


PERSONAL INFORMATION

Radu Văcăreanu



 Str. Trestiana nr 11, Bucharest, Romania

 +40212421161 

 radu.vacareanu@utcb.ro

 ccers.utcb.ro

Sex Male | Date of birth 22/10/1966 | Nationality Romanian

POSITION

Professor

WORK EXPERIENCE

1992-present

Teaching Assistant, Lecturer, Associate Professor, Professor of Structural Reliability and Seismic Risk Analysis

Technical University of Civil Engineering of Bucharest

- Education of undergraduate, postgraduate and Ph.D. students
- Research in the fields of structural reliability, natural hazards, engineering seismology and earthquake engineering

Business or sector Higher education

EDUCATION AND TRAINING

Jan 2007 – Feb 2007

Oct 2005 – Dec 2005

Aug 2002 – Oct 2002

Earthquake Engineer

Earthquake Engineering

Building Research Institute, Tsukuba, Japan

Nov 2014

Ph.D. Habilitate

Civil Engineering

Technical University of Iasi

Aug 1999 – Nov 1999

Post-doctoral scholarship

Structural Reliability

Institute of Engineering Mechanics, University of Innsbruck, Austria

1992 – 1999

Ph.D.

Mechanics of structures

Technical University of Civil Engineering of Bucharest

1986-1991

Engineer

Civil Engineering

Technical University of Iasi, Faculty of Civil Engineering

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	B2

	Replace with name of language certificate. Enter level if known.				
French	B1	B1	A2	A2	A2
	Replace with name of language certificate. Enter level if known.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- Very good communication skills gained through my experience as professor and through dissemination of research output in international and national conferences

Organisational / managerial skills

- 2016 – present – Rector of Technical University of Civil Engineering Bucharest
- 2012 – 2016 – Vice-Rector of Technical University of Civil Engineering Bucharest
- 2014 – 2016 – Director of Seismic Risk Assessment Research Centre of UTCB
- 2008 – 2012 – Vice-Dean of Faculty of Buildings Engineering
- 2002-2008 – Director of National Centre for Seismic Risk Reduction
- 2000 and 2002 - Member of Organization Committees of “JICA International Seminar: Earthquake Hazard and Countermeasures for Existing Fragile Buildings” and “International Conference Earthquake Loss Estimation and Risk Reduction”, Bucharest

Job-related skills

- President of the European Association for Earthquake Engineering
- National Delegate at the International Association for Earthquake Engineering
- Executive President of the National Commission for Earthquake Engineering of Ministry of Development, Public Works and Administration
- Co-Chair of the Third European Conference on Earthquake Engineering and Seismology (3ECEES), September 2022, Bucharest, Romania
- Co-Chair of the Eighth European-African Conference on Wind Engineering (8EACWE), September 2022, Bucharest, Romania
- Member of Earthquake Engineering Research Institute and Seismological Society of America
- Editorial Board Member of Earthquakes and Structures. An International Journal
- Guest Editor of Bulletin of the International Institute of Seismology and Earthquake Engineering
- Reviewer for Bulletin of the Seismological Society of America, Earthquake Spectra, Bulletin of Earthquake Engineering, Soil Dynamics and Earthquake Engineering, Earthquakes and Structures. An International Journal and Earthquake Engineering and Engineering Vibration
- Member of ASRO/CT 343 Basis of Design and Structural Eurocodes
- Evaluator of technical proposals and research projects for domestic and international bodies
- Numerous papers on seismic hazard, vulnerability and risk presented in journals, national and international conferences on earthquake engineering
- Member of drafting team – Romanian Earthquake Resistant Design Code – P100-1/2006 & 2013 editions
- Member of drafting team – Romanian Seismic Evaluation and Seismic Retrofitting Code – P100-3
- Member of drafting team – Romanian Code on Wind Loads CR 1-1-4-2012, Romanian Code on Basis of Structural Design, CR 0-20012 and Code on Snow Load, CR 1-1-3-20012
- Responsible of team member for research/consultancy projects on earthquake engineering, structural safety and wind engineering

