

PAPERS PRESENTED AT THE 7th EUROPEAN CONFERENCE ON EARTHQUAKE ENGINEERING, ATHENS, SEPT. 20-25, 1982.

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19. Reduction of seismic response of system with changing rigidity using the vibration absorber
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G. Sandulescu, G. Cristea
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A. Giuffre, R. Giannini
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4. Effect of base rotation and up-lifting of shear walls on aseismic capability of R/C frame-wall structures
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F. Wolovits
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12. Function of lintels in ductile behaviour of coupled shear walls
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13. Seismic response of reinforced concrete frames
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14. Numerical prediction of plane R.C. frame response under static and dynamic loading
J. Ozbolt, N. Bicanic
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21. The shear strength of short RC columns
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23. Inelastic modelling of reinforced concrete section
T.K. Santhanam, G. Shanmugam
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S.G. Arzoumanidis
25. A method for the torsional analysis of perforated core walls
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26. Analytical model for cyclic deterioration of R/C interior beam-column joints
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27. Hysteretic behaviour of reinforced concrete members (beams and columns) subjected to high shear
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28. Investigation of multistorey building reinforced concrete cores under lateral loading
A.O. Sahakian
29. Strength in inclined sections of reinforced concrete columns of lightweight concrete with volcanic slags exposed to seismic loads
Y.S. Kulygin, I.Z. Batsanadze
30. Aseismic constructions made of reinforced concrete with ceramic stones
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31. Behaviour of reinforced-concrete frame of industrial multi-storey buildings under the action of seismic load
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2. Deformation capacity and ultimate strength of cold formed steel members and frames
Prof. T. Ono
3. Low cycle fatigue damage of weak-beam type steel structures due to earthquakes
K. Kaneta, I. Kohzu, H. Miyakawa
4. Mathematical model formulation of a single bay steel frame structure using parametric system identification and shaking table experiments
D. Jurukovski, D. Mamucevski
5. New constructive forms of steel earthquake-resistant frames
G.M. Ostrikov, Y.S. Maksimov
6. Inelastic behaviour of steel frames subjected to strong earthquakes
V. Petrini, P. Setti, R. Zandonini

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S.C. Anand, D.T. Young
3. Prestressed masonry
O.H. Basilio
4. Testing of tall slender reinforced concrete and reinforced masonry walls subjected to vertical and lateral loads
J.E. Amrhein, L.G. Selna, R.S. McLean
5. Optimum strength distribution of earthquake resistant coupled structural walls
P. Mueller, J.M. Becker
6. Shear strength of brick-mortar couplets
J.G. Chinwah
7. Industrial construction of stone buildings with improved seismic stability
T.V. Ismailov, A.A. Chuprina
8. Experimental studies on post-tensioned masonry
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2. Interactive, optimization - based design of seismically loaded structures
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3. Cost-benefit analysis of earthquake protective measures in residential buildings in the Georgian S.S.R.
Sh.A. Djabua, A.Kh. Koridze
4. A data base scheme for economic evaluation of earthquake effects
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2. Performance of wet horizontal joints and simple shear walls in precast concrete large panel buildings under earthquake loading
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3. Precast panel shear walls local damage
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4. Some aspects related to multistorey industrial buildings with precast reinforced concrete frames subjected to seismic action
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5. The dynamic properties of the prefabricated post-tensioned slabcolumn system
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6. Static and dynamic analysis of a prefabricated large panel system
M. Zamolo, I. Podhorsky
7. Seismic qualification tests on a large bearing wall prefabricated building
F. Angotti, A. Castoldi, P. Pezzoli, L. Sanpaolosi
8. Construction system and structural behaviour of a new precast reinforced concrete structure
Y. Sonobe, H. Imai, M. Murakami, N. Niwa, T. Kuchinomachi, S. Arakawa, K. Uesu
9. Hysteretic behaviour of three-storey models of large panel precast structural systems
P. Garvrljovic, M. Velkov
10. Research for improvement of the stability of large panel structural systems for seismic excitation
M. Velkov, P. Gavrilovic
11. Shearing strength in large-panel buildings joints
V.I. Lishak
12. Mass construction of industrial house buildings in seismic hazard regions of Transcaucasia
O.G. Tukhareli
13. Mass construction of framing-panel dwelling public and industrial buildings in seismic regions of the U.S.S.R.
V.G. Kornilov, A.M. Kimberg, M.A. Bediashvili, T.M. Janjgava, E.A. Gorodetski, T.K. Janashia, T.A. Katsadze
14. Seismic and dynamic behaviour of two types of reinforced concrete beam-column space subassemblages for partial precast multistorey industrial buildings
C. Mihai, R. Giurgea, D. Amariei, L. Tanasachi, G.R. Palamaru
15. Dynamic analysis of large panel buildings with seismic cores
D. Diaconu, D. Vasilescu, M. Iticovici, I. Soroceanu, T. Dull
16. R.C. precast panels' connections under cyclic actions
T.P. Tassios, S.G. Tsoukantas

SESSION 7.: RURAL HOUSES IN EARTHQUAKE AREAS.

