

Prof. dr. ing. Dan Lungu

Profesor de Siguranța construcțiilor

Mobil 0745 189 851
E-mail lungud@utcb.ro

Experiență profesională și managerială

- Profesor de Siguranța construcțiilor, *Universitatea Tehnică de Construcții București*, 1991-2011; Conferențiar, Lector, Asistent, *UTCB*, 1969-1991
- Conducător de doctorat în domeniul Inginerie civilă, specializarea Siguranța construcțiilor și Inginerie seismică, *Universitatea Tehnică de Construcții București, UTCB*, 1991 – prezent
- Diplomă de doctor, *Institutul de Construcții București, ICB (azi UTCB)*, 1978
- Director, Departamentul de Inginerie Civilă, *Universitatea Tehnică de Construcții București, UTCB*, 1997 – 2001
- Director, Centrul de cercetare “*Siguranța structurilor la acțiuni din hazard natural*” la *UTCB* 2003- 2011, Ministerul Educației și Cercetării, Consiliul Național al Cercetării Științifice din Învățământul Superior, CNCȘIS
- Expert tehnic atestat, Rezistența și stabilitatea construcțiilor cu structuri din beton, zidărie, metal, lemn (A1 și A2), *Ministerul Transporturilor, Construcțiilor și Turismului, MTCT*, 2005
- Diplomă de inginer, *Universitatea Tehnică de Construcții București, UTCB*, 1967
- Inginer proiectant, *Institutul Proiect București*, 1967-1969
- Director general, *Institutul Național al Monumentelor Istorice, INMI*, 2006 – 2009
- Director general adjunct, *Institutul Național al Patrimoniului, INP*, 2009 – 2010
- Director general, *Institutul Național de Cercetare-Dezvoltare în Construcții și Economia Construcțiilor, INCERC* 2001- 2006
- *Bursa JICA, Japan International Cooperation Agency* „Administrative Training on Legislation and Dissemination” at the Cabinet Office, Ministry of Land, Infrastructure and Transportation; Building Research Institute; and other organizations, Japonia, Jan 2006
- *Bursa JICA*, „Seismology and Earthquake Engineering” la *International Institute for Earthquake Engineering and Engineering Seismology, Building Research Institute*, Ministry of Construction of Japan, Tsukuba, Mai-Iunie 1998
- *Bursa UNESCO* la *International Institute for Mechanical Sciences*, Udine, Italia, Nov-Dec 1975

Proiecte naționale și internaționale

- Proiectul *IRPP/SAAH* de reabilitare integrată a patrimoniului de arhitectură și arheologic din cadrul Programului regional pentru patrimoniul cultural și natural din SE Europei, *RPSEE* - un program comun al *Consiliului Europei* și *Comisiei Europene*, 2006-2008-2010 (Coordonator *IRPP/SAAH*, la *INMI, Institutul Național al Monumentelor Istorice*)
- *PROHITECH*, Protecția seismică a monumentelor istorice prin tehnologii reversibile, la *UTCB, Universitatea Tehnică de Construcții București*, Contract CE. Programul FP 6, Contract INCO – CT – 2004 – 509119, 2004-2008 (Responsabil proiect, UTCB, România)
- *RISK-UE*, Scenarii avansate de risc seismic cu aplicații pentru 7 orașe europene *Universitatea Tehnică de Construcții București*, - Contract CE. Programul FP 5: EVK4-CT-2000-00014, 2001-2003 (Responsabil proiect, România)
- *CETERS*, Cercetări teoretice și experimentele pentru reducerea riscului seismic al clădirilor din patrimoniul cultural național (Responsabil contract), CEEX, Programul MENER ANCS, MEC, (2006-2009).
- *Japan International Cooperation Agency*, Reducerea riscului seismic pentru construcții și structuri în România, la *UTCB, Universitatea Tehnică de Construcții București* (1998-2002) *MLPTL, Ministerul Lucrărilor Publice, Transporturilor și Locuinței și INCERC* (2002-2006).
- Consultanță seismică pentru Proiectul *Băncii Mondiale/World Bank*:
- Hazard Risk Mitigation and Emergency Preparedness in Romania, Componenta B- Reducerea riscului seismic (2002 și 2012)
- Proiectul *PHARE RO/TS/01*, Support of the Romanian *NRA (CNCAN)* in the Licensing Review of the Seismic Safety Design of Cernavoda Nuclear Power Plant, la *INCERC*, 2002-2004 (Responsabil contract)
- Proiectul Probabilistic Seismic Hazard Analysis for the Cernavoda NPP Site, *Rizzo Associates Inc*, Monroeville, PA, USA, *Stevenson & Associates*, Bucharest Office, la *UTCB*, 2003-2004 (Consultant)
- Proiectul *NATO* - Armonizarea hazardului seismic și reducerea riscului în țările afectate de sursa Vrancea, *Sciences for Peace Project Plan*, la *INCERC*, (Responsabil proiect, România, 2004-2006)
- Proiectul *Națiunilor Unite RADIUS*, Risk Assessment tools for Diagnosis of Urban areas against Seismic disasters. Understanding Urban Seismic Risk around the World, *Geohazards International, Stanford, Ca*: City of Bucharest seismic profile, 1997-1999 (Responsabil proiect)
- Probabilistic hazard analysis to the Vrancea earthquakes in Romania. Part I in the Experience database of Romanian facilities subjected to the last three Vrancea earthquakes. Research Contract No. 8233/EN R1, 1995 and No. 8223/1996, EN with *International Atomic Energy Agency*, Vienna, la *Stevenson & Assoc.* Bucharest (Responsabil contract)
- Seismic microzonation of the city of Bucharest-Romania, *Association Française du Génie Parasismique*, 1997-1999 (Responsabil contract)

- Programul "Strong earthquakes: A Challenge for Geosciences and Civil Engineering", *German Science Foundation Grant SFB461*, at *University of Karlsruhe*, Germany; Proiectele: Damage estimation and retrofitting of buildings in central Bucharest and Geotechnical and seismic microzoning of Bucharest 1995- 2007 (Responsabil al celor doua proiecte în România)
- Implementing of Structural Eurocodes in Romanian civil engineering standards. *TEMPUS Project CME 001198/95*, *Universitatea Tehnica de Construcții București, UTCB*, 1995-1998. (Responsabil proiect pentru Eurocodurile EC1- Basis of design și EC8 – Seismic action)

Cărți publicate

- *Wind, snow and temperature effects on structures based on probability*, Abacus Press, Tunbridge Wells, Kent, United Kingdom of Great Britain, 411 p. 1975 (D. Ghiocel & D. Lungu)
- *Structural Reliability and Risk Analysis*, Editura Conspress, București, 2007, 148 p, (R. Văcăreanu, A. Aldea, D. Lungu)
- *Clădiri amplasate în zone cu mișcări seismice puternice* ISBN, 973-8391-040 / Orizonturi Universitare / Timișoara, 2003, 479p, (autor si coordonator)
- *Advanced Structural Analysis*, Conspress, Universitatea Tehnica de Construcții București, UTCB, 2000. 177p. (D. Lungu, R. Vacareanu, A. Aldea, C. Arion)
- *Metode probabilistice in calculul construcțiilor*. Editura Tehnica București, 1983, 443 p. (D. Lungu & D. Ghiocel)
- *Siguranța structurilor*. Universitatea Tehnica de Construcții București, UTCB, 683 p, 1973, (D. Ghiocel & D. Lungu).
- *Actiunea vântului, zăpezii și variațiilor de temperatură în construcții*. Editura Tehnică, București 1972, 372 p, (D. Ghiocel , D. Lungu)
- *Monumentele istorice din Bucuresti, Cladiri si incendii în Bucuresti*. Centrul seismic vrancean si efectele sale in *Cartea Neagra, Distrugerea patrimoniului architectural si urbanistic din Romania: 01 Bucuresti (1990-2009)*, editura CNI, Coresi, Bucuresti, p.12-13; 30-37 (Proiect realizat cu sprijinul *Ministerului Culturii, Cultelor si Patrimoniului National*), ISBN 978-973-570-349-3. coautor

Cărți publicate ca editor

- *România, Patrimoine Mondial/World Heritage. Patrimoine Saxone de Transylvanie/Saxon Heritage in Transylvania*, Institutul Național al Patrimoniului, 122p. București, 2010 (coordonarea generală D. Lungu, T. Sinigalia)
- *România, Patrimoine Mondial/World Heritage*, Institutul Național al Monumentelor Istorice, 402 p., București, 2007 (coordonarea generală D. Lungu, T. Sinigalia)
- *Volume 1 - Intervention strategies for the seismic protection of historical building heritage in the Mediteranian basin*, ISBN 978-88-7699-169-1, Mazzolani F., Matteis G., Mandara A., Ascar G.A., Lungu D, Esposto M. editori), Polimetrica International Scientific Publisher.
- *Earthquake Loss Estimation and Risk Reduction*, Conferinta Internationala, Oct. 24-26, 2002, la Academia Romana, Bucuresti. Vol. I, 366 p., Vol II, 420 p., (Lungu, D., Wenzel, F., Mouroux, P., Tojo, I. editori)
- *Earthquake Hazard and Countermeasure for Existing Fragile Buildings*. JICA International Seminar, Nov. 23-24, 2002, Bucuresti, (Lungu D., Saito T. editori)

- *Vrancea Earthquakes. Tectonics, Hazard and Risk Mitigation*, Proceedings of the First International Workshop on Vrancea Earthquakes, Nov. 1997, Bucharest. (Wenzel, F., Lungu, D., editors), Kluwer Academic Publishers, 1999, 374 p.
- *Implementing of Structural Eurocodes in Romanian Civil Engineering Standards. EUROCODE 8 - Design examples with emphasis on seismic condition of Romania*. TEMPUS Project CM E 001198/95, Bridgeman Ltd. Timisoara, 433 p. (D. Lungu, F. Mazzollani, S. Savidis editori), 1997.