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

--

Driving licence Driving license category B

ADDITIONAL INFORMATION

Publications Projects

List of relevant publications in the period 2013-2022 is appended

- IPRED - International Platform for Reducing Earthquake Disaster – 2007-present
- ANDROID-Academic Network for Disaster Resilience to Optimise Educational Development – 2012 - present
- JICA Technical Cooperation Project for Seismic Risk Reduction for Buildings and Structures in Romania, financed by Japan International Cooperation Agency – Coordinator – Director of the National Centre for Seismic Risk Reduction – Project Implementing Agency – 2002-2008
- IAEA CRP-NFE Camus Benchmark - IAEA Research Contract No: 12146/RBF - Numerical Simulations and Engineering Methods for the Evaluation of Expected Seismic Performances – Researcher – 2002-2005
- RISK-UE "An advanced approach to earthquake risk scenarios with applications to different European towns", financed by European Commission, Fifth Framework, Researcher – 2001-2004
- NEMISREF "New methods of mitigation of seismic risk on existing foundations", financed by European Commission, Fifth Framework, Researcher – 2002-2005
- Collaborative Research Centre (CRC) 461 of SFB, Germany: Strong Earthquakes: A Challenge for Geosciences and Civil Engineering" at Karlsruhe University – Researcher – 2000-2007
- COST Action C26: "Urban Habitat Constructions Under Catastrophic Events", Working Group 2 "Earthquake Resistance"

September 2022

Prof. Radu Văcăreanu, Ph.D.

Publications (in the past 10 years)*Textbooks and/or chapters in edited books*

- Văcăreanu, R., Ionescu, C. (eds). (2022). Progresses in European Earthquake Engineering and Seismology. Third European Conference on Earthquake Engineering and Seismology – Bucharest, 2022. Springer Proceedings in Earth and Environmental Sciences. Springer, Cham, ISBN 978-3-031-15103-3, ISBN 978-3-031-15104-0 (eBook), XIX, 488 p., <https://doi.org/10.1007/978-3-031-15104-0>
- Aldea, A., Văcăreanu, R., Lungu, D., Pavel, F., Arion, C. (2022). GMPEs for Romania's Vrancea Intermediate Depth Seismic Source. In: Văcăreanu, R., Ionescu, C. (eds) Progresses in European Earthquake Engineering and Seismology. ECEES 2022. Springer Proceedings in Earth and Environmental Sciences. Springer, Cham. https://doi.org/10.1007/978-3-031-15104-0_6
- Pavel, F., Văcăreanu, R., Arion, C., Aldea, A. (2022). New Insights on the Seismic Exposure and Vulnerability of Structures in Romania. In: Văcăreanu, R., Ionescu, C. (eds) Progresses in European Earthquake Engineering and Seismology. ECEES 2022. Springer Proceedings in Earth and Environmental Sciences. Springer, Cham. https://doi.org/10.1007/978-3-031-15104-0_12
- Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, 544 p., eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Pavel, F., Popa, V., Văcăreanu, R. (2018). Impact of Long-Period Ground Motions on Structural Design: A Case Study for Bucharest, Romania, SpringerBriefs in Geotechnical and Earthquake Engineering, Springer, 87p., ISBN 978-3-319-73402-6, DOI 10.1007/978-3-319-73402-6
- Pavel, F., Văcăreanu, R. (2018). Applications of Probabilistic Methods in Structural Reliability and Risk Assessment, Editura Conspress, 199p., ISBN 978-973-100-472-3
- Pavel, F., Văcăreanu, R. (2017). Elemente generale de hazard și risc seismic (in Romanian), Editura MatrixRom, 315p., ISBN 978-606-25-0333-8
- Văcăreanu, R., Ionescu, C. (Eds) (2016). The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake, Springer Natural Hazards Book Series, 521 p., eBook ISBN 978-3-319-29844-3, Hardcover ISBN 978-3-319-29843-6, DOI 10.1007/978-3-319-29844-3
- Văcăreanu, R., Aldea, A., Lungu, D., Pavel, F., Neagu, C., Arion, C., Demetriu, S., Iancovici, M. (2016). Probabilistic Seismic Hazard Assessment for Romania. In: D'Amico, S. (Eds) Earthquakes and Their Impact on Society, Springer Natural Hazards Book Series, p. 137-169, ISBN: 978-3-319-21752-9 (Print) 978-3-319-21753-6 (Online), DOI 10.1007/978-3-319-21753-6
- Văcăreanu, R., Pavel, F., Aldea, A., Arion, C., Neagu, C. (2015). Elemente de analiză a hazardului seismic (in Romanian), Editura Conspress, 215p., ISBN 978-973-100-386-3
- Văcăreanu, R., Ionescu, C. (Eds.) (2014). Proceedings of the Fifth National Conference on Earthquake Engineering & First National Conference of Earthquake Engineering and Seismology, Editura Conspress, 426 p., ISBN 978-973-100-342-9
- Văcăreanu, R., Pavel, F., Aldea, A. (2013). Îndrumător pentru evaluarea acțiunii vântului asupra construcțiilor conform CR 1-1-4/2012, Editura Conspress, 89p., ISBN 978-973-100-279-9

