7th European Workshop
on the Seismic Behaviour of Irregular and Complex Structures

Faculty of Civil Engineering, Opole University of Technology, October, 16-18, 2014

Wydział Budownictwa, Politechnika Opolska, 16-18 Październik 2014 r.

Thursday, October 16th

17.00 - 21.00 Registration and icebreaker party

Hall of the New Wing of the Faculty of Civil Engineering, Opole, Katowicka 48 street.

Friday, October 17th

8.00 - 9.00 Registration

Hall of the New Wing of the Faculty of Civil Engineering, Opole, Katowicka 48 street,

9.00 - 9.20 Welcoming addresses,

9.20 - 10.20 Session #1. Irregular Structures,

Chairperson: Mario DeSTEFANO, Damian BEBEN

1. Sinkovič K., Peruš I., Fajfar P., *Assessment of seismic performance of regular and irregular RC frame buildings*
2. Belejo A., Bento R. Application *of Nonlinear Static Procedures for the Seismic Assessment of a 9-Storey Asymmetric Plan Building*
3. Palermo M., Silvestri S., Gasparini G., and Trombetti T. *Maximum corner displacement amplifications for inelastic one-storey in-plan asymmetric systems under seismic excitation*

10.20 - 10.50 Coffee break

10.50 - 13.10 Session #2. Irregular Structures

Chairperson: Peter FAJFAR, Robert JANKOWSKI

4. De Stefano M., A. La Brusco A., Mariani V., Tanganelli M., Viti S., *Seismic assessment of an existing irregular RC building according to Eurocode 8 methods*
5. De *Stefano* M., Mariani V., Tanganelli M.,, Viti S., *The influence of axial load variation on the seismic performance of in-plan irregular RC buildings*
6. De Stefano M., Tanganelli M., Viti S., *The concrete strength variability as source of irregularity for RC existing buildings*
7. Bosco M., Ghersi A., Marino E.M. and Rossi P.P., *Influence of interaction phenomena on torsional coupling of asymmetric buildings*
8. Bosco M., Ghersi, A., Marino E.M. and Rossi P.P., *Improved nonlinear static methods for seismic response estimation of asymmetric buildings*
9. Bosco M., Ferrara, G.A.F., Ghersi A., Marino E.M. and Rossi P.P., *Application of nonlinear static method with corrective eccentricities to steel multi-storey braced buildings*
10 Barbagallo F., Bosco M., Marino M.E., Rossi P.P., and Stramondo P.R., *Seismic upgrade of vertically irregular existing r.c. frames by BRBs*

13.10 - 14.00 Lunch break

14.00 - 17.00 Session #3 Rotational effects, complex Loads & other irregularies

Chairperson: Rita BENTO, Damian BEBEN

11 Zembaty Z., Rossi A., Spagnoli A., *Estimation of rotational ground motion effects on the Bell Tower of Parma Cathedral*
12. Nouri G.R., Ghayamghamian M.R., Hashemifard M., *Evaluation of torsional ground motion by different methods using dense array data*
13. Świdziński W., Korzec A., Woźniczko K., *Stability Analysis of Żelazny Most Tailings Dam Loaded by Mining-Induced Earthquakes,*
14. Falborski T., Jankowski R., *Behaviour of asymmetric structures with base isolation made of Polymeric Bearings*

15. Daniel Y., Lavan O., *Optimal drift and acceleration control of 3D irregular buildings by means of Multiple Tuned Mass Dampers*
16. Khante S.N., Meshram R.S., *Improved seismic performance of RCC building irregular in plan with water tank as passive TMD,* (remote, tele-conference presentation)
17. Teisseyre R., *Asymmetric continuum with shear and rotation strains and quantum synchronous processes*
18. Jaroszewicz L.R., Kurzych A., Krajewski Z., Kowalski J.K., Teisseyre K.P., *FOSREM - Fibre-Optic System for Rotational Events & Phenomena Monitoring: construction, investigation and area of application*
19. Z. Zembaty Z., Kokot S., Bobra P., *Application of rotation rate sensors in measuring beam flexure and structural health monitoring*

17.05 - 18.00 Guided walk through Opole historic downtown.

Saturday, October 18th

9.00 - 9.30 Chairperson: Oren LAVAN, Zbigniew ZEMBATY

Invited lecture prof. Attila ANSAL (President of EAEE):

Site Specific Earthquake Spectra for Performance Based Design

9.30 - 10.30 Session #4. Irregular Structures (continued...)

Chairperson: Oren LAVAN, Zbigniew ZEMBATY

20. Köber D., Zamfirescu D., *Seismic response trends of SDOF plan irregular structures. Simplified approach*
21. Köber D., Zamfirescu D., *Influence of the rotational mass inertia on the torsional seismic response*.
22 Athanatopoulou, A., Manoukas G., Throumoulopoulos A., *Parametric study of inelastic seismic response of reinforced concrete frame buildings*

10.30 - 11.00 coffee break,

11.00 - 13.00 Session #5. Irregular Structures (continued...)

Chairperson: Jan BENČAT, Tadeusz CHMIELEWSKI

23. Fujii K., *Torsional index of asymmetric building based on mode shape*
24. Fujii K., *Prediction of "average" peak nonlinear seismic response of asymmetric buildings under bi-directional ground motion acting at an arbitrary angle of incidence*
25. Wilkinson P., Lavan O., *Seismic design of one-way asymmetric plan RC wall structures: The Effective Modal Design (EMD) method*,
26. Wdowicki J., Wdowicka E., Pawlak Z., *Dynamic analysis of irregular multistorey shear wall buildings using continuous-discrete approach*,
27. Tatara T., Pachla F., *Analysis of the dynamic response of masonry buildings with irregularities of localization of bearing elements due to mining shocks,*
28. Sołtysik B., Jankowski R., *Earthquake-induced pounding between asymmetric steel buildings*

13.00 - 14.00 Lunch break

14.00 - 15.20 Session #6. Irregular Structures (continued...)

Chairperson: Leszek JAROSZEWICZ, Zbigniew ZEMBATY

29. Georgoussis G.K., *An approximate method for assessing the seismic response of irregular in elevation asymmetric buildings*
30. Moghadam A.S., Karimiyan S., *Seismic Progressive Collapse of Multistorey Asymmetric Buildings*
32. Reyes J.C., Kalkan E., Riaño A.C., *A general procedure for selecting and scaling ground motion records for nonlinear analysis of asymmetric-plan buildings*
31. Benčat J., *Numerical and experimental prediction method for induced vibrations in irregular buildings*

18.00 - 21.00 Conference Dinner

Sunday, October 19th

8.00 - 18.00 Excursion to Cracow