

LIST OF PAPERS BY THE MEMBERS OF
EARTHQUAKE RESISTANT STRUCTURE RESEARCH CENTER

(Jan. ~ Dec., 1975)

SEISAN-KENKYU: Monthly Journal of the Institute of Industrial Science, University of Tokyo.

JSCE: Japan Society of Civil Engineers.

JSME: The Japan Society of Mechanical Engineers.

AIJ : Architectural Institute of Japan.

3SMiRT: The 3rd Conference on Structural Mechanics in Reactor Technology.

JSSC: Japan Society of Steel Construction

* : Written in Japanese

S. Okamoto: "Reservoir Impounding and Strong or Rather Strong Earthquakes", 1st-International Symposium on Induced Seismicity, Canada, 1975

C. Tamura, S. Okamoto and M. Hamada: "Dynamic Behavior of a Submerged Tunnel during Earthquakes", Report of the Institute of Industrial Science, University of Tokyo, Vol. 24, No. 5, 1975.

C. Tamura and S. Okamoto: "A Study on the Earthquake Resistant Design of Sabaqueous Tunnels", Proc. of 5th European Conference on Earthquake Engineering, 1975.

C. Tamura: "On Earthquake Resistance of a Tunnel, Modern Shield Construction Methods for a Tunnel", Shin-Sogodoboku-Kenkyujo, 1975.

* C. Tamura, S. Okamoto, K. Kato and T. Ohmachi: "Study on Mechanism of Failure of Rockfill Dams during Earthquakes on Results of Vibration Failure Tests of Large Scale Models of the Dam", Proc. of 4th Japan Earthquake Engineering Symposium-1975.

* C. Tamura and S. Morichi: "Dynamic Stress Analysis with Model made of Gelatin Gel", Proc. of 4th Japan Earthquake Engineering Symposium - 1975.

* C. Tamura, S. Morichi and Y. Nakamura: "Experimental Studies on the Vibration of the Subway Tunnel and of the Ground around it", Preprint of JSCE Meeting, 1975.

- * C. Tamura, E. Kawakami and K. Kato: "On Characteristics of the Earthquake Motion along the depth at the Rock Ground", Preprint of JSCE Meeting, 1975.
- * M. Seki and T. Okada: "Nonlinear Earthquake Response Analysis of Reinforced Concrete Buildings by Computer-Actuator On-line System. ...One Story-One Bay Column Yielding Type...", Proceedings of the Annual Convention of AIJ, Oct., 1975.
- * M. Hisano and T. Okada: "Nonlinear Earthquake Response of Low-Rise Reinforced Concrete Buildings with Seismic Walls", Proceedings of the Annual Convention of AIJ, Oct., 1975.
- * T. Okada: "Evaluation of Seismic Safety of Existing Reinforced Concrete Low-Rise Buildings", Concrete Journal, Vol. 13, No. 12, Dec., 1975.

T. Okada and B. Bresler: "Seismic Safety of Existing Low-Rise Reinforced Concrete Buildings", Proceedings of the Review Meeting, US-Japan Cooperative Research Program in Earthquake Engineering with Emphasis on The Safety of School Buildings, August 18-20, 1975, Honolulu, Hawaii, U.S.A., published by The Japan Earthquake Engineering Promotion Society.

- * T. Okada: "History of Seismic Codes in the U.S.A.", Japan Earthquake Engineering Promotion Society News, No. 23, Jan., 1975.

Tadahiko Kawai: "Some Variational Principles in Structural Mechanics", preprints of the 1975 JSME-ASME Joint Western Conference on Applied Mechanics, Honolulu, Hawaii, March 22-29, 1975.

Tadahiko Kawai and Shoji Shiina: "Reevaluation of Rayleigh-Ritz Method in Structural Mechanics", Ditto.

Yoshinobu Fujitani and Tadahiko Kawai: "Shear Deformation Analysis of an Elastic Plate by Finite Element Method", Ditto.