Papers in Peer-Reviewed Journals

- Pavel, F., Văcăreanu, R. (2022). Seismic Risk Assessment for Elements of the Electric Network in Romania. Buildings (2022), 12, 244, <https://doi.org/10.3390/buildings12020244>
- Pavel, F., Văcăreanu, R., Pitalakis, K. (2022). Preliminary Evaluation of the Impact of Eurocode 8 Draft Revision on the Seismic Zonation of Romania. Appl. Sci. 2022, 12(2), 649; <https://doi.org/10.3390/app12020649>
- Tiganescu, A., Craifaleanu, I-G, Aldea, A., Grecu, B., Văcăreanu, R., Toma-Danila, D., Balan, S.-F. and Dragomir, C.-S. (2022). Evolution, Recent Progress and Perspectives of the Seismic Monitoring of Building Structures in Romania. Front. Earth Sci. 10:819153. doi: 10.3389/feart.2022.819153

- Georgescu, D., Văcăreanu, R., Aldea, A., Apostu, A., Arion, C., Girboveanu, A. (2022). Assessment of the Sustainability of Concrete by Ensuring Performance during Structure Service Life. *Sustainability* 2022, 14, 617. <https://doi.org/10.3390/su14020617>
- Pavel, F., Văcăreanu, R., Arion, C., Aldea, A., Scupin, A. (2021). Seismic risk assessment of lifelines in Bucharest, *International Journal of Disaster Risk Reduction*, 66 (2021) 102629, <https://doi.org/10.1016/j.ijdr.2021.102629>
- Olteanu, P., Văcăreanu, R. (2021). Inelastic displacement demand of RC buildings subjected to earthquakes generated by intermediate-depth Vrancea seismic source, *Natural Hazards*, <https://doi.org/10.1007/s11069-021-04930-3>
- Coțovanu, A., Văcăreanu, R. (2021). Recommended Path Durations for Stochastic Simulations of Ground Motions Generated by Vrancea Intermediate-Depth Seismic Source, *Pure and Applied Geophysics*, <https://doi.org/10.1007/s00024-021-02782-3>
- Pavel, F., Văcăreanu, R., Marcu, D. (2021). Seismic performance assessment and rating for a flat-slab RC core wall structure in Bucharest, Romania, *Structures*, 31: 1006-1016
- Pavel, F., Văcăreanu, R., Scupin, A. (2020). Seismic fragility assessment for post-1977 high-rise reinforced concrete structures in Romania, *Bulletin of Earthquake Engineering*, <https://doi.org/10.1007/s10518-020-01014-8>
- Pavel, F., Văcăreanu, R. (2020). Re-assessment of peak ground accelerations for large magnitude Vrancea intermediate-depth earthquakes, *Journal of Seismology*, DOI: 10.1007/s10950-020-09955-y
- Olteanu, P., Văcăreanu, R. (2020). Ground Motion Model for Spectral Displacement of Intermediate-Depth Earthquakes Generated by Vrancea Seismic Source, *Geosciences*, 10(8), 282; <https://doi.org/10.3390/geosciences10080282>
- Coțovanu, A., Văcăreanu, R. (2020). Modeling energy release parameters in stochastic simulation of ground motions generated by Vrancea intermediate-depth seismic source, *Bulletin of Earthquake Engineering*, 18: 2557–2580, <https://doi.org/10.1007/s10518-020-00805-3>
- Pavel, F., Văcăreanu, R. (2020). Assessment of the Seismic Performance for a Low-Code RC Shear Walls Structure in Bucharest (Romania), *The Open Construction and Building Technology Journal*, 14:111-123, DOI: 10.2174/1874836802014010111
