **Group A : Conceptual Framework** Room 401

Chairs : Y. Ishiyama(Japan) and R. D. Hanson(USA)

9:30 Opening Remarks

Y. Ishiyama(Japan)

9:40 A-1 Issues in the Application of Performance Concepts to Building Regulation and Standards

L. Pham(Australia)

10:00 A-2 Performance-Based Design and Reliability Applications in Timber Engineering

R. O. Foschi(Canada)

10:20 A-3 A Performance-Based Framework and Needs of Owners/Users for Building Structures

H. Fujitani(Japan)

- Coffee break -

11:00 A-4 JSCA Code and Performance Menu

N. Mori(Japan)

11:20 A-5 Performance Based Seismic Design

M. G. Mahoney(USA)

11:40 A-6 Performance-Based Design Criteria

R. D. Hanson(USA)

- Luncheon -

Chairs : R. D. Hanson(USA) and Y. Ishiyama(Japan)

13:30 A-7 Performance Based Buildings: Concepts, Applications and the CIB Program

G. C. Foliente(Australia)

14:10 A-8 Comments on Guidelines for the Preparation of ISO Standards for the Description of Housing Performance

L. Pham(Australia)/S. Kose(Japan)

14:40 A-10 Reliability Indices in Load Regulations for New Building Standard of Japan

J. Kanda(Japan)

15:00 Discussion for Intermediate Presentation

- Coffee break -

15:45-16:45 **Intermediate Presentation and Review of the Group Session** Room 102

Chair : Y. Ishiyama(Japan)

15:45 Group A: Conceptual Framework

R. D. Hanson(USA)

16:05 Group B: Loads and Responses

S. Sakamoto(Japan)

16:25 Group C: Seismic Design

H. Krawinkler(USA)

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9:30-15:00 **Group B : Loads and Responses** Room 402
Chairs : I. Sakamoto(Japan) and J. D. Barrett(Canada)

9:30 Opening Remarks
I. Sakamoto(Japan)

9:40 B-1 Structural Standards Globalisation -An Asia Pacific Perspective
L. K. Stevens(Australia)

10:00 B-2 On Revision of AIJ Recommendations for Seismic Loads on Buildings
T. Takada(Japan)

10:20 B-3 Australian Structural Performance Evaluation System for Buildings
L. Pham(Australia)

- Coffee break -

11:00 B-4 Comments on the Proposed ISO Standard for the Description of Structural Performance for Houses
L. Pham(Australia)

11:20 B-5 Comparison of Structural Damping Provisions and AIJ Proposal
Y. Tamura(Japan)

11:40 B-6 Passive Viscoelastic Damping Systems for Buildings
K. Cho(Japan)

- Luncheon -

13:00 B-7 Wind-Induced Dynamic Response and its Load Estimation for Structural Frames of Flat Long-Span
Roofs
Y. Uematsu(Japan)

13:20 B-8 Earthquake Loading on Piles Caused by Displacement Response Effects
M. B. Karkee(Japan)

13:40 B-9 Limit States Design in Timber Structures: A Japanese Perspective
Y. Hirashima(Japan)

14:00 B-10 Mechanics Based Modeling of the Dynamic Response of Wood Frame Building
F. Lam(Canada)

14:20 B-11 Performance-Based in Earthquake Engineering
R. O. Foschi(Canada)

14:40 Discussion for Intermediate Presentation

- Coffee break -

15:45-16:45 **Intermediate Presentation and Review of the Group Session** Room 102
Chair : Y. Ishiyama(Japan)

15:45 Group A: Conceptual Framework
R. D. Hanson(USA)

16:05 Group B: Loads and Responses
S. Sakamoto(Japan)

16:25 Group C: Seismic Design
H. Krawinkler(USA)

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9:30-15:00 **Group C : Seismic Design** Room 403

9:30 Opening Remarks **K. Ohi(Japan)**

Limit State Chairs : T. Kabeyasawa(Japan) and S. C. Goel(USA)

9:40 C-1 EQ Damage Evaluation Focusing on the Cost of Repairs **H. Tanaka(Japan)**