Membru în Asociații profesionale

- Delegat național al României la *World Association of Earthquake Engineering, WCEE*, 2004 – 2012
- Membru în *AFPS, Asociația Franceza de Inginerie Seismica*, Paris, 1994-prezent
- Vicepreședinte *AICR, Asociația Inginerilor Constructori din România*, 1997-prezent
- Vicepreședinte *ARIS, Asociația Romana de Inginerie Seismica*, 2001-prezent
- Membru în *AICPS, Asociația Inginerilor Proiectanți de Structuri*, 2006 - prezent

Membru în comitetul editorial

- Comitetul editorial, *Journal of Earthquake Engineering*, Imperial College Press, London, UK, 1997-2003 (membru)
- Colegiul de redacție, *Revista Monumentelor Istorice* (presedintele Colegiului) și *Buletinul Comisiei Monumentelor Istorice, Institutul Național al Monumentelor Istorice*, 2007 – 2010

Comisii de specialitate

- Președintele *Comisiei de Inginerie Civilă a Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare*, Ministerul Educației și Cercetării 2006 – 2011
- Membru în *Comisia Prezidențială pentru patrimoniul construit, siturile istorice și naturale*, Mai 2008 – 2010.
- Membru în *Comisia Națională a României pentru UNESCO*, subcomisia Știință – Cercetare, 2008 – 2011
- Președinte al *Comisiei 7, Transporturi, Construcții, Amenajarea teritoriului și Materiale de construcții*; Colegiul Consultativ al Agenției Naționale pentru Cercetare, Dezvoltare, Educației și Cercetării, 2002 – 2006
- Membru în Biroul Permanent al *Comisiei Inginerie Civilă a Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare*, Ministerul Educației și Cercetării 2011-2012.
- Membru în *Comisia Națională a Monumentelor Istorice*, Ministerul Culturii și Cultelor, 2006 - 2011
- Membru în *Comitetul Director al Asociației Romane a Antreprenorilor in Constructii ARACO*, 2004 - 2007
- Membru în *Comisia pentru Reducerea Riscului Seismic* la Ministerul Dezvoltarii Regionale și Turismului, 1997-prezent

Conferințe invitate

- Professor invitat, *University of Genova*, Conferința: Natural risk reduction in Romania and Wind action on *Brancusi Endless Column* according to EUROCODE 1, 2001
- Profesor invitat, *Institut für Bodenmechanik und Bauinformatik, Technische Universität Dresden*, Nov-Dec, 1995
- Profesor invitat la *Sonderforschungsbereich SFB210 al Fundatiei Germane pentru Stiinta* "Fluid mechanical design rules for buildings", *Institut für Massivbau, Universität Karlsruhe*, Jul-Aug, 1994.
- Lector invitat: History of Earthquake engineering, Lessons learned and outcomes in today practice - Perspective from Romania, *Exceptional event: 25th Anniversary, Association Francaise du Genie Parasismique*, Nice, 13 June, 2008
- Lector invitat la *Civil Protection School in Kosovo*, Module 4: Natural hazards, Module 8: Natural Risks, Disasters and Effects. *Acordul Europa Major Hazards Agreement, Consiliul Europei*, 2001 (2 sesiuni).
- Lector invitat la *304th meeting of the German Reactor Safety Commission & 63rd meeting of the RSK-Committee for Layout and Civil Works*, Oct.21/22, 1996, *Technische Universität München*
- Lungu, D., Earthquake mitigation in Romania: synergy from international projects. International workshop on: Regional Cooperation in the field of Risk Mitigation and Emergency Management, Skopje Macedonia, December 13-14, 2004
- Lungu, D., Situatii de urgenta in dezvoltarea urbana a capitalei. Protectia cladirilor din clasa 1 de risc seismic si din "zone protejate", expuse demolarii. 240 de ani de la prima reglementare de prevenire a incendiilor in Romania, Ministerul Internelor si Reformei Administrative, Inspectoratul General pentru Situatii de Urgenta, Sala Operei Romane Bucuresti, Septembrie 5, 2008
- Lungu, D., Earthquake Mitigation in Romania: synergy for international projects. "Strong Earthquakes: A Challenge for Geosciences and Civil Engineering", Review of the Collaborative Research Center 461, German Science Foundation, Karlsruhe University, Sept. 28-29, 2004
- Lungu, D., Disaster monitoring using space technology. Space and aeronautics: towards European and international integration. Romanian Space Agency in cooperation with the Ministry of Education and Research, Bucharest, Romania, 10-11 December 2002
- Lungu, D., Seismic risk mitigation in the Vrancea region, Romania. Hazard Risk Mitigation in Europe and Central Asia, World Bank Workshop, Istanbul, Oct. 26-28, 2004
- Lungu, D., Arion, C., Protectia seismica si protectia impotriva demolarii patrimoniului construit. Conferinta Nationala Terra si Viata, Academia Romana, Comisia Nationala a Romaniei pentru UNESCO, Bucuresti, 22aprilie 2008
- Lungu, D., Arion, C., Riscul seismic pentru cladirile monument din Transilvania, Conferinta internationala "Restaurarea de cladiri-monument din Transilvania sub aspectul influentelor de mediu si climatice", Medias, 3-4 Iunie 2009
- Lungu, D., Arion, C., Protectia cladirilor din Bucuresti: (i) antiseismica si (ii) impotriva demolarii, Colocviul National Istorie, istoria artei decorative, conservare-restaurare, relatii publice, Muzeul National Cotroceni, Bucuresti, 21-22 Mai 2008
- Lungu, D., Riscuri naturale si antropice pentru patrimonial construit al Bucurestiului, Ziua internationala pentru Reducerea Riscului Dezastrelor Naturale, Inspectoratul General pentru Situatii de Urgenta , Punctul National Focal Hyogo Framework for Action, 14 Octombrie 2009
- Lungu, D., Arion, C., Aldea, A., Vacareanu, R., Management of Bucharest earthquake risk. Synergy from national and international actions, NATO Advanced Workshop "Management

of urban earthquake risk in central asian and Caucasus countries”, Istanbul, Turkey, 14-19 May, 2006

- Lungu, D., Arion, C., Aldea, A., Protecția seismică a patrimoniului cultural național. Exigente europene și urgente de consolidare în România. A VIII a Conferința națională a specialiștilor din domeniul protejării patrimoniului cultural național. Gala premiilor patrimoniului cultural național. Muzeul Național de Artă al României, 30 martie – 1 aprilie 2005
- Lungu, D., Patrimoniul construit al Bucureștiului este în pericol! Comisia Națională a României pentru UNESCO organizatori ai “Știința și patrimonial”, Aula Bibliotecii Academiei Române, 14 Aprilie 2009.
- Lungu, D., Protecția seismică a Bucureștiului de altă dată, Academia Română și Comitetul Român de Istorie și Filosofia Științei și Tehnicii organizator al “Dezvoltarea Urbanistică a Capitalei. Orașul ca Bun Cultural”, Aula Academiei Române, 31 Mai 2006
- Lungu, D., Arion, C., Aldea, A., Protecția seismică a construcțiilor ce aparțin patrimoniului cultural național. A VII a Conferința națională a specialiștilor din domeniul protejării patrimoniului cultural național. Gala premiilor patrimoniului cultural național. Muzeul Național de Artă al României, Sala Auditorium 31 martie – 2 aprilie 2005