- * Tadahiko Kawai and Utaka Toi: "Elasto-plastic analysis of eccentrically loaded columns by Rayleigh-Ritz method", Proc. of the Symposium on the Matrix Method of Structural Analysis, the 9th Annual Meeting of the Society of Steel Construction of Japan, June 1975.
- * Tadahiko Kawai, Yoshinobu Fujitani and Shoji Shiina: "3 dimensional Rayleigh-Ritz method on the vibration of structure", Ditto.

* Tadahiko Kawai and Tetsuo Aso: "Static Analysis of swept-back wings by 3 dimensional Rayleigh-Ritz method". Ditto.

* Tadahiko Kawai: "On the coupled field problems in structural mechanics", Ditto.

Tadahiko Kawai and Masaaki Watanabe: "Analysis of a Solitary Water Wave Problem by the Method of Weighted Residuals, the preprint of the STAN Research Committee, the Society of Steel Construction of Japan, September, 1975.

Tadahiko Kawai: "Recent Developments of Finite Element Methods in Japan", Proc. of the World Congress on Finite Element Methods in Structural Mechanics, Bournemouth, Dorset, England, 12-17 October, 1975.

Tadahiko Kawai and Yoshinobu Fujitani: "On the Fourier-Bessel Series Solution of Three Dimensional Through-Thickness Crack Problems", November 1975, (unpublished).

H. Shibata: "Anti-Earthquake Design of Industrial Facilities", Proc. of 1975 Joint JSME-ASME Applied Mechanics Western Conference, G-1, March 1975.

H. Shibata, Y. Kazimura and M. Shiraki: "Seismic Analysis of Thin Cylindrical Shells with Attached Masses", Proc. of 1975 Joint JSME-ASME Applied Mechanics Western Conference, C-1, March 1975.

H. Shibata and others: "On the Reliability of Anti-earthquake Design of Structures" in the second part of "Reliability Approach in Structural Engineering" published by Maruzen Book Co., 1975.

H. Shibata: "On Response Analysis for Structural Design and its Reliability", Proc. of 3rd Structural Mechanics in Reactor Technology, K 4/3*, Sept. 1975.

H. Shibata and others: "Bell-ring Vibration Response of Nuclear Containment Vessel with Attached-mass under Earthquake Motion", Proc. of 3SMiRT, K 6/1, Sept. 1975.

H. Shibata, T. Udoguchi and K. Akino: "On the Behavior of Pressurized Pipings under Excessive-stress Caused by Earthquake Loadings", Proc. of 3SMiRT, K 7/5, Sept. 1975.

H. Shibata: "Some Comments on the Seismic Loading Condition and the Design Criteria of Nuclear Vessels, Pipings and Other

Equipment", Proc. of the International Seminar on Extreme Load Conditions and Limit Analysis Procedures for Structural Reactor Safeguards and Containment Structures, U 5/1, Sept. 1975.

H. Shibata: "Anti-earthquake Design of Industrial Facilities", Technocrat, 8, 11, November 1975, p.12.

- * H. Shibata, S. Toshimitsu and T. Mochio: "Basic Study on Stochastic Analysis of Wave Pattern of Ground Motions", Proc. of Japan National Symposium on Earthquake Engineering-1975, November 1975, p.257.

H. Shibata: A part of the draft of the safety guide on "Aseismic Analysis and Testing" for International Atomic Energy Agency, September 1975.