10:00 C-2 Seismic Design of Pile Foundation against Large Earthquakes **K. Takano(Japan)**

10:20 Summary for Limit State

- Coffee break -

Seismic Demand Chairs H. Tanaka(Japan) and H. Krawinkler(USA)

10:45 C-3 Relating Ground Motion Spectral Information to Structural Deformation Demands **H. Krawinkler (USA)**

11:10 C-4 Conversion of Multi-Story Building into Equivalent SDOF System and Prediction of Earthquake Response by Equivalent Linear Method

Predicting the Earthquake Response of Buildings Using Equivalent Single Degree of Freedom System

Deviation of Plastic Deformation and Equivalent Damping Ratio on Single Degree of Freedom System

M. Teshigawara(Japan)

11:25 C-5 Prediction by Equivalent Linearization Method and Energy Method

N. Inoue(Japan)

11:45 C-6 Inelastic Displacement Demands of Reinforced Concrete Structures **T. Kabeyasawa (Japan)**

- Luncheon -

Seismic Demand Chair M. Yoshimura(Japan)

13:05 C-7 Soil Amplification Factor for Seismic Design of Buildings **M. Iiba(Japan)**

13:30 C-8 A Study on Seismic Response Evaluation by Monolithic Analysis of Building and its Foundation

K. Watanabe (Japan)

13:55 Summary for Seismic Demand

- Coffee break -

Seismic Capacity Chair: D. P. Negro(Italy)

14:30 C-9 Dynamic Push-Over Test and Analysis by Use of Impulse Response **S. J. Lee(Korea)**

14:55 C-10 A Simple Proposal for Ultimate Seismic Demand Evaluation of Steel Moment Resisting Frames

K. Praveen(India)

15:15 C-11 Controlled Yield Sequence of Reinforcement in Concrete Members **M. Nishiyama(Japan)**

- Coffee break -

15:45-16:45 **Intermediate Presentation and Review of the Group Session** Room 102

Chair : Y. Ishiyama(Japan)

15:45 Group A: Conceptual Framework **R. D. Hanson(USA)**

16:05 Group B: Loads and Responses **S. Sakamoto(Japan)**

16:25 Group C: Seismic Design

Wednesday, November 15, 2000

9:30-12:00 **Group A : Conceptual Framework** Room401

Discussion for Final Presentation
Chairs : Y. Ishiyama(Japan) and R. D. Hanson(USA)

9:30-12:00 **Group B : Loads and Responses** Room402

Discussion for Final Presentation
Chairs : I. Sakamoto(Japan) and J. D. Barrett(Canada)

9:30-12:00 **Group C : Seismic Design** Room403

9:30 Opening Remarks

Seismic Capacity Chairs: K. Ohi(Japan) & D. P. Negro(Italy)

9:35 C-12 Full-Scale Shaking Table Test of Structural Elements Using the Inertial Loading Equipment

S. Yamada(Japan)

10:00 C-13 Development of Magnetorheological (MR) Damper for Semi-Active Control

H. Fujitani(Japan)

- Coffee break -

Seismic Design Chairs: N. Inoue & BRI

10:30 C-14 A Seismic Design Procedure Based on Performance Limit States

S. C. Goel(USA)

10:50 C-15 Seismic Performance Evaluation of Japanese and U.S. Steel Building Structures Based on the U.S. SAC Performance Evaluation Method

T. Hasegawa(Japan)

11:15 Summary for Seismic Design

K. Ohi(Japan) & S. C. Goel(USA)

- Luncheon -

13:20-14:50 **Final Presentation and Review of the Group Sessions** Room 102

Chair : Y. Ishiyama(Japan)

13:20 Group A: Conceptual Framework

R. D. Hanson(USA)

13:45 Group B: Loads and Responses

I. Sakamoto(Japan)

14:10 Group C: Seismic Design

S. C. Goel(USA)

14:35 Review and Summary of the Workshop

S. C. Goel(USA)

14:50-15:00 **Closing Session** Chair : H. Okada(Japan)

Closing Address

J. Murakami, Deputy Director General of BRI, Japan