Comitete științifice internaționale

- Membru în International Scientific Committee of the *15th World Conference Earthquake Engineering, 15WCEE*, Sept 24-28, 2012, Lisabona, Portugal.
- Membru în Comitetul Științific Internațional al Conferinței Internaționale *Earthquake Engineering in the 21 st Century*, Aug 27-1 Sept, 2005, Skopje-Ohrid, Macedonia
- Membru în International Advisory Committee of the *Sixth International Conference on Seismic Zonation, 6ICSZ*, Nov 12-15, 2000, Palm Springs, California, USA.
- Membru în Comitetul Științific și Președinte al Sesiunii T7-1 Seismic Hazard and Risk, *XIth European Conference on Earthquake Engineering*, Sept 1998, Paris, Franța
- Membru în Comitetul Științific al *EUROMECH 372 Colloquium of the European Mechanics Society*, Oct 1997
- Membru în Comitetul Științific al *International Association for Bridge and Structural Engineering, IABSE Symposium on EUROCODE 1*, Delft, Martie 27-29 1996
- Raportor pentru Session A1.2, "Zonation as a tool for retrofit and design of new facilities" - *5th International Conference on Seismic Zonation*, Nice, France, Oct. 16-19, 1995

Premii, diplome

- Membru de onoare, *Société de Géographie*, Paris, Franța, 31 Mai 2008
- Diploma de Excelență, *Ministerul Culturii și Inspectoratul pentru Cultura Gorj*, pentru Restaurarea *Coloanei fără Sfârșit* de Constantin Brâncuși, Tg. Jiu, 17 Dec. 2000
- Diploma de Merit, Ministerul Culturii și Cultelor, pentru editarea albumului *Romania, Patrimoine Mondial / World Heritage*, 27 Martie 2008
- Premiul "*Traian Vuia*" al Academiei Române, 29 Nov 1977
- Diploma de Membru de Onoare, *Fundatia Panteonul României, Academia Roman*, Iulie 2009.
- Diploma „*Opera Omnia*” a Asociației Inginerilor Proiectanți de Structuri, AICPS, 18 Mai 2006
- Diplomă de Merit *Inspectoratul de Stat în Construcții*, 2004
- Diploma AGIR, *Asociația Generală a Inginerilor din România*, 11 Sept. 2004.

- Diplome de excelenta *Inspectoratul General pentru Situații de urgență*, 28 febr 2008, 14 Oct 2009
- Certificat de apreciere, *Ministerul Administrației și Internelor, Exercițiul internațional EADRCC cu NATO, Civil Emergency, Planning and Exercises*, Oct. 7, 2003

Activitatea de proiectare, consolidare și restaurare

- Restaurarea *Coloanei fără Sfârșit de Constantin lui Brâncuși*, Tg. Jiu, (2000) și 2004
- Consolidarea *Clădirii principale a Facultății de Medicină* din București, 1977
- Proiectarea Clădirii Sălii Mari a *Teatrului Național* București, 1969
- Proiectarea clădirilor: *Institutul Național de Geologie* București, Casa de Cultura Slatina, Hoteluri în Buzău, Botoșani, ș.a.
- Studii de hazard seismic pentru Centrala nucleară Cernavodă
- Comisii de evaluare a siguranței seismice și soluției de consolidare inovative pentru Primăria Municipiului București, Clădirea Guvernului din Piața Victoriei, București, ș.a.

Coduri / standarde de proiectare

- Codul de proiectarea seismică a construcțiilor, P100/1-2006 (și P100/1-2012, proiect), Capitolul 3 Acțiunea seismică, (*Ministerul Dezvoltării Regionale și Turismului*), 2012 (autor)
- Codul de proiectarea seismică a construcțiilor, P100/1-2011 (proiect), Capitolul 3 Acțiunea seismică, *Ministerul Transporturilor, Construcțiilor și Turismului (respectiv Ministerul Dezvoltării Regionale și Turismului)*, 2006 Buletinul Construcțiilor Vol. 5/ 2005 și Vol. 11-12/ 2007 (autor)
- Codurile de proiectare (i) Bazele proiectării structurilor în construcții, în Buletinul Construcțiilor Vol. 2 / 2006 (ii) Bazele proiectării structurilor în construcții, Acțiunea vântului, în Buletinul Construcțiilor Vol. 7/2005 și (iii) Bazele proiectării structurilor în construcții, Evaluarea acțiunii zăpezii asupra construcțiilor, în Buletinul Construcțiilor Vol. 2/2006, *Ministerul Transporturilor, Construcțiilor și Turismului* (autor și coautor)
- Codurile de proiectare (i) Bazele proiectării construcțiilor, (ii) Evaluarea acțiunii vântului asupra construcțiilor și (iii) Evaluarea acțiunii zăpezii asupra construcțiilor, (*Ministerul Dezvoltării Regionale și Turismului*) 2012 (autor și coautor)
- Standardul *SR11100/1-93*, Macrozonarea seismică a României. *Institutul Român de Standardizare*, București, 1993 (coautor).

Articole publicate (semnificative)

2015

- Neagu, C., Lungu, D., Arion, C. (2015). Major historical earthquakes in Romania and contemporary seismic risk management activities. 7th International Conference on Seismology and Earthquake Engineering, Teheran, Iran, 18-21 May 2015

2014

- Vacareanu, R., Demetriu, D., Lungu, D., Pavel, F., Arion, C., Iancovici, M., Aldea, A., C., Neagu, C. (2014). Empirical ground motion model for Vrancea intermediate-depth seismic source. *Earthquakes and Structures, An International Journal*, Volume 6, Number 2, pp 141-161, DOI: 10.12989/eas.2014.6.2.127
- Demetriu S., Vacareanu R., Lungu D., Pavel F., Arion C., Iancovici M., Aldea A., Neagu C., (2014). Ground motion prediction equations for Vrancea intermediate-depth earthquakes. In:

Proceedings of the 9th International Conference on Structural Dynamics, EURODDN 2014, Porto, Portugal, 30 June - 2 July 2014, A. Cunha, E. Caetano, P. Ribeiro, G. Müller (eds.), ISSN: 2311-9020; ISBN: 978-972-752-165-4

- Vacareanu R., Lungu D., Aldea A., Demetriu S., Pavel F., Arion C., Iancovici M., Neagu C. (2014). Probabilistic seismic hazard assessment for Romania. Part III: Seismic Hazard Maps. In: Vacareanu R, Ionescu C (eds) Proceedings of the 5th National Conference on Earthquake Engineering & 1st National Conference on Earthquake Engineering and Seismology, CONSPRESS, Bucharest, pp. 229-236.
- Pavel, F., Văcăreanu, R., Lungu, D. (2014). Bi-normalized response spectra for various frequency content ground motions. *Journal of Earthquake Engineering*, 18(2): 264-289.

2013

- Pavel F., Lungu D., 2013. Correlations between frequency content indicators of strong ground motions and PGV. *Journal of Earthquake Engineering*, DOI:10.1080/13632469.2012.762957
- Vacareanu R., Lungu D., Aldea A., Arion C., Neagu C., Gaman F., Petrescu F., Aldea M. (2013). Expected direct seismic losses assessment using GIS. Case study for Iasi Municipality, Technical University of Civil Engineering Bucharest - Scientific Journal - Series: Mathematical Modeling in Civil Engineering, No. 3, 2013, ISSN 2066-6926, p. 12-18
- Vacareanu, R., Pavel, F., Lungu, D., Iancovici, M., Demetriu, S., Aldea, A., Arion, C., Neagu, C. (2013). Uniform hazard spectra for cities in Romania. Proceedings of the International Conference on Earthquake Engineering SE-50 EEE, Skopje, Macedonia, Paper no. 164.

2012

- Vacareanu, R., Lungu, D., Arion, C., (2012). Seismic fragility functions for masonry buildings in Romania. 15th World Conference of earthquake engineering, 24-28 September 2012, Lisbon, Portugal, paper 1969- e-poster
- Lungu D., Arion, C. (2012). Seismic Risk and/or Real Estate Risk for the Bucharest Heritage Buildings. 15th World Conference of earthquake engineering, 24-28 September 2012, Lisbon, Portugal. paper 1996- oral
- Pavel, F., Lungu, D. (2012). Frequency content indicators of strong ground motions, paper no. 2372. In 15th World Conference of Earthquake Engineering, 24-28 September 2012, Lisbon, Portugal. CD-ROM
- Lungu D, Arion C., 2012. Intervention Strategies, Chapter 5.. Volume 1 - Intervention strategies for the seismic protection of historical building heritage in the Mediterranean basin, 80 pages in Polimetrika International Scientific Publisher ISBN 978-88-7699-169-1.