- Pavel, F., Văcăreanu, R., Pitilakis, K., Anastasiadis A. (2020). Investigation on site-specific seismic response analysis for Bucharest (Romania), *Bulletin of Earthquake Engineering*, 18: 1933–1953, <https://doi.org/10.1007/s10518-020-00789-0>
- Coțovanu, A., Văcăreanu, R. (2019). Local site conditions modeling in stochastic simulation of ground motions generated by Vrancea (Romania) intermediate-depth seismic source. *Journal of Seismology*, 24(1): 229–241, DOI: 10.1007/s10950-019-09892-5
- Pavel, F., Văcăreanu, R. (2019). Analysis of exceedance probabilities for design spectral accelerations from crustal earthquakes in Romania. *Journal of Seismology*, 23: 1327–1345, <https://doi.org/10.1007/s10950-019-09869-4>
- Pavel, F., Văcăreanu, R., Pitiliakis, K. (2019). Intensity-dependent site amplification factors for Vrancea intermediate-depth earthquakes. *Bulletin of Earthquake Engineering*, 17(5): 2363–2380, DOI: 10.1007/s10518-019-00563-x
- Pavel, F., Văcăreanu, R. (2018). Investigation on regional attenuation of Vrancea (Romania) intermediate-depth earthquakes. *Earthquake Engineering and Engineering Vibration*, 17(3): 501–509, DOI: 10.1007/s11803-018-0458-5
- Văcăreanu, R., Pavel, F., Crăciun, I., Colibă, V., Arion, C., Aldea, A., Neagu, C. (2018). Risk-targeted maps for Romania. *Journal of Seismology*, 22(2):407–417, DOI 10.1007/s10950-017-9713-x
- Pavel, F., Calotescu, I., Văcăreanu, R., Săndulescu, A.M. (2018). Assessment of seismic risk scenarios for Bucharest, Romania. *Natural Hazards*, 93 (Suppl 1): 25-37, <https://doi.org/10.1007/s11069-017-2991-3>
- Bejan, A-S., Damian, R. M., Leiber, T., Neuner, I., Niculiță, L., Văcăreanu, R. (2018) Impact evaluation of institutional evaluation and programme accreditation at Technical University of Civil Engineering Bucharest (Romania), *European Journal of Higher Education*, 8:3, 319-336, DOI: 10.1080/21568235.2018.1474780
- Pavel, F., Văcăreanu, R. (2017). Evaluation of the seismic hazard for 20 cities in Romania using Monte Carlo based simulations. *Earthquake Engineering and Engineering Vibration*, 16(3): 513-523, DOI: 10.1007/s11803-017-0400-2
- Pavel, F., Văcăreanu, R., Calotescu, I., Săndulescu, A.-M., Arion, C., Neagu, C. (2017). Impact of spatial correlation of ground motions on seismic damage for residential buildings in Bucharest, Romania. *Natural Hazards*, 87(2): 1167–1187, DOI 10.1007/s11069-017-2814-6
- Pavel, F., Văcăreanu, R. (2017). Ground motion simulations for seismic stations in southern and eastern Romania and seismic hazard assessment. *Journal of Seismology*, 21(5):1023–1037, DOI 10.1007/s10950-017-9649-1
- Pavel, F., Văcăreanu, R. (2017). Spatial Correlation of Ground Motions from Vrancea (Romania) Intermediate-Depth Earthquakes. *Bulletin of the Seismological Society of America*, 107(1): 489-494, DOI: 10.1785/0120160095
- Pavel, F., Văcăreanu, R. (2016). Scenario-based earthquake risk assessment for Bucharest, Romania. *International Journal of Disaster Risk Reduction*, 20:138-144, DOI: 10.1016/j.ijdr.2016.11.006