- * T. Katayama: "Fundamentals of Probabilistic Evaluation of Seismic Activity and Seismic Risk", SEISAN-KENKYU, Vol. 27, No. 5, May, 1975.
- * T. Katayama and N. Sato: "Damage in the Northeastern District of Mt. Aso Caused by the Earthquake of January 23, 1975", SEISAN-KENKYU, Vol. 27, No. 6, June, 1975.
- * T. Katayama, N. Sato and T. Kunii: "Damage to Civil Engineering Structures by the 1975 Central Oita Prefecture Earthquake", SEISAN-KENKYU, Vol. 27, No. 9, September, 1975.
- T. Katayama, K. Kubo and N. Sato: "Earthquake Damage to Water and Gas Distribution System", Proc. U.S. National Conference on Earthquake Engineering, June, 1975.
- * T. Katayama: "An Evaluation Method of Seismic Resistance of Bridges", Column, No. 59, December, 1975.
- * K. Kubo, T. Katayama and N. Sato: "Quantitative Analysis of Seismic Damage to Buried Pipelines", Proc. Fourth Japan Earthquake Engineering Symposium - 1975, November, 1975.
- * K. Udagawa, K. Takanashi and H. Tanaka: "Non-linear Earthquake Response Analysis of Steel Structures by a Computer-actuator On-line System (a class of column-failure-type with a rigid beam)", Proceedings of the Annual Convention of AIJ, Oct., 1975.
- * M. Saisho and H. Tanaka: "Rotation Capacity of Wide-flange Steel Beams Restrained by Slabs", Proceedings of the Annual Convention of AIJ, Oct., 1975.

- * H. Taniguchi and H. Tanaka: "On the Behavior of Wide-flange Steel Column subjected to Thrust and Bi-axial Bending", Proceedings of the Annual Convention of AIJ, Oct., 1975.
- * H. Tanaka: "A Computer-Actuator On-line System for Non-linear Earthquake Response Analysis of Structures", SEISAN-KENKYU, Vol. 27, No. 12, Dec., 1975.
- * H. Tanaka and A. Tanaka: "Design Formulas for the Strength of T-stub Connection", JSSC (Society of Steel Construction of Japan) Vol. 11, No. 120, Dec., 1975.
- * K. Takanashi, K. Udagawa, M. Seki, T. Okada and H. Tanaka: "Non-Linear Earthquake Response Analysis of Structures by a Computer-Actuator On-Line System (Part 1 Detail of the System)", Trans. of AIJ, No. 229, March 1975.
- * Y. Hangai: "Analysis of Stability Problems of Elastic Structures," Application of Finite Element Analysis, edited by JSSC., March, 1975.
- * Y. Hangai, T. Hosono and J. Kunita: "Analysis of Stability Problems by means of Generalized Matrices," Pre-print of the Kanto Meeting of AIJ, July, 1975.
- * Y. Minakawa and Y. Hangai: "Coupling of Circumferential Waves in Shells of Revolution," Pre-print of the Kanto Meeting of AIJ, July, 1975.
- * Y. Hangai and N. Matsui: "Dynamic Buckling under Step Loading and Time Duration," Pre-print of the Annual Convention of AIJ, Oct., 1975.
- * K. Kanazawa and Y. Hangai: "Nonlinear Vibrations of Thin Shallow Shells," Pre-print of the Annual Convention of AIJ, Oct., 1975.
- * Y. Hangai and N. Matsui: "Time Duration of Step Loading in Dynamic Buckling," Proceedings of 25th Japan National Congress of Theoretical and Applied Mechanics, Oct. 1975.
- * Y. Minakawa and Y. Hangai: "Nonlinear Vibrations of Cylindrical Shells," SEISAN-KENKYU, Vol. 27, No. 10, Oct., 1975.
- * H. Sato; "Response Analysis of Appended System to a Simulated Earthquake with Two Ground Predominant Periods" Trans. JSME, 41-384, Aug. 1975.

K. Suzuki and H. Sato; "A Study on the Multi-Dimensional Spectral Analysis for Response of a Piping Model with Two Seismic Inputs" Preprint 3rd SMiRT Conf., K7/1, Sept. 1975.

* H. Sato; "Dynamic Analysis and Design Procedure for Structure" JSME 415th Seminar on Aseismic Design of Chemical Plant, June, 1975.