2011

- Lungu D., 2011. O analiza statistica a structurii Planului National de Restaurare 2007-2010, *Transylvania Nostra*, Built Heritage, Year V, Issue 17, Febr. 2011, Cluj, p. 36-40.
- R. Vacareanu, A. Aldea, C. Arion, D. Lungu, V. Popa, E.S. Georgescu. National centre for the seismic risk reduction, *Bulletin of International Institute of Seismology and Earthquake Engineering, IISSE* Tsukuba, Japan, Vol 45, p.147-154, ISSN 0074-655X
- Lungu D., Arion, C., Aldea, A. Vacareanu, 2011. R. Seismic protection and prevention of the demolition of Bucharest heritage buildings. p. 190-208, Surveys and activities on Post-earthquake disaster: *UNESCO-IPRED-RIHS International Workshop*, Padang, Indonesia, 6 - 8 July 2010, UNESCO <http://unesdoc.unesco.org/images/0021/002138/213843E.pdf>

- Lungu D., Arion, C., Aldea A., Vacareanu V., Seismic risk versus real estate risk for the Bucharest heritage buildings, *TIEMS, The International Emergency Management Society, Brussels, Annual Conference* in Bucharest, Romania, 7 - 10 June, 2011, <http://www.tiems.info/tiems-events-2009/tiems-2010.html>
- Vacareanu R., A. Aldea, C, Arion, D. Lungu, 2011. National centre for seismic risk reduction and *Japan International Cooperation Agency Technical Cooperation Project* in Romania. *TIEMS, The International Emergency Management Society, Brussels, Annual Conference* in Bucharest, Romania 7th - 10th June 2011.
- A. Aldea, D. Lungu, Vacareanu R., C, Arion, 2011. Need for regional harmonization of Vrancea seismic hazard. *TIEMS, The International Emergency Management Society, Brussels, Annual Conference* in Bucharest, Romania 7th - 10th June 2011.
- R. Vacareanu, D. Lungu, A. Aldea, C. Arion, C. Neagu, F. Gaman, F. Petrescu, M. Aldea Evaluarea pierderilor seismice directe asteptate utilizand SIG. Studiu de caz pentru municipiul Iasi. Conferinta nationala Ingineria Cladirilor, UTCB, 29-30septembrie 2011, <http://civile.utcb.ro/cic/>

2010

- Lungu D., R. Vacareanu, S. Demetriu, C. Arion, A. Aldea. Statistics of the maximum annual wind load in Romania, *Recent advances in research on environmental effects on buildings and people*, Proceedings of 6th International Symposium on Environmental Effects on Buildings and People: Actions, Influences, Interactions, Discomfort. A. Flaga, T. Lipecki editors, Cracow: Polish Association for Wind Engineering, 2010 + CD-ROM, p.47-55.
- Lungu D., S. Demetriu, A. Aldea, C. Arion, R. Vacareanu. Statistics of the maximum annual snow load in Romania, *Recent advances in research on environmental effects on buildings and people*, Proceedings of 6th International Symposium on Environmental Effects on Buildings and People: Actions, Influences, Interactions, Discomfort. A. Flaga, T. Lipecki editors, Cracow: Polish Association for Wind Engineering, 2010 + CD-ROM, p.312-319
- Lungu D. Protectia patrimoniului construit din zone protejate situate in Bucuresti, în *Monumentul XI. Lucrările celei de-a XI-a ediții (2009) a Simpozionului Național Monumentul – Tradiție și Viitor, Iași*, 2010, Vol 2, p. 533-541, ISSN 1844-9042.
- Lungu D., Craifaleanu I., Seismic assessment and retrofitting of existing structures in Romania, *Safety and Reliability of Industrial Products, Systems and Structures* Edited by C. Guedes Soares, CRC Press 2010, p 245–259, Print ISBN: 978-0-415-66392-2, eBook ISBN: 978-0-203-81865-7

2009

- Zaicenco A., Craifaleanu I.-G., Lungu D., I. Paskaleva, G. Ozcebe, Harmonization of seismic hazard and risk reduction in the Vrancea zone: *Scientific results of a NATO research project*, *Constructii*, nr. 2 / 2009. p. 35-51, ISSN 1221 - 2709
- Lungu D, Aldea, A. Arion C. Seismic protection & protection against demolition of Bucharest heritage building. *Protection of Historical Buildings, PROHITECH 09, 2009 Taylor and Francis Group, London*, p. 1311-1320. ISBN 978-0-415-55803-7.
- Arion, C., Lungu D., Calarasu E., Neagu, C., Geotechnical in situ investigation used for seismic design of buildings in Romania, *Proceeding of IS-Tokyo 2009, International Conference on Performance-Based Design in Earthquake Geotechnical engineering – from Case History to Practice*, published by CRC Press, Balkema, ISBN 978-0-415-55614-9, p. 1293-1301, 2009
- Aldea A., Demetriu S., Vacareanu R., Lungu D., Reteaua seismica a Centrului National pentru Reducerea Riscului Seismic; *A 4-a Conferința Naționala de Inginerie Seismică*, Bucuresti, 18 Dec 2009; *Conspress*, p. 1-10, ISBN 978-973-100-096

- Lungu D., Riscuri naturale și antropice pentru patrimoniul construit al Bucureștiului; *A 4-a Conferința Națională de Inginerie Seismică*, Bucuresti, 18 Dec 2009; *Conspress*, p.111-123, ISBN 978-973-100-096
- Vacareanu R., Lungu D., Aldea A., Arion C. Evaluarea probabilistica a hazardului seismic din sursa subcrustala Vrancea pentru municipiul Iasi; *A 4-a Conferința Națională de Inginerie Seismică*, Bucuresti, 18 Dec 2009; *Conspress*, p.173-183, ISBN 978-973-100-096
- Lungu D., 2009. Risks for heritage buildings in Bucharest, Romania. *World Bank Conference "Istanbul International Conference on seismic risk mitigation"*, Proceedings, Dec. 8-10, 2009, 12 pages.
- Văcăreanu, A. Aldea, D. Lungu, C. Arion, C. Neagu, F. Gaman, Managementul riscului seismic urban utilizand IIS. Evaluarea hazardului seismic local. Studiu de caz pentru municipiul Iasi, *Editura Politehniun, Universitatea Tehnica Gheorghe Asachi Iasi*, 2009, 68 pag.
- Lungu D., Proiectul *IRPP/SAAH* de reabilitare integrată a patrimoniului de arhitectura si arheologic din Romania, *Revista Monumentelor Istorice*, Nr.1-2/2009, Anul LXXVIII. p. 7-17, *INMI – Institutul National al Monumentelor Istorice*, Bucuresti ISSN 1220-174x.
- Lungu D. Patrimoniul construit al Bucurestiului este in mare pericol, în *Monumentul X. Lucrările celei de-a X-a ediții (2008 a Simpozionului Național Monumentul – Tradiție și Viitor, Iași*, (2009) p. 435-445.

2008

- Lungu D., I. Craifaleanu, Shake maps of strength and displacement demands for Romanian Vrancea earthquakes, *NATO Science for Peace and Security Series C: Environmental Security. Harmonization of Seismic Hazard in Vrancea Zone. Special Emphasis on seismic risk reduction*, Springer, 2008. p. 241-262
- Lungu D., C. Arion, A. Aldea, Seismic protection and protection against demolition of Bucharest historical buildings, *NATO Science for Peace and Security Series C: Environmental Security. Harmonization of Seismic Hazard in Vrancea Zone. Special Emphasis on seismic risk reduction*, Springer, 2008. p. 101-116
- Lungu D., A. Aldea, C. Arion, Romania's seismicity and seismic hazard: from historical records to design codes, *NATO Science for Peace and Security Series C: Environmental Security. Harmonization of Seismic Hazard in Vrancea Zone. Special Emphasis on seismic risk reduction*, Springer, 2008. p. 1-16
- Lungu D., Craifaleanu I., Shake Maps of Strength and Displacement Demands for Romanian Vrancea Earthquakes. *The 14th World Conference on Earthquake Engineering*, Oct 12-17, 2008 Beijing, China, in 14th WCEE Conference Proceedings, Paper no. 03-03-0060
- Văcăreanu R., Lungu D., A. Aldea, A. Arion, Kato H., 2008. Outline and Outcomes of The JICA Technical Cooperation Project on Reduction of Seismic Risk in Romania. *The 14th World Conference on Earthquake Engineering*, Oct 12-17, 2008 Beijing, China, 14th WCEE Conference Proceedings, Paper no. 09-01-0034.
- Lungu D., Vacareanu R., Aldea A. Seismicity of Vrancea subcrustal source and corresponding seismic instrumentation. *Proceedings of the International Symposium Urban Habitat Constructions Under Catastrophic Events*, Oct. 23 – 26, Malta, 2008, p. 129 – 135.
- Lungu D., Arion C., Calarasu E., Bucharest soil conditions and input ground motion for the structural performance analysis. *Proceedings of the International Symposium Urban Habitat Constructions Under Catastrophic Events*, Oct. 23 – 26, 2008, Malta, p. 135 – 141.
- Craifaleanu I. G., Lungu D., R. Vacareanu, O. Anicai, A. Aldea, C. Arion, Dezvoltarea unei platforme software GIS pentru evaluarea riscului seismic in Romania, *Revista Constructii*, nr. 2 / 2008, p. 39-46. ISSN 1221 - 2709

