

PROGRAM

**2nd U.S.-Asia Conference on Engineering for Mitigating
Natural Hazards Damage (EMNHD-2)
Yogyakarta, Indonesia
22-26 June 1992**

Monday, 22 June 1992

- 08:00 - 09:00 Registration - in front of Roro Jonggrang Room, Ambarrukmo
Palace Hotel
- 09:00 - 09:30 **Opening Ceremony - Roro Jonggrang Room (7th floor)**
- Co-Chairmen -
Arthur N.L. Chiu
Aspan S. Danuatmodjo
Hernowo Hadiwonggo
- Welcoming Address -
Mr. Hernowo Hadiwonggo,
Co-chairman, Organizing Committee
- Welcoming Remarks -
Dr. Albert J. Simone,
President, University of Hawaii
and Chancellor, University of Hawaii at Manoa
- Opening Address -
His Majesty Sri Paduka Paku Alam VIII,
Governor of the Special Territory of Yogyakarta
- 09:30 - 10:00 Coffee Break
- Plenary Session I - Roro Jonggrang Room**
Themes: Volcano and Earthquake Hazards
Chairman: M. Ito
- 10:00 - 10:30 Volcanic Hazard Mitigation in Indonesia - A. Sudradjat
- 10:30 - 11:15 Volcano Monitoring and Eruption Prediction: Strategy, Techniques,
and Limitations - B. Voight
- 11:15 - 12:00 Technology Transfer in Earthquake Engineering Research - G.C. Lee
and I.G. Buckle (presented by M.P. Gaus)
- 12:00 - 12:45 Disaster Estimation Caused by Failure of Critical Facilities Due to
Natural Hazard - H. Shibata
- 12:45 - 13:45 Lunch - Borobudur Restaurant
- Plenary Session II - Roro Jonggrang Room**
Theme: Ground-Failure Hazard
Chairman: T.H. Wu
- 13:45 - 14:30 Retention Systems for Slope Stabilization: Engineering Innovations
in the United States - R.L. Schuster
- 14:30 - 15:15 Current Methods of Slope Protection in Taiwan - J-J. Hung
(presented by G.T-J. Chen)
- 15:15 - 15:30 Coffee Break

Plenary Session III - Roro Jonggrang Room

Theme: Wind Hazard

Chairman: T. Balendra

- 15:30 - 16:15 Holism, Eurocodes and Natural Hazards in the Pacific Rim - A.P. Jeary
- 16:15 - 17:00 On the Question of the Role of Building Codes and Standards in Mitigating Damage Due to High Winds - D.C. Perry and W.L. Beason
- 18:30 - 20:00 Cocktail Reception - Sinar Bulan Room (8th Floor)

Tuesday, 23 June 1992

Plenary Session IV - Roro Jonggrang Room

Theme: Flood Hazard

Chairman: M.R. Peart

- 08:30 - 09:15 Mitigating Flood Impacts: Approaches and Experiences in the United States - J.M. Wright
- 09:15 - 10:00 Flood Action Plan of Bangladesh: A Critical Review - A. Nishat
- 10:00 - 10:15 Coffee Break

Simultaneous Session IA - Roro Jonggrang Room

Volcano, Earthquake and Ground-Failure Hazards

Co-Chairmen: P. Karasudhi and M.P. Gaus

- 10:15 - 10:30 Volcanoes and Their Volcanic Hazard Map Preparations - S. Bronto
- 10:30 - 10:45 The Volcanic Hazards of Hydrothermal Areas in Indonesia, and Mitigation Efforts - M. Alzwar
- 10:45 - 11:00 The Potential Hazard of Sector Collapse of Alteration from Mt. Ili Lewotolo, NTT - A. Nasution
- 11:00 - 11:15 Mitigation of Ground Failures in Third World Countries with Special Reference to India - P. Kumar and N.S. Bhal
- 11:15 - 11:30 Monitoring of Bendowuluh Landslide in Banjarnegara Regency, Jawa Tengah - U. Sudarsono and S. Kartoatmodjo
- 11:30 - 11:45 Prediction and Mapping of Landslide Hazards - T.H. Wu

Simultaneous Session IB - Mataram Room (2nd floor)