1. Seismic risk mitigation of rural houses using performance coefficients selection
E.S. Georgescu
2. Experimental investigation and seismic safety evaluation of brick masonry buildings with R/C tie columns
L. Xihui, Z. Hongxi, L. Jingwei, L. Liquan
3. Seismic performance of rural earth buildings in China's northwest region
Gong Si-li, Cao Shao-Kang, Han Meng
4. Dynamic and static experimental analysis of stone masonry buildings
D. Benedetti, A. Castoldi
5. On the problem of the optimal seismo-equipment of industrial rural structures
A.I. Martemianov
6. Evaluation of the safety level of existing buildings with particular reference, to seismic actions
F. Zaupa, C. Modena, S. Odorizzi
7. Seismic response on earthquake buildings in Greece
P. Carydis

SESSION 8.: DAMAGE EVALUATION OF PAST EARTHQUAKES.

1. The earthquake in Southern Italy of 23 November, 1980. Engineering aspects and interpretation of building damage
W. Ammann, B. Pozzo
2. Behaviour of reinforced concrete buildings during the Southern Italy earthquake of November 23, 1980
Hojjat Adeli
3. On the performance of reinforced concrete buildings during the El Asnam earthquake of October 10, 1980
Hojjat Adeli
4. Ghaenat (Khorasan, Iran) earthquake of November 14, 1979
Hojjat Adeli
5. Analysis of the behaviour of two reinforced-concrete buildings during the 1979 Montenegro earthquake
Peter Fajfar
6. A survey of damages due to earthquake of July 29 in Western Nepal, India border region
S.P. Gupta
7. Damage assessment and ground motion in the Italian earthquake of 23/11/80
A.W. Coburn, R.E. Hughes, D.F.T. Nash, R.J.S. Spence
8. Geotechnical engineering aspects of the Southern Italian earthquake of November 23, 1980
E. Berger, J. Studer
9. Some results of a statistical analysis of Friuli records
R.L. Grossmayer, R. Fritze
10. Romanian earthquake of March 4, 1977, some specific engineering aspects
Mihail Ifaim
11. A survey of structural damages caused by the Southern Italy earthquake of November 1980
M. Aristodemo, G. Sarà, A. Vulcano
12. Damages to Platees and Erythras due to the February-March 1981, Alkyonides gulf (Greece) earthquakes
K. Pitilakis, S. Tsotsos, T. Hatzigogos
13. Acropolis' monuments behaviour during the February 23, 1981 earthquake
Kostas Zabas
14. Geotechnical effects of recent strong Greek earthquakes
J. Protonotarios
15. A case study for the analytical reproduction of the damage morphology topographical method
C.A. Symakezis, S. Magalios

SESSION 9.: REPAIRING AND STRENGTHENING OF STRUCTURES AND MONUMENTS.

1. Tall building dynamic property improvement
G. Apostolov
2. Uterior strengthening of reinforced concrete frameworks damaged in earthquakes
B. Csák, L. Havady, Gy. Visnovitz
3. Earthquake strengthening of historical monuments in Dubrovnik, Yugoslavia
Drazen Anicic
4. Experimental evaluation of strengthening methods on low cost masonry houses for seismic actions
Oscar Hernández-Basilio
5. Earthquake resistant strengthening of brick structures
Niu Zezhen
6. The strengthening of stone-masonry buildings for revitalization in seismic regions
M. Tomazevic, P. Sheppard
7. Repair and strengthening of reinforced concrete structures after seismic damage
G. Augusti, M. Matteuzzi
8. Repair of structural walls
W.G. Corley, A.E. Fiorato, R.G. Oesterle
9. The mechanics of column repair with a reinforced concrete jacket
T.P. Tassios
10. Behaviour study on the structure of a big hospital in Bucharest that withstood the strong earthquakes of November the 10th 1940 and of March the 4th 1977 and on the reinforcement works brought to its structure
S. Tologea
11. Restoration and reinforcement of large-panel earthquake damaged buildings in Gasli by epoxy polymer mortars
A.I. Martemianov, E.P. Alexandryan, V.V. Shirin
12. Reinstating old buildings in an earthquake-prone environment
D.G. Cox