- Pavel, F., Văcăreanu, R. (2016). Scaling of ground motions from Vrancea (Romania) earthquakes. *Earthquakes and Structures. An International Journal*, 11(3): 505-516, DOI: 10.12989/eas.2016.11.3.505
- Pavel, F., Văcăreanu, R., Douglas, J., Radulian, M., Cioflan, C. O., Barbat, A. (2016). An Updated Probabilistic Seismic Hazard Assessment for Romania and Comparison with the Approach and Outcomes of the SHARE Project. *Pure and Applied Geophysics*, 173(6): 1881-1905, DOI: 10.1007/s00024-015-1223-6
- Văcăreanu, R., Iancovici, M., Neagu, C., Pavel, F. (2015). Macro seismic intensity prediction equations for Vrancea intermediate-depth seismic source. *Natural Hazards*, 79(3):2005-2031, DOI: 10.1007/s11069-015-1944-y
- Pavel, F., Văcăreanu, R. (2015). Investigation on site conditions for seismic stations in Romania using H/V spectral ratio. *Earthquakes and Structures. An International Journal*, 9(5): 983-997, DOI: 10.12989/eas.2015.9.5.983
- Pavel, F., Văcăreanu, R., Radulian, M., Cioflan, C. (2015). Investigation on directional effects of Vrancea subcrustal earthquakes. *Earthquake Engineering and Engineering Vibration*, 14(3): 399-410, DOI: 10.1007/s11803-015-0032-3
- Văcăreanu, R., Radulian, M., Iancovici, M., Pavel, F., Neagu, C. (2015). Fore-arc and back-arc ground motion prediction model for Vrancea intermediate depth seismic source. *Journal of Earthquake Engineering*, 19(3): 535-562, DOI: 10.1080/13632469.2014.990653
- Pavel, F., Văcăreanu, R. (2015). Assessment of the ground motion levels for the Vrancea (Romania) November 1940 earthquake. *Natural Hazards*, 78(2): 1469-1480, DOI 10.1007/s11069-015-1767-x
- Pavel, F., Văcăreanu, R. (2015). Kappa and regional attenuation for Vrancea (Romania) earthquakes. *Journal of Seismology*, 19:791–799, DOI 10.1007/s10950-015-9490-3
- Popa, V., Văcăreanu, R., Opreșoreanu, V., Albotă, E., Köber, D. (2015). Suitability of Current Assessment Techniques to Retrodict the Seismic Damage of Buildings: A Case Study in Van, Turkey. *The Open Civil Engineering Journal*, 9: 330-343, DOI: 10.2174/1874149501509010330
- Bejan, S-A., Janatuinen, T., Jurvelin, J., Klöpping, S., Malinen, H., Minke, B., Văcăreanu, R. (2015) Quality assurance and its impact from higher education institutions' perspectives: methodological approaches, experiences and expectations, *Quality in Higher Education*, 21:3, 343-371, DOI: 10.1080/13538322.2015.1112546
- Văcăreanu, R., Iancovici, M., Pavel, F. (2014). Conditional mean spectrum for Bucharest. *Earthquakes and Structures. An International Journal*, 7(2): 141-157, DOI: 10.12989/eas.2014.7.2.141