Wind and Flood Hazards

Co-Chairmen: A.P. Jeary and J.H. Golden

- 10:15 - 10:30 Reliability-Based Wind-Resistant Design of Transmission Towers - H-N. Cho, J-C. Shin and S.J. Lee
- 10:30 - 10:45 Integrated Approach Against Cyclonic Wind Hazard and Role of Voluntary Agencies - K. Seetharamulu and V.R. Sharma
- 10:45 - 11:00 Engineering of Structures for Wind Hazard Reduction - J. Shanmugasundaram, S. Arunachalam and T.V.S.R. Appa Rao
- 11:00 - 11:15 Computational Methods for Estimating Extreme Wind Speeds - E.D.H. Cheng and A.N.L. Chiu
- 11:15 - 11:30 Strong Wind Damage to Houses in Yanagawa City by Typhoon 9119 - H. Ishizaki, J. Katsura, Y. Taniike and T. Maruyama
- 11:30 - 11:45 Determination of Wind Effects on and around Tall Buildings - H.F. Cheong, T. Balendra and S.L. Lee
- 11:45 - 13:00 Lunch - Borobudur Restaurant

**Simultaneous Session IIA - Roro Jonggrang Room
Volcano, Earthquake and Ground-Failure Hazard**

Co-Chairmen: P.C. Thenhaus and K. Muniandy

- 13:00 - 13:15 Mountain Risk Engineering for Linear Infrastructures - B.B. Deoja
13:15 - 13:30 Landslide Potential of the Halang Formation in the Waled Area,
Cirebon Regency, West Java, Indonesia - I.B. Sudjarwo, Suranta and
Y.O.P. Siagian
13:30 - 13:45 Attenuations of Seismic Waves - P. Karasudhi
13:45 - 14:00 An Assessment Model for Earthquake Fatalities - K. Shiono
14:00 - 14:15 Analysis and Design of a Base-Isolated Building - T-C. Pan, A.H.
Muhr and J.M. Kelly
14:15 - 14:30 The Susceptibility to Landsliding in the Enrekang Area, South
Sulawesi, Indonesia - S. Nitihardjo

**Simultaneous Session IIB - Mataram Room
Wind and Flood Hazards**

Co-Chairmen: A. Nishat and J. Shanmugasundaram

- 13:00 - 13:15 Processes of River Bank Erosion During Floods - Y. Fujita, Y.
Muramoto and Y. Yahiro
13:15 - 13:30 Effects of the War on Flood Damages in Hiroshima Due to Typhoon
4516 - Y. Kawata, T. Oka and Y. Tsuchiya
13:30 - 13:45 Flood Hazards Mitigation in Malaysia - K.L. Hiew and K.F. Law
13:45 - 14:00 To Improve Heavy Rainfall Forecast: Taiwan Area Mesoscale
Experiment (TAMEX) - G.T-J. Chen
14:00 - 14:15 Post-Cyclone Relief and Rehabilitation - H.E. Rashid
14:15 - 14:30 Floods Expected Due to Global Warming - R. Harboe and Z. Ahmad
14:30 - 14:45 Coffee Break

**Simultaneous Session IIIA - Roro Jonggrang Room
Volcano, Earthquake and Ground-Failure Hazards**

Co-Chairmen : S. Bronto and T.H. Wu

- 14:45 - 15:00 Risk Management for Natural Disasters: A Global Perspective -
H.C. Shah
15:00 - 15:15 Probabilistic Seismic Hazard Estimates in North Sulawesi Province,
Indonesia - P.C. Thenhaus, I. Effendi and E. Kertapati
15:15 - 15:30 Seismicity and Its Relation to the Volcanic's Activity in Indonesia -
G. Ibrahim and M. Ahmad
15:30 - 15:45 Damage Assessment of Existing Bridge Structures with System
Identification - A.H-S. Ang and W-J. Kim
15:45 - 16:00 The Use of Natural Rubber Bearings to Protect a Small Apartment
Block from Earthquake Damage - K. Muniandy, K.N.G. Fuller and
H.R. Sidjabat
16:00 - 16:15 Zoning Method: One of Technology to Live with Geologic Hazard
Area - D. Santoso

