



**Eighth European Workshop on the Seismic Behaviour
of Irregular and Complex Structures
19-20 October 2017, Bucharest, Romania**
Faculty of Civil, Industrial and Agricultural Buildings
Technical University of Civil Engineering Bucharest



Wednesday, October 18th

18.00 – 21.00 Registration and icebreaker party

Faculty of Civil, Industrial and Agricultural Buildings (B-dul Lacul Tei nr. 122-124, sector 2), hall on the 4th floor

Thursday, October 19th

8.00 – 9.00 Registration

Faculty of Civil, Industrial and Agricultural Buildings, room I.2 on the first floor

9.00 - 9.20 Welcoming addresses

9.20 – 10.00 Invited lecture Prof. Attila ANSAL (President of EAAE):
Site-Specific Response Analysis

10.00 – 11.00 Oral Session 1

Chairperson: Avigdor RUTENBERG, Dan ZAMFIRESCU

1. Palermo M., Silvestri S., Gasparini G., Trombetti T. *Corner displacement response spectra for one-storey eccentric structures*
2. Lavan O., Wilkinson P. *Deformation based seismic design of generally irregular 3D RC frame buildings for minimized total steel volume*
3. Lavan O., Puthanpurayil A.M., Dhakal R.P. *Multi-objective seismic retrofitting loss optimization of irregular structures using fluid viscous dampers*
4. Reyes J.C., Avila W.A., Sierra A. *Fast nonlinear response history analysis: an application to irregular building structures*

11.00 - 11.30 Coffee break

Faculty of Civil, Industrial and Agricultural Buildings, room I.4 on the first floor

11.30 – 13.00 Oral Session 2

Chairperson: Avigdor RUTENBERG, Mario De STEFANO

5. Caruso C., Bento R., Marino E.M. *Torsional behaviour of an old RC frame-wall building in Lisbon*
6. Barbagallo F., Bosco M., Gherzi A., Marino E.M., Rossi P.P. *A database for assisted assessment of torsional response of in-plan irregular buildings*
7. Fujii K., Yoshida T., Nishimura T., Furuta T. *Observations of damage to Uto City Hall suffered in the 2016 Kumamoto Earthquake*
8. Fujii K. *Preliminary evaluation of seismic capacity and torsional irregularity of Uto City Hall damaged in 2016 Kumamoto Earthquake*
9. Fujii K. *Modified mode-adaptive bi-directional pushover analysis considering higher mode for asymmetric buildings*
10. Barnaure M. *Structural irregularities in RC frame structures due to masonry enclosure walls*

13.00 – 14.00 Lunch break

Faculty of Civil, Industrial and Agricultural Buildings, room I.4 on the first floor

14.00 – 15.30 Oral Session 3

Chairperson: Oren LAVAN, Michele PALERMO

11. Ene A., Carasca O., Miritoiu R., Marcu D., Popa H. *Influence of the soil initial shear modulus on the behaviour of retaining walls for deep excavations in Bucharest*
12. Otsuka T., Sasaki K., Konishi S., Nishigaki Y., Maekawa K., Tsunoda R. *Seismic performance of uneven double-box tunnel sections for subway*
13. Kosik M., Dolsek M., Fajfar P. *Failure probability of regular and irregular RC frame structures*
14. Bonkowski P., Zembaty Z., Minch M.Y. *Effect of soil compliance on seismic response of slender towers under rocking excitations*
15. Bonkowski P., Zembaty Z., Minch M.Y. *Seismic effects on leaning towers and buildings*
16. Maleska T., Bonkowski P., Beben D., Zembaty Z. *Transverse and longitudinal seismic effects on soil-steel bridges*