- Pavel, F., Văcăreanu, R., Cioflan, C., Iancovici, M. (2014). Spectral Characteristics of Strong Ground Motions from Intermediate-Depth Vrancea Seismic Source. *Bulletin of the Seismological Society of America*, 104(6): 2842–2850, DOI: 10.1785/0120130334
- Pavel, F., Văcăreanu, R., Ionescu, C., Iancovici, M., Sercăianu, M. (2014). Investigation of the variability of strong ground motions from Vrancea -earthquakes. *Natural Hazards*, 74(3): 1707-1728, DOI 10.1007/s11069-014-1273-6
- Popa, V., Coțofană, D., Văcăreanu, R. (2014). Effective stiffness and displacement capacity of short reinforced concrete columns with low concrete quality. *Bulletin of Earthquake Engineering*, 12(6): 2705–2721, DOI 10.1007/s10518-014-9618-9
- Pavel, F., Văcăreanu, R., Neagu, C., Pricopie, A. (2014). Bi-normalized response spectra and seismic intensity in Bucharest for 1986 and 1990 Vrancea seismic events. *Earthquake Engineering and Engineering Vibration*, 13(1): 125-135, DOI: 10.1007/s11803-014-0217-1
- Văcăreanu, R., Demetriu, S., Lungu, D., Pavel, F., Arion, C., Iancovici, M., Aldea, A., Neagu, C. (2014). Empirical ground motion model for Vrancea intermediate-depth seismic source. *Earthquakes and Structures, An International Journal*, 6(2): 141-161, DOI: 10.12989/eas.2014.6.2.127
- F. Pavel, R. Văcăreanu & D. Lungu (2014). Bi-normalized response spectra for various frequency content ground motions. *Journal of Earthquake Engineering*, 18(2): 264-289, DOI:10.1080/13632469.2013.846283
- Pavel, F., Văcăreanu, R., Arion, C., Neagu, C. (2014). On the variability of strong ground motions recorded from Vrancea earthquakes. *Earthquakes and Structures, An International Journal*, 6(1): 1-18, DOI: 10.12989/eas.2014.6.1.001
- Văcăreanu, R., Mărmureanu, Gh., Pavel, F., Neagu, C., Cioflan, C.A., Aldea, A. (2014). Analysis of soil factor S using strong ground motions from Vrancea subcrustal seismic source. *Romanian Reports in Physics*, 66(3): 893–906
- Văcăreanu, R., Pavel, F., Aldea, A. (2013). On the selection of GMPEs for Vrancea subcrustal seismic source. *Bulletin of Earthquake Engineering*, 11(6): 1867-1884, DOI: 10.1007/s10518-013-9515-7
- Pavel, F., Văcăreanu, R., Aldea, A., Arion, C. (2013). Source Effects on the Spectral Characteristics of Strong Ground Motions Recorded in Bucharest Area During Vrancea Earthquakes of 1986 and 1990, *Journal of Earthquake Engineering*, 17(8): 1192-1211, DOI:10.1080/13632469.2013.830997
- Lungu, D. , Văcăreanu, R., Aldea, A., Arion, C. (2013). Earthquake Hazard and Risk in Romania. *Bulletin International Institute for Seismology and Earthquake Engineering, Tsukuba, Japan*, 47: 139-148, ISSN 0074-655X