**Simultaneous Session IIIB - Mataram Room
Wind and Flood Hazards**

Co-Chairmen: R. Harboe and H.E. Rashid

- 14:45 - 15:00 Understanding Flood Forming Mechanism for Better Flood Hazard
Prevention and Mitigation - L. Polo
15:00 - 15:15 Flood Hazard in the Coastal Land Reclamations of Hong Kong -
M.R. Peart and W.W-S. Yim
15:15 - 15:38 New Technology Applications for Improved Severe Storm Warnings
- J.H. Golden
15:38 - 16:00 GIS-A Convenient Tool for Natural Hazard Studies and Analysis -
M.P. Gaus and S.H. Kim
16:00 - 16:15 Wind Engineering on Long Span Bridges in Japan - M. Ito

Wednesday, 24 June 1992

- 08:00 - 17:30 **Field Trip**
- 08:00 Buses will be in front of Ambarrukmo Palace Hotel
08:00 Leave Hotel for Merapi Volcano Observatory Office
08:20 Arrive at Merapi Volcano Observatory Office
09:00 Leave for VOLCANIC SABO TECHNICAL CENTER (VSTC)
09:30 Arrive at VOLCANIC SABO TECHNICAL CENTER
10:30 Leave for Merapi Project site at Bebeng
11:00 Arrive at Salam Village, thence by minibuses to the project site
11:30 Arrive at the project site
12:15 Return to Salam Village, thence by bus to Borobudur Temple
13:15 Arrive at Borobudur Temple and direct to DAGI Restaurant (located
 at Borobudur) for lunch
14:30 Visit Borobudur Temple
16:00 Return to Yogyakarta
17:30 Arrive at Ambarrukmo Palace Hotel
- 19:00 - 21:00 **Dinner and Cultural Program**

Thursday, 25 June 1992

- Plenary Session - Roro Jonggrang Room**
Co-Chairmen: Arthur N.L. Chiu
 Aspan S. Danuatmodjo
- 08:30 - 09:00 **A Hard-fought Victory in the Philippines, but Losing Big in the
Andes: The State-of-Practice in Pacific Rim Volcano Crisis
Management as Revealed by Pinatubo and Armoro - B. Voight**
- 09:00 - 09:15 **General Discussion on Workshop Format and Goals**
- 09:15 - 09:30 **Coffee Break**
- 09:30 - 12:00 **Workshop Sessions**
- Theme: Volcano Hazards - Roro Jonggrang Room**
Co-Chairmen: B. Voight and S. Bronto
Rapporteurs: A. Nasution and M. Alzwar
- Theme: Ground-Failure Hazards - Roro Jonggrang Room**
Co-Chairmen: R.L. Schuster and B.B. Deoja
Rapporteurs: P. Kumar and T.H. Wu
- Theme: Earthquake Hazards - Roro Mendut I**
Co-Chairmen: H. Shibata and P.C. Thenhaus
Rapporteurs: A.H-S. Ang and K. Muniandy
- Theme: Wind Hazards - Roro Jonggrang Room**
Co-Chairmen: A.P. Jeary and D.C. Perry
Rapporteurs: K. Seetharamulu and T. Maruyama
- Theme: Flood Hazards - Roro Mendut II**
Co-Chairmen: J.M. Wright and A. Nishat
Rapporteurs: M.R. Peart and G.T-J. Chen

12:00 - 13:30 **Lunch - Borobudur Restaurant**

13:30 - 15:00 **Workshop: Continue Discussions**

15:00 - 15:15 **Coffee Break**

15:15 - 16:30 **Workshop: Draft Reports and Proposals**

Friday, 26 June 1992

08:30 - 09:45 **Plenary Session - Roro Jonggrang room**
Co-Chairmen: Arthur N.L. Chiu
 Aspan S. Danuatmodjo
 Hernowo Hadiwonggo
Draft Reports by Workshop Groups

09:45 - 10:00 **Coffee Break**

10:00 - 12:00 **Workshop: Revise Draft Reports - Roro Jonggrang Room**

12:00 - 14:00 **Lunch - Borobudur Restaurant**

14:00 - 15:30 **Plenary Closing Session - Roro Jonggrang Room**
Co-Chairmen: Arthur N.L. Chiu
 Aspan S. Danuatmodjo
 Hernowo Hadiwonggo
Final Reports by Workshop Groups
Resolutions
Closing Remarks

15:30 - 16:00 **Coffee Break**

18:00 - 21:30 **Closing Banquet - Sinar Bulan Room**