15.30 - 16.00 Coffee break

16.00 – 17.15 Oral Session 4

Chairperson: Zbigniew ZEMBATY, Maria TODOROVSKA

17. Danila G. *Assessment of nonlinear static analysis on irregular building structures*
18. Danila G. *Procedure of non-linear static analysis for retrofitted buildings structures through seismic isolation*
19. Danila G., Iordachescu A. *Seismic assessment of an irregular unreinforced masonry building*
20. Damian I., Köber D., Zamfirescu D. *Assessment of global torsional sensitivity of common RC structural walls layout types*
21. Köber D., *Design particularities of a five stories RC plan and elevation irregular structure*

17.15 – 18.00 WG8 organization and activities

Friday, October 20th

9.00 – 9.40 Invited lecture Prof. Maria TODOROVSKA (Univ. of Southern California):
Wave Method for Structural System Identification and Health Monitoring: Application to a Special Building

9.40 – 10.30 Oral Session 5

Chairperson: Dan ZAMFIRESCU, Dietlinde KÖBER

22. Comodini F., De Stefano M., La Brusco A. *Seismic assessment of an existing R.C. irregular hospital building with N2 method extended to plan irregular buildings*
23. De Stefano M., Tanganelli M., Viti S. *Effect of the mechanical properties of concrete on the seismic assessment of RC irregular buildings*
24. Alecci V., De Stefano M., Galassi S., Lapi M., Orlando M. *An assessment of American criterion for detecting plan irregularity*
25. Postolov N., Volcev R., Todorov K., Lazarov Lj. *Effects of modelling assumptions on the plan irregularity criteria for single story buildings*
26. Volcev R., Postolov N., Todorov K., Lazarov Lj. *Base isolation as an effective tool for plan irregularity reduction*

11.00 - 11.30 Coffee break

11.30 – 13.00 Oral Session 6

Chairperson: Mario De STEFANO, Rita BENTO

27. Soltysik B., Falborski T., Jankowski R. *Study on polymer elements for mitigation of earthquake-induced pounding between buildings in complex arrangements*
28. Falborski T. *Numerical study on seismic response of a high-rise RC irregular residential building considering soil-structure interaction*
29. Falborski T. *Evaluation of foundation input motions based on kinematic interaction models*
30. Manoukas G., Athanatopoulou A. *Optimum torsion axis of multi-story buildings based on their dynamic properties*
31. Fontara I.-K., Kostinakis K., Athanatopoulou A. *Seismic behaviour of 3D R/C irregular buildings considering complex site conditions*
32. Kostinakis K., Morfidis K. *Application of artificial neural networks for the assessment of the seismic damage of buildings with irregular infills' distribution*

13.00 – 14.00 Lunch break

14.00 – 15.15 Oral Session 7

Chairperson: Zbigniew ZEMBATY, Oren LAVAN

33. Saghi S., Farshbaf M., Moghadam A.S. *Seismic performance of asymmetric 3-storey braced steel buildings with rocking motion*
34. Bakalis A.P., Makarios T.K. *Dynamic eccentricities in pushover analysis of asymmetric single-story buildings*
35. Georgoussis G.K. *Suggestions for optimal seismic design of wall-frame concrete structures*
36. Pachla F. *Analysis of the dynamic response of prefabricated residential buildings with structural irregularities due to mining shocks*
37. Pachla F., Tatara T. *Dynamic resistance of residential masonry buildings with structural irregularities*

15.15 - 15.45 Coffee break

15.45 – 16.15 Oral Session 8

Chairperson: Dan ZAMFIRESCU, Dietlinde KÖBER

38. Kayvani J. Nouri G.R., Pakzad S., Tahmasebi Yamchelou M. *On the response of asymmetric structures equipped with viscous dampers subjected to simultaneous action of earthquake translational and rotational components*
39. Nouri G.R., Yosefzaei M.R. *On the effect of mass irregularity on progressive collapse potential in steel moment frame structures*

Closing addresses

19.00 – 22.00 Conference dinner

Restaurant "The Old Sibiu " , str. Ion Oteleşanu nr. 3A-3B Bucureşti, sector 1

Saturday, October 21th

Excursion to Sinaia and Braşov