- Lungu D., 2008. Collaborative Research and Lessons of future earthquake risk reduction in Romania. *IPRED – International. Platform for Reducing Earthquake Disaster* – First Session, *UNESCO Headquarters*, Paris, July, 8-10, <http://www.ipred-iisee.org/IPRED1/>
- Lungu, D., Aldea, A., Arion, C., Vacareanu, R., Major Historical Earthquakes in Romania, *International Conference Constructions 2008*, 9-10 May, *Technical University of Cluj Napoca, Acta Technica Napocensis*, Section Civil Engineering and Architecture, ISSN 1221-5848, No.51, Vol.1, p. 157-165
- Lungu, D., Vacareanu, R., Aldea, A., Arion, C., National and international programs for reduction of seismic risk in Romania, *International Conference Constructions 2008*, 9-10 May, *Technical University of Cluj Napoca, Acta Technica Napocensis*, Section Civil Engineering and Architecture, ISSN 1221-5848, No.51, Vol.1, p. 165-172
- Lungu D., Arion C. Protecția seismică și protecția împotriva demolării patrimoniului construit. *Conferința Națională Terra și Viața, Comisia Națională a României pentru UNESCO*, Academia Română, București, 22 Apr 2008, 63 p.
- Lungu D., Aldea A., Arion C., Vacareanu, R., Cutremure istorice majore in Romania, *Transylvania Nostra*, Built Heritage, Year II, Issue 5-6, No. 1-2/2008, Cluj, p. 6-31, ISSN 1842-5631
- Lungu, D., Vacareanu, R., Aldea, A., Arion, C., Codul de proiectare seismica P100-01. Prevederi de proiectare pentru cladiri. Cap.3. Actiunea seismica, *Buletinul AICPS*, nr.4/2006, Partea 1, p.30-80.

2007

- Lungu, D., Aldea A., Arion C., Vacareanu R., Cutremure istorice majore în România, *Revista Monumentelor Istorice*, Nr. LXXVI, 1-2/2007, p.96-120, *Institutul Național al Monumentelor Istorice*, București
- Lungu D., Craifaleanu I.G., I.S. Borcia, Zonarea caracteristicilor cutremurelor vranceane si a efectului acestora asupra constructiilor, *Revista Constructii*, nr. 1 / 2007, p. 71-80. ISSN 1221 - 2709
- Lungu, D., Aldea A., Arion C., Vacareanu R., Seismic hazard, vulnerability and risk for Vrancea earthquakes, *Proceedings of the International Symposium on Strong Vrancea Earthquakes and Risk Mitigation*, Oct 4 – 6, 2007, Bucharest, p. 291 – 307
- Lungu, D., Craifaleanu I., Shake maps of spectral response ordinates for Vrancea ground motions, *Proceeding of International Symposium on Strong Vrancea Earthquakes and Risk Mitigation*, Oct 4 – 6, 2007, Bucharest, p. 307-317
- Lungu, D., Craifaleanu I., Spatial Distribution of Strength and Displacements Demands for Romanian Earthquakes, *Proceedings of International Symposium on Seismic Risk Reduction The JICA Technical Cooperation Project in Romania*, Romanian Academy, UTCB and INCERC, 26 – 27 April 2007, Bucharest, in Proceedings, p. 407 - 412

2006

- D. Lungu, C. Arion, E. Calarasu, Seismic microzonation of the city of Bucharest, *Proceedings of the First European Conference on Earthquake Engineering and Seismology*, Geneva, Sept 3-8, 2006, Paper No. 993, Abstract book, p. 303.
- D. Lungu, C. Arion, R. Vacareanu, National and international efforts for seismic risk mitigation in Bucharest, Romania, *Proceedings of the First European Conference on Earthquake Engineering and Seismology*, Geneva, Sept 3-8, 2006, Paper No. 995, Abstract book, p. 132.
- D. Lungu, S. Demetriu, A. Aldea, C. Arion, Probabilistic seismic hazard assessment for Vrancea earthquakes and seismic action in the new seismic code of Romania, *Proceedings of*

the First European Conference on Earthquake Engineering and Seismology, Geneva, Sept 3-8, 2006, Paper No. 1003, Abstract book, p. 303.

- F. Wenzel, G. Schmitt, E., Gottschämmer, V. Sokolov, B. Sperner, D. Hannich, M. Böse, M. Markus, D. Lungu, G. Marmureanu (2006), Earthquake risk research in Romania - 10 years of collaborative efforts, *Proceedings of the First European Conference on Earthquake Engineering and Seismology*, Geneva, Sept 3-8, 2006, Paper No. 1749, Abstract book, p. 340.
- I. Craifaleanu, Lungu D., I.S. Borcia, Shake maps of nonlinear spectral ordinates for Romanian earthquakes, *Proceedings of the First European Conference on Earthquake Engineering and Seismology*, Geneva, Sept 3-8, 2006, Paper No. 1257, Abstract book, p. 460.

2005

- Lungu, D., Arion, C., Vacareanu, R., City of Bucharest: building vulnerability and seismic risk reduction actions, *Proceedings of International Conference 250th Anniversary of the 1755 Lisbon earthquake*, Portugal, Nov.1-4, 2005, p.653-659.
- Lungu, D., Solari, G., Vacareanu, R., Aldea, A., Arion, C., Demetriu, S., 2005. Ambient vibration measurements and along-wind response of the Brancusi Endless Column, Romania, EACWE4 - *The Fourth European & African Conference on Wind Engineering* July 11-15, 2005 Prague, Czech Republic, Proceedings& CD-ROM, J.Naprsteck and C.Fisher editors, p.214-215
- Lungu, D., Demetriu, S., Arion, C., Aldea, A. Basic code parameters for wind action in Romania harmonised with EC1, EACWE4 - *The Fourth European & African Conference on Wind Engineering* July 11-15, 2005 Prague, Czech Republic, Proceedings& CD-ROM, J.Naprsteck and C.Fisher editors, p.216-217
- Lungu, D., Aldea, A., Demetriu, S. City of Bucharest: seismic hazard and microzonation of site effects, *Proceedings of International Conference 250th Anniversary of the 1755 Lisbon earthquake*, Portugal, Nov.1-4, 2005, Paper No.158.
- Lungu D., Un program national pentru monumentele istorice, *Simpozion dezbatere, Centrul financiar-bancar al Capitalei*, 6apr, 2005, *Magazin Istoric*, p.58 (numar special editat de BNR si Fundatia Magazin Istoric, 2005)
- Lungu, D., Arion, C., Aldea, Seismic protection of cultural heritage buildings in Bucharest, *The Second International Conference: Science and Technology for Safe Development of Lifeline Systems, Natural Risks: Earthquakes and Co-seismic Associated Risks, Neotectonics and Seismic Hazard Assessment in the CEI Area*, Oct 24-25, 2005, Bratislava, Slovak Republic, p. 117-12

2004

- Lungu, D., Aldea, A., Demetriu, S., Arion, C., Probabilistic zonation of Vrancea seismic hazard. Eurocode 8 representation of design action, *Proceedings of the International Conference Earthquake Loss Estimation and Risk Reduction*, Oct 24-26, 2002, Bucharest, Vol. 1, p.137-150.
- Lungu, D., Aldea, A., Arion, C., Cornea, T., Vacareanu, R., RISK_UE, WP1: European Distinctive features, inventory database and typology, *Proceedings of the International Conference Earthquake Loss Estimation and Risk Reduction*, Oct 24-26, 2002, Bucharest, Vol. 2, pag. 251-272.
- Lungu, D., Seismic risk mitigation in the Vrancea region, Romania, *Hazard Risk Mitigation in Europe and Central Asia, World Bank International Workshop, Istanbul*, Turkey, Oct 26-28, 2004.
- Lungu, D., Arion, C., Aldea, A., Vacareanu R., Representation of seismic action in the new Romanian code for design of earthquake resistant buildings P100-2003, *13th World Conference on Earthquake Engineering*, Vancouver, Canada, CD-ROM, paper 1796.

- Lungu, D., Aldea, A., Demetriu, S., Craifaleanu, I., Seismic strengthening of buildings and seismic instrumentation – two priorities for seismic risk reduction in Romania, *Acta Geod. Geoph. Hung.* Vol. 39(2-3), p. 233-258 (2004)
- Lungu D., Aldea A., Demetriu S., Craifaleanu I. 2004, "Seismic stengthening of buildings and seismic instrumentation - Two priorities for seismic risk reduction in Romania", *Acta Geod. Geoph. Hung.* Vol 39 (2-3), pp. 233-258

2003

- Lungu, D., Aldea, A., Arion, C., Vacareanu, R. "WP1 – European distinctive features, inventory database ad typology", *Bulletin of the Technical University of Civil Engineering Bucharest*, No. 2/2003, p. 12-42
- Aldea, A., Lungu, D., Demetriu, S., Cornea, T., Vacareanu, R. "City of Bucharest: distinctive features and seismic hazard", *Bulletin of the Technical University of Civil Engineering*
- Lungu, D., Aldea, A., Arion, C., Demetriu, S., 2003. "Probabilistic zonation of Vrancea seismic hazard. Eurocode 8 representation of design action" *International Conference Constructions 2003, Technical University of Cluj-Napoca, Faculty of Civil Engineering*, Vol II, p.173-182
- Aldea, A., Lungu, D., Arion, A.. "GIS microzonation of site effects in Bucharest based on existing seismic and geophysical evidence", *6ème Colloque National Association Française du Génie Parasismique 2003*, Palaiseau, France, 8p., CD-ROM
- Lungu, D., Aldea, A., Arion, C., Demetriu, S. "Probabilistic zonation of Vrancea seismic hazard. Eurocode 8 representation of design action", *6ème Colloque National Association Française du Génie Parasismique 2003* Genie Parasismique-Aspects Dynamiques et Vibratoires en Genie Civil, Vol I, p.99-106,
- Lungu, D., Aldea, A., Demetriu, S., Arion, C., 2003. "From assessment of seismic hazard to retrofitting of most fragile buildings. Experience of Romania", *International Conference "Skopje Earthquake - 40 years of European earthquake engineering"*, Skopje, FYROM, 21p.

2002

- D. Lungu, G. Bartoli, M. Righi, R. Văcăreanu, A. Villa. Reliability under wind loads of the Brancuși Endless Column, Romania, *International Journal of Fluid Mechanics Research* 2002, Vol.29, Issue 3&4, p. 47 -53
- Lungu, D., Aldea, A. Earthquake engineering and site effects, *Proc. 12th Danube-European Conference of Geotechnical Engineering, Passau, Germany 27-28 May, 2002*, 10p.
- Lungu, D., Aldea, A., Arion, C., GIS mapping of earthquake risk and buildings retrofitting in Bucharest, *12th European Conference on Earthquake Engineering*, Sept 2002, London, UK, Published by Elsevier Science Ltd., Paper No. 584.
- R. Vacareanu, T. Cornea, D. Lungu - Improved procedure for assessing demand ADRS – *12th European Conference on Earthquake Engineering*, Sept 2002, London, UK, Published by Elsevier Science Ltd., Paper No. 585
- D. Lungu, R. Vacareanu G. Solari, A. Villa G. Bartoli, M. Righi - Reliability under wind loads of the Brancusi Endless Column, Romania - *3rd East European Conference on Wind Engineering*, May 2002, Kiev, Ukraine, in Proceedings, 10p.
- Solari, G., Lungu, D., Bartoli, G., Righi, M., Văcăreanu, R., Villa, A.- Brancusi Endless Column, Romania: Dynamic response and reliability under wind loading - *The Second International Symposium on Advances in Wind and Structures (AWAS'02)*, 21-23 Aug 2002, Pusan Convention Center, Pusan, Korea, in Proceedings, p.779-786.
- Wentel F., Lungu D., *Objectives and Challenges of Future Romanian – German Cooperation in Earthquake Mitigation International Conference Earthquake Loss Estimation and Risk*

- Reduction*, Romanian Academy, UTCB and INCERC, Oct 24-26, 2002, Proceedings, Vol. 1, p. 49 – 60
- Lungu D., Aldea A., Demetriu D., Arion C., Probabilistic Zonation of Vrancea Seismic Hazard. Eurocode 8 Representation of Design Action, *International Conference Earthquake Loss Estimation and Risk Reduction*, Romanian Academy, UTCB and INCERC, Oct 24-26, 2002, Proceedings, Vol. 1, p. 137 – 150
- Văcăreanu R., Lungu D., Arion C., Iancovici M., Assessment of Seismic Behavior and Fragility of Buildings Using HAZUS and ATC – 40 Methodologies – Case studies, *International Conference Earthquake Loss Estimation and Risk Reduction*, Romanian Academy, UTCB and INCERC, Oct 24-26, 2002, Proceedings, Vol. 2, p. 33 -42.
- Lungu, D., Earthquake risk and countermeasures for existing fragile buildings in Bucharest, Romania, Book of Abstracts, University of Genoa, Italy, *50th Anniversary of the European Seismological Commission (ESC): XXVIII General Assembly*, Genova, 2002, p.62

2001

- Lungu, D., Aldea, A., Arion, C., Cornea, T., Microzonage sismique de la ville de Bucarest-Roumanie. *Colloque Franco-Roumain d'Ingénierie, Normalisation et Recherche en Construction Mixte Acier-Beton*, Universitatea Politehnica, Timisoara, 14-15 Sept. 2001, p.395-418
- Lungu, D., Aldea, A., Arion, C., Cornea, T. Seismic risk management for Bucharest buildings. *Bucharest Seminar on Facilitation of Transfer of Know-How of the Construction Industry*, Oct. 26, 2001. Organized by Ministry of Land, Infrastructure and Transport, Japan, Ministry of Public Works and Technical University of Civil Engineering, Romania compiled by JICA, Japan International Cooperation Agency, Independent Film, p. 75-88, ISBN 973-85112-4-0
- R. Văcăreanu, T. Cornea, D. Lungu, Evaluarea comportarii structurale si a vulnerabilitatii seismice folosind metodologiile HAZUS si ATC-40 modificate, *A Doua Conferinta Nationala de Inginerie Seismica*, Bucuresti, 8-9 Nov. 2001, pag. 2 - 16
- Lungu, D., Aldea, A., Arion, C., Cornea, T., City of Bucharest Seismic Profile: from Hazard Estimation to Risk Management, *JICA International Seminar: Earthquake Hazard and Countermeasures for Existing Fragile Buildings*, Bucharest, Nov 23-24, 2000, in Proceedings, Independent Film, 2001, p.43-67.
- Vacareanu, R., Cornea, T., Lungu, D., 2001. Evaluation of Seismic Fragility of Buildings, *JICA International Seminar: Earthquake Hazard and Countermeasures for Existing Fragile Buildings*, Bucharest, Nov 23-24, 2000, in Proceedings, Independent Film, 2001, p.163-177.
- Lungu, D., Aldea, A., Demetriu, S., Vacareanu, R., Cornea, C., Convergente si divergente ale prescriptiilor romanesti pentru cutremur, vant si zapada cu prevederile codurilor europene EC1 si EC8 si american ASCE 7-98, *Buletinul AICPS*, 2001, 27 p.
- P. van Gelder, D. Lungu and M. Thomas, Vrancea Earthquakes using Prior Information, *Statistical Analysis of Extreme Values from insurance, finance, hydrology and other fields*. Extended 2nd edition, Feb 2001, by Rolf Reiss and M. Thomas, *Birkhäuser, Basel · Birkhäuser, Boston · Springer, New York*, 2001, ISBN 3-7643-6487-4 pp. 379-384

2000

- Lungu, D., Aldea, A., Arion, C., Demetriu, S., Cornea, T., Microzonage Sismique de la ville de Bucarest - Roumanie, *Cahier Technique de l'Association Française du Génie Parasismique*, No.20, p.31-63

- Lungu, D., Aldea A., Cornea, T., Arion, C., Seismic microzonation of the City of Bucharest, *6ICSZ Sixth International Conference on Seismic Zonation*, Palm Springs, California, USA, Nov.12-15, 2000, Proceedings p.489-496
- Lungu, D., Arion, C., Baur, M., Aldea, A. Vulnerability of existing building stock in Bucharest, *6ICSZ Sixth International Conference on Seismic Zonation*, Palm Springs, California, USA, Nov.12-15, 2000, Proceedings p.837-846
- Lungu, D., Aldea, A., Demetriu, S., Arion, C., Evaluarea riscului seismic pentru fondul construit din Bucuresti, *Buletinul AICPS*, 2000, No 2, p. 14- 36.
- Lungu, D., Vacareanu, R., Technical report for the *World Bank Project - Cultural Heritage, Rehabilitation of Endless Column by Constantin Brancusi*: Wind action on Brancusi Endless Column at Tg. Jiu, Romania, according to the wind loading codes from European Union, USA and Romania, 2000, 30 pag.
- Lungu, D., Aldea, A., Arion, C. Engineering, state & insurance efforts for reduction of seismic risk in Romania, *12th World Conference on Earthquake Engineering*, Auckland, New Zealand, Jan/Feb.2000, Proceedings & CD-ROM, 8p.
- Lungu, D., Trezos, C. JCSS Probabilistic Model Code, Section 2.17: Earthquake, *Joint Committee on Structural Safety JCSS*, 2000, draft, 14 p.
- Lungu, D., Aldea, A., Demetriu, S., Arion, C., Evaluarea riscului seismic pentru fondul construit din Bucuresti, *Gazeta AICR*, Anul XI, 2000, Nr.41-42, Mai, p. 3-25

1999

- Lungu, D., Seismic Hazard and countermeasures in Bucharest-Romania, *Bulletin of the International Institute of Seismology and Earthquake Engineering IISSE*, Tsukuba, Japan, Vol.33, p.341- 373.
- Lungu, D., Aldea, A., Zaicenco, A., Cornea, T., Hazardul seismic din sursa subcrustala Vrancea. Macrozonare si microzonare seismica. Conferinta: *Siguranta constructiilor in conditiile de teren si seismicitate specifice Romaniei si Republicii Moldova*, 27-28 Octombrie 1999 Chisinau, UTCB editor p. 1- 24.
- Lungu, D. & Aldea, A., Understanding Urban Risk Around the World. *United Nations RADIUS Project at Geohazards Int., Ca., USA*. Documents for the city of Bucharest seismic profile (29p.+25p.+8p) 1999.
- Lungu, D., Aldea, A., Cornea, T., Dynamic characteristics of the existing building stock of Romania, *EURODYN '99, Fourth International Conference of the European Association for Structural Dynamics*, Prague, 7-10 June 1999, Proceedings, Vol.2, p.897-902, Balkema, Rotterdam.
- Lungu, D., Arion, C., Aldea, A., Demetriu, S., Assessment of seismic hazard in Romania based on 25 years of strong ground motion instrumentation, *NATO ARW Conference on strong motion instrumentation for civil engineering structures*, Istanbul, Turkey, June 2-5, 1999, in Proceedings, 12p.
- Lungu, D., Aldea, A., Arion, C., Cornea, T., "Seismic hazard zonation in Eastern Europe", *Second International Conference on Earthquake Hazard and Seismic Risk Reduction*, September 15-21, Yerevan, Armenia, 1998, Kluwer Academic Publisher 1999, in Proceedings, 8p.
- Lungu, D., Aldea, A., Cornea, T., 1999. Hazardul seismic in Bucuresti, *Buletinul Asociatiei Inginerilor Constructori din Romania, AICR*, No 39-40, p.18-31
- Lungu, D., Eibl, J., Wenzel, F., Bahr, H.P., 1999. Seismic hazard and vulnerability of Bucharest, *Geophysical Research Abstracts*, Vol 1, No. 4, 1999, p. 852, Proceedings of the *24th General Assembly of the European Geophysical Society*, Hague, 19-23 April.
- Lungu, D., Cornea, C., Demetriu, S., Aldea, A., 1999. Microzonage sismique de la ville de Bucarest, *Cinquième Colloque National, Génie Parasismique et Réponse Dynamique des Ouvrages*, Association Française du Génie Parasismique AFPS, Cachan, 19-21 Oct., p.99-111

- Lungu, D., Aldea, A., Nedelcu, C., Cornea, T. Seismic hazard assessment in Romania using GIS technology, *Bulletin of the Technical University of Civil Engineering*, No.2/1998, p.2-11
- Lungu, D., Aldea, A., Nedelcu, C., Cornea, T. Use of the GIS technology for microzonation of the frequency content and effective peak values of soil response to earthquakes. *XIth European Conference on Earthquake Engineering*, Paris, France, 6-11 Sept 1998, Abstract Volume & CD-ROM, Balkema, p. 546
- Lungu, D., Aldea, A., Zaicenco, A., Cornea, T. PSHA and GIS technology - tools for seismic hazard macrozonation in Eastern Europe. *XIth European Conference on Earthquake Engineering*, Paris, France, 6-11 Sept 1998, Abstract Volume & CD-ROM, Balkema, p. 99
- Lungu, D., Demetriu, S., Arion, C. Seismic vulnerability of buildings exposed to Vrancea earthquakes in Romania. In *Vrancea Earthquakes. Tectonics, Hazard and Risk Mitigation*, Kluwer Academic Publishers 1998, Wenzel F., Lungu D., editors, Proc. of *First International Workshop on Vrancea Earthquakes*, Bucharest Nov. 1-4, 1997, p. 215-224.
- Lungu, D., Cornea, T., Nedelcu, C., 1998. Probabilistic hazard assessment and site-dependent response for Vrancea earthquakes. In *Vrancea Earthquakes. Tectonics, Hazard and Risk Mitigation*, Kluwer Academic Publishers 1998, Wenzel F., Lungu D., editors, Proc. of *First International Workshop on Vrancea Earthquakes*, Bucharest Nov. 1-4, 1997, p.251-268
- Lungu, D., Aldea, A., Moldoveanu, T., Ciugudean, V., Stefanica, M., 1998. Surface geology and dynamical properties of soil layers in Bucharest. In *Vrancea Earthquakes. Tectonics, Hazard and Risk Mitigation*, Kluwer Academic Publishers 1998, Wenzel F., Lungu D., editors, Proc. of *First International Workshop on Vrancea Earthquakes*, Bucharest Nov. 1-4, 1997, p.137-148
- Zaicenco A., Lungu D., Alkaz V., Cornea T, 1998. Classification and evaluation of Vrancea Earthquake records from Republic of Moldova, In *Vrancea Earthquakes. Tectonics, Hazard and Risk Mitigation*, Kluwer Academic Publishers 1998, Wenzel F., Lungu D., editors, Proc. of *First International Workshop on Vrancea Earthquakes*, Bucharest Nov. 1-4, 1997, p.67-74

- Lungu, D., Cornea, T., Aldea, A., Zaicenco, A. Basic representation of seismic action. In: *Design of structures in seismic zones: Eurocode 8 - Worked examples. TEMPUS PHARE CM Project 01198: Implementing of structural Eurocodes in Romanian civil engineering standards*. Edited by D.Lungu, F.Mazzolani and S.Savidis. Bridgeman Ltd., Timisoara, 1997, p.1-60.
- Lungu, D., Demetriu, S., Aldea, A. Structura fondului construit in Bucuresti si evolutia nivelului sigurantei in codurile de proiectare a constructiilor rezistente la cutremur, din perioada 1941-1997. *Prima Conferinta Nationala de Inginerie Seismica*, Bucuresti, 17-18 Sept. 1997, Editata de UTCB, Vol.1, p.193-204
- Lungu, D., Cornea, T., Aldea, A., Nedelcu, C., Demetriu, S. Uncertainties in mapping frequency content of soil response to various magnitude earthquakes. *EUROMECH 372 Colloquium of the European Mechanics Society, Reliability in nonlinear structural mechanics*, 21th-24th Oct. 1997, Université Blaise Pascal, Institut Français de Mécanique Avancée, Clermont-Ferrand, France, Proceedings p. 39-48.
- Lungu, D, Zaicenco, A., Cornea, T., van Gelder, P., Seismic hazard: Recurrence and attenuation of subcrustal (60-170km) earthquakes. *Proceedings of 7th International Conference on Structural Safety and Reliability ICOSSAR'97*, Kyoto, Japan, Nov. 24 – 28, 1997, Vol 7, No.3, p. 1525-1532

- Lungu, D. and P.H.A.J.M. van Gelder. Characteristics of wind turbulence with application to wind codes, *2nd European & African Conference on Wind Engineering*, Genova, Italy 1997, p.1271-1277
- Lungu D., Cornea T., Zaicenco A., Nedelcu C. Hazardul seismic din sursa Vrancea si microzonarea seismica a municipiului Bucuresti, *Prima Conferinta Nationala de Inginerie Seismica, Bucuresti*, 17-18 Sept. 1997, Editata de UTCB, Vol.1, p.11-28
- Sandulescu M., Lungu D., Dinu C., Popescu P., Enescu D., Capatana D., Moldoveanu T., 1997. Programul de cercetare-dezvoltare Anticutremur, 1997-2002. *Prima Conferinta Nationala de Inginerie Seismica, Bucuresti*, 17-18 Sept. 1997, Editata de UTCB, Vol.1, p.205-211
- van Gelder P., Lungu, D.,. A new statistical model for Vrancea earthquakes using prior information from earthquakes before 1900. *ESREL'97 International Conference on Safety and Reliability*, Lisbon, Portugal, June 17-20, 1997. Vol. 2, p.1535-1542

1996

- Lungu, D. Determination of the seismic loads assumptions in Romania and earthquake resistant design of essential facilities, especially of nuclear power plants. 304th Meeting of the *Reactor Safety Commission (RSK)* & 63rd Meeting of the *RSK-Committee for Layout and Civil Works*, Oct.21/22, 1996, Technische Universitat München.
- Lungu, D., Cornea T., Craifaleanu I., Demetriu S. Probabilistic seismic hazard analysis for inelastic structures on soft soils. *11th World Conference on Earthquake Engineering*, Acapulco, Mexico, June 23-28, 1996, CD-ROM, paper No.1768

1995

- Lungu, D., Cornea, T., Coman, O. Probabilistic hazard analysis to the Vrancea earthquakes in Romania. Part I in "Experience database of Romanian facilities subjected to the last three Vrancea earthquakes. Research report to the *International Atomic Energy Agency, Vienna*, Contract No. 8233/EN R1. *Stevenson & Assoc.* office in Bucharest, 57 p. 1996 and Contract No. 8223/EN. *Stevenson & Assoc.* Office in Bucharest, 71 p, 1995
- Elnashai, A., Lungu, D. Zonation as a tool for retrofit and design of new facilities. Report of the Session A.1.2. *5th International Conference on Seismic Zonation*, Nice, France, Oct. 16-19, 1995, Proceedings, Vol.3, Quest Editions, Preses Academiques, p.2057-2082.
- Lungu, D., Cornea, T., Craifaleanu, I., Aldea, A.,. Seismic zonation of Romania based on uniform hazard response ordinates. *5th International Conference on Seismic Zonation*, Nice, France, Oct.16-19, 1995. Proceedings Vol.1, Quest Editions, Presses Academiques, Nantes, p.445-452.
- Lungu, D., Coman, O., Moldoveanu, T. Hazard analysis for Vrancea earthquakes. Application to Cernavoda NPP site in Romania. Transactions of the *13th International Conference on Structural Mechanics in Reactor Technology*, Porto Alegre, RS, Brazil, Aug 13-18, 1995 Proceedings, Vol.3, p.289-295.
- Lungu, D., Demetriu, S., Aldea, A., 1995. Basic Code parameters for Environmental Actions in Romania harmonised with EC1. *7th International Conference on Application of Statistics and Probability in Civil Engineering, Reliability and Risk Analysis, ICASP-7*, Paris, July 10-13, Proceedings Vol.1, p.881-888, A.A. Balkema, Rotterdam
- Lungu, D., Aldea, A., Demetriu, S., Cornea, C., Craifaleanu, I., 1995. Uniform hazard response spectra in soft soil condition and EUROCODE 8. *7th International Conference on Application of Statistics and Probability in Civil Engineering, Reliability and Risk Analysis, ICASP-7*, Paris, July 10-13, Proceedings Vol.1, p.619-626, A.A. Balkema, Rotterdam

Lungu, D., Demetriu, S., Radu, C., Coman, O., Uniform hazard response spectra for Vrancea earthquakes in Romania. *10th European Conference on Earthquake Engineering*, Vienna, Aug 28-Sept 2 1994. Proceedings Vol.1, p.365-370, A.A. Balkema, Rotterdam, 1995.

1994

- Lungu, D., Demetriu, S., Aldea, A., Cornea, T., Craifaleanu, I. Uniform hazard response spectra in soft soil condition and EUROCODE 8, *Buletinul Stiintific al UTCB*, Anul XXXVII, Vol.2/1994, p.45-56
- Lungu, D., Scherer, R.J., Coman, O., Zsohar, M. On the phenomenon of long predominant periods of ground vibration during 1990, 1986 and 1977 earthquakes from Vrancea source. *Second International Conference on Earthquake Resistant Construction and Design, ERCAD*, Berlin, June 15-17, 1994. Proceedings Vol.1, p.51-59. A.A. Balkema: Rotterdam
- Lungu, D., Demetriu, S., Coman, O. Prediction of Vrancea strong motions for design. *Second International Conference on Computational Stochastic Mechanics*, Athens, Greece, June 13-15, 1994. Proceedings p.221-229, A.A. Balkema, Rotterdam
- Radu, C., Lungu, D., Demetriu, S., Coman O. Recurrence, attenuation and dynamic amplification for intermediate depth Vrancea earthquakes. *XXIV General Assembly, European Seismological Commission*, SC-F, Athens, Sept. 19-24, 1994.
- Lungu D., Demetriu S., Aldea A. Basic code parameters for environmental actions in Romania harmonised with EUROCODE 1, *Buletinul Stiintific al UTCB*, Anul XXXVII, Vol.2/1994, p.35-44

1993

- Lungu, D., Coman, O., Cornea, T., Demetriu, S., Muscalu, L., Structural response spectra to different frequency bandwidth earthquakes. *6th International Conference on Structural Safety and Reliability ICOSSAR '93*, Innsbruck, Austria, Aug. 9-13, 1993. Proceedings Vol.3, p.2163-2170. A.A. Balkema, Rotterdam

1992

- Lungu, D., Popovici, A., Cornea, T., Studies concerning the structural behavior of buildings in Bucharest to Vrancea earthquakes. *First International Conference on Disaster Prevention in Urban Areas, ICDPUA-I*, Teheran, May 11-13, 1992
- Lungu, D., Cornea, T., Demetriu, S., Frequency bandwidth of Vrancea earthquakes and the 1991 edition of seismic code in Romania. *10th World Conference on Earthquake Engineering*, Madrid, 19-24 July 1992, Proceedings, Vol. 10, p. 5633-5638. AA Balkema, Rotterdam. ISBN: 90-5410-060-5. 90-5410-070-2
- Lungu D, Demir V., Darie M., Valori extreme climatice pentru proiectarea constructiilor in Bucuresti. *Constructii* Nr. 3,4,5,6/ 1992, p. 75-84.

1990

- Lungu, D., Cornea, T., Grounding of design forces in Romania based on Vrancea seismic records of 1986 and 1977. *9th European Conference on Earthquake Engineering*, Moscow, Russia, Sept. 11-16, 1990. Proceedings, Additional Vol., p.63-72.
- Lungu, D., Demetriu, S., Duration effect on RMS acceleration. Application for Vrancea and Armenia earthquakes. *9th European Conference on Earthquake engineering*, Moscow, Russia, Sept. 11-16, 1990. Proceedings Vol. 10A, p.164-173

- Lungu, D., Cornea, T., Vierescu, R., Analiza dinamica neliniara la seismele din 1986 si 1977 a cladirilor din Bucursti cu sectiunea D11F1. *Institutul Proiect Bucuresti*, Nov 1989, 137 p.
- Lungu, D., Cornea, T., Seismele Vrancea din 1986 si 1977. Analiza stochastica a compozitiilor spectrale si a efectelor asupra constructiilor. *Constructii* Nr.3-4, 1989, p. 25-50.
- Lungu, D., Cornea, T., Power spectra in Bucharest for Vrancea earthquakes. *Symposium on Reliability-Based Design in Civil Engineering*. Lausanne, July 7-9, 1988, Proceedings Vol.1, p. 17-24
- Lungu, D., Cornea, T., Parametri de proiectare antiseismica pentru constructiile din municipiul Bucuresti pe baza inregistrarilor seismice existente. *Institutul Proiect Bucuresti*, Sept. 1988, 236 p.
- Dabija, F., Lungu, D., Dynamic analysis of multistory structures with prestressed concrete core. *9th World Conference on Earthquake Engineering*, Aug. 2-9, 1988, Tokyo-Kyoto, Japan, Paper B12-05
- Lungu, D., Giurgea, R., Probabilistic analysis of inelastic response of frame structures to artificial accelerograms. *Constructii* Nr. 4-5, 1987. p. 23-26 (in Romanian)
- Lungu, D., Cornea, T., Spectre de putere si de raspuns la cutremurele din Vrancea, pentru municipiul Bucuresti, *Institutul de Constructii Bucuresti*, Mai 1987, 52 pag.
- Lungu, D., Cornea, T., Analiza stochastica a inregistrarilor cutremurelor Vrancea. *Simpozion de Proiectare Seismica*, Iasi, 1986, Vol.1, p.175-180.
- Lungu, D. Reliability of roof snow load assessment. *IABSE Symposium on the Selection of Structural Forms*, Imperial College, London, Sept.10-11, 1981, in Proceedings.
- Ifrim, M., Lungu, D., Aseismic design of multistoried structures with the help of story relative rigidities. Paper No 110, *Bull. Indian Society for Earthquake Engineering, ISET*, Vol.8, Nr.3, Sept. 1971, p. 109-120

Prof. dr. ing. Dan Lungu