- Văcăreanu 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 Iași Municipality, Technical University of Civil Engineering Bucharest - Scientific Journal – Series: Mathematical Modeling in Civil Engineering, 3:12-18

Papers in Proceedings of Conferences

- Coțovanu, A., Văcăreanu, R. (2022). Simulation of accelerograms specific to design hazard for Vrancea intermediate depth earthquakes, in Proceedings of the Third European Conference on Earthquake Engineering and Seismology – 3ECEES, Arion, C., Scupin, A., Țigănescu, A. (eds), ISBN 978-973-100-533-1, p. 9-18, Conspress, Bucharest
- Olteanu, P., Văcăreanu, R. (2022). Seismic input for displacement-based design of RC buildings in Romania, in Proceedings of the Third European Conference on Earthquake Engineering and Seismology – 3ECEES, Arion, C., Scupin, A., Țigănescu, A. (eds), ISBN 978-973-100-533-1, p. 449-458, Conspress, Bucharest
- Scupin, A., Văcăreanu, R., Pavel, F. (2022). Seismic vulnerability assessment of masonry buildings in the education sector in Romania, in Proceedings of the Third European Conference on Earthquake Engineering and Seismology – 3ECEES, Arion, C., Scupin, A., Țigănescu, A. (eds), ISBN 978-973-100-533-1, p. 1638-1645, Conspress, Bucharest
- Arion, C., Călărășu, E., Neagu, C., Aldea, A., Văcăreanu, R. (2022). Main dynamic parameters for the seismic characterization of Bucharest, Romania surface geology, in Proceedings of the Third European Conference on Earthquake Engineering and Seismology – 3ECEES, Arion, C., Scupin, A., Țigănescu, A. (eds), ISBN 978-973-100-533-1, p. 2215-2224, Conspress, Bucharest
- Crăifăleanu, I-G., Dragomir, C-S., Țigănescu, A., Aldea, A., Văcăreanu, R., Dobre, D., Georgescu, E-S. (2022). Seismic instrumentation of buildings in Romania: overview, challenges and future actions needed for a coordinated approach, in Proceedings of the Third European Conference on Earthquake Engineering and Seismology – 3ECEES, Arion, C., Scupin, A., Țigănescu, A. (eds), ISBN 978-973-100-533-1, p. 2281-2288, Conspress, Bucharest
- Văcăreanu, R., Pavel, F., Scupin, A. (2021). Probabilistic seismic risk assessment for reinforced concrete buildings in Romania, 17th World Conference on Earthquake Engineering, Sendai, Japan
- Scupin, A., Văcăreanu, R. (2021). Numerical Simulation of the Non-linear Response of Historic Masonry, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), DOI: 10.1109/CIEM52821.2021.9614765
- Scupin, A., Văcăreanu, R., Pavel, F. (2021). Seismic performance assessment based on displacement capacity of unreinforced masonry structures, IOP Conference Series Earth and Environmental Science 664(1):012087, DOI: 10.1088/1755-1315/664/1/012087
- Scupin, A., Văcăreanu, R., Pavel, F. (2021). Evaluation of Invasive Retrofitting Interventions on an Unreinforced Masonry Heritage Building, 12th International Conference on Structural Analysis of Historical Constructions, DOI: 10.23967/sahc.2021.091
- Aldea, A., Demetriu, S., Văcăreanu, R., Lungu, D., Arion, C., Neagu, C. (2019). A short historical overview of wind characteristics and wind pressure for design in Romania, Technical Transactions 10/2019, Civil Engineering, DOI: 10.4467/2353737xct.19.109.11033
- Pavel, F., Văcăreanu, R., Pitilakis, K. (2019). Preliminary revision of the seismic zonation from the current Romanian seismic design code, Proceedings of the 7th International Conference on Earthquake Geotechnical Engineering, Rome, Italy
- Neagu, C., Arion, C., Aldea, A., Calarasu, E. A., Văcăreanu, R., Pavel, F. (2018) Ground Types for Seismic Design in Romania. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 157-172, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Crăciun, I., Văcăreanu, R., Pavel, F., Colibă, V. (2018) On the Ground Motions Spatial Correlation for Vrancea Intermediate-Depth Earthquakes. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 191-210, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Arion, C., Pavel, F., Văcăreanu, R., Neagu, C., Iancovici, M., Popa, V., Damian, I. (2018) Seismic Risk Assessment of Romania. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 251-266, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8