13. Incorporated steel structures: A repair/strengthening technique
M.P. Chronopoulos
14. Seismic behaviour of RC beam-column subassemblages: First results of a co-ordinated experimental research on repair techniques
G. Via, M. Ciampoli, V. La Mesa
15. A contribution to the determination of seismic forces acting on freely supported, articulated ancient buildings
Kostas Zabas

SESSION 10.: SEISMIC RISK ANALYSIS OF SPECIAL STRUCTURES

SESSION 10.1.: NUCLEAR POWER PLANTS.

1. Steel energy absorbing restrainers and their incorporation into nuclear power plants for enhanced seismic safety
S.F. Stiemer, Wm. G. Godden
2. A simulation study of the Armenian nuclear power station for seismic resistance
A.G. Nazarov, P.O. Amasian, S.S. Darbinian, V.L. Mnatsakanian
3. Seismic problems for possible installation of nuclear power plants in Greece
J. Protonotarios

SESSION 10.2.: DAMS AND RELATED STRUCTURES.

1. The design of the hydraulic structures situated in seismic areas
A. Moroianu
2. Coupled dynamic response analysis of arch dam reservoir systems
B. Nath, S.G. Potamitis
3. Seismic interaction analysis of control towers embedded in embankment dams
G.J. Bureau, T. Udaka
4. Dynamic behaviour of arch dams
R. Flesch, M. Eismayr
5. Boundary solution and finite element methods in the earthquake response analysis of dam-water-foundation interaction system
A. Vulpe, V. Poterasu, A. Carausu
6. Dynamic characteristics of elastic earth structures determined from a seminanalytical method
B. Martinez, J. Villarreal
7. Experimental studies on large dams by means of measuring ambient vibration
T. Zorapapel, A. Moroianu, D. Radulescu, M. Costea
8. The relationship between dynamic properties and stress state of soil in estimating earthfill dam seismic stability
N.D. Krasnikov, L.A. Eisler
9. Influence of water on earthquake stability of dams and pressure tunnels
T.L. Gvelessiani, J.N. Kylasonia, G.J. Jinikhashvili, G.P. Mamradze
10. Study of seismic stability of concrete dams
P.A. Gutidze, G.K. Ninidze
11. Study of frequencies and shapes of natural vibrations of concrete dams on generalized elastic foundation
N.S. Motsonelidze

SESSION 10.3.: BRIDGES

1. Seismic analysis of a multispan railway bridge: A case study
P. Gülkan, M. Erdik, N. Akkas, Ç. Yilmaz, M. Öner
2. The response of a bridge to strong ground shaking
R. Shepherd, L. Lisiecki
3. Earthquake resistant cable-stayed bridge system
Ramiro Sofronie
4. Seismic design of bridges in high activity region
A. Casteglioni, C. Urbano, B. Stupazzini

SESSION 10.4.: TANKS AND COOLING TOWERS.

1. Parameters for seismic response analysis of cooling towers
Z. Bittnar, O. Fischer, E. Juhásová
2. Hydrodynamic forces in liquid storage tanks during seismic excitation
T. Balendra
3. Buckling in seismic response of cylindrical liquid storage tanks
A. Niwa, R.W. Clough
4. Experimental investigation of a cylindrical tank under earthquake loading
G.C. Manos, R.W. Clough, F. Cambra, G. Hua
5. Some data on seismic response of large capacity tanks placed on the ground
D. Diaconu, S. Marinescu, M. Iticovici, S. Ilie

SESSION 10.5.: MISCELLANEOUS STRUCTURES.

1. **Specific dynamic consideration concerning the behaviour of a T.V. - tower to earthquake and wind action**
T. Popp, R. Popescu
2. **Dynamic interaction of offshore elastic cylindrical shell tanks during horizontal and vertical earthquake excitations**
Y. Tanaka, T. Hamamoto, H. Hanakura
3. **Shaking table study of a tubular offshore platform frame**
Y. Ghanaat, R.W. Clough
4. **Aseismic design of sprinkler system bearing structure of water cooling towers**
H. Kapsarov
5. **Seismic risk evaluation of electrical power facilities**
Julius Solnes