- Pavel, F., Văcăreanu, R., Calotescu, I. (2018) Comparison of Seismic Risk Results for Bucharest, Romania. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 267-280, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Calotescu, I., Pavel, F., Văcăreanu, R. (2018) Earthquake Risk Awareness in Bucharest, Romania: Public Survey. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 297-312, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Mărmureanu, Gh., Văcăreanu, R., Cioflan, C.O., Ionescu, C., Toma-Dănilă, D. (2018) Historical Earthquakes: New Intensity Data Points Using Complementary Data from Churches and Monasteries. In: Văcăreanu, R., Ionescu, C. (Eds) (2018). Seismic Hazard and Risk Assessment. Updated Overview with Emphasis on Romania, Springer Natural Hazards Book Series, p. 103-116, eBook ISBN 978-3-319-74724-8, Hardcover ISBN 978-3-319-74723-1, DOI 10.1007/978-3-319-74724-8
- Văcăreanu, R., Pavel, F., Crăciun, I., Aldea, A., Calotescu, I. (2017) Correlation models for strong ground motions from Vrancea intermediate-depth seismic source. Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, paper no. 2026.
- Pavel, F., Văcăreanu, R., Calotescu, I., Colibă, V. (2017) Design displacement response spectra for southern and eastern Romania. Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, paper no. 1926.
- Văcăreanu, R., Pavel, F., Colibă, V., Crăciun, I. (2016). Uniform risk-targeted maps for Romania. Proceedings of the 35th General Assembly of the European Seismological Commission, Trieste, Italy, paper no. 336.
- Văcăreanu, R., Pavel, F., Iancovici, M., Aldea, A. (2016). Influence of GMPEs on site-specific uniform hazard spectra. Case study for Iasi, Romania. Proceedings of the 35th General Assembly of the European Seismological Commission, Trieste, Italy, paper no. 543.
- Pavel, F., Văcăreanu, R. (2016) Investigation on the seismic risk of Bucharest, Romania. Proceedings of the 35th General Assembly of the European Seismological Commission, Trieste, Italy, paper no. 370.
- Pavel, F., Calotescu, I., Văcăreanu, R., Sandulescu, A.M., Sibisteanu H. (2016). Investigation on community resilience in Bucharest, Romania. Proceedings of the 35th General Assembly of the European Seismological Commission, Trieste, Italy, paper no. 372.
- Pavel, F., Calotescu, I., Văcăreanu, R. (2016). Evaluation of ground motion variability in Bucharest from Vrancea intermediate-depth earthquakes. Proceedings of the International Conference on Urban Risk, ICUR 2016, Lisbon, Portugal, paper no. 146.
- Pavel, F., Calotescu, I., Văcăreanu, R., Săndulescu, A.M., (2016). Derivation of scenario earthquakes for Bucharest, Romania. Proceedings of the International Conference on Urban Risk, ICUR 2016, Lisbon, Portugal, paper no. 145.
- Calotescu, I., Pavel, F., Săndulescu, A.M., Sibisteanu H., Văcăreanu, R., (2016). Preliminary investigation on community resilience of Bucharest, Romania. Proceedings of the International Conference on Urban Risk, ICUR 2016, Lisbon, Portugal, paper no.142.
- Văcăreanu, R., Iancovici, M., Pavel, F. (2016). Selecting and scaling strong ground motion records based on conditional mean spectra. Case study for Iasi city in Romania. The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake, Văcăreanu, R., Ionescu, C. (eds.), Springer Natural Hazards Book Series, p.377-394, eBook ISBN 978-3-319-29844-3, Hardcover ISBN 978-3-319-29843-6, DOI 10.1007/978-3-319-29844-3
- Pavel, F., Ciuiu, D., Văcăreanu, R. (2016). Site-dependent seismic hazard assessment for Bucharest based on stochastic simulations. The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake, Văcăreanu, R., Ionescu, C. (eds.), Springer Natural Hazards Book Series, p.221-234, eBook ISBN 978-3-319-29844-3, Hardcover ISBN 978-3-319-29843-6, DOI 10.1007/978-3-319-29844-3
- Olteanu, P., Colibă, V., Văcăreanu, R., Pavel, F., Ciuiu, D. (2016). Analytical seismic fragility functions for dual RC structures in Bucharest. The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake, Văcăreanu, R., Ionescu, C. (eds.), Springer Natural Hazards Book Series, p.463-480, eBook ISBN 978-3-319-29844-3, Hardcover ISBN 978-3-319-29843-6, DOI 10.1007/978-3-319-29844-3
- Crăciun, I., Văcăreanu, R., Pavel, F. (2016). Spectral displacement demands for strong ground motions recorded in Vrancea intermediate-depth earthquakes. The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake, Văcăreanu, R., Ionescu, C. (eds.),

- Springer Natural Hazards Book Series, p.169-188, eBook ISBN 978-3-319-29844-3, Hardcover ISBN 978-3-319-29843-6, DOI 10.1007/978-3-319-29844-3
- Văcăreanu, R., Lungu, D., Radulian, M., Pavel, F., Iancovici, M., Arion, C. (2014). New Developments in Probabilistic Seismic Hazard Analysis for Romania. Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), Istanbul, August 24-29, 2014, Paper no. 545
 - Văcăreanu, R., Radulian, M., Iancovici, M., Pavel, F., Neagu, C. (2014). Fore-Arc and Back-Arc Ground Motion Prediction Model for Vrancea Intermediate-Depth Seismic Source. Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), Istanbul, August 24-29, 2014, Paper no. 484
 - Pavel, F., Văcăreanu, R., Cioflan, C. (2014). Directivity Effects of Strong Ground Motions from Vrancea Subcrustal Earthquakes. Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), Istanbul, August 24-29, 2014, Paper no. 466
 - Pavel, F., Văcăreanu, R., Aldea, A. (2014). Evaluation of GMPEs for Vrancea Intermediate-Depth Seismic Source. Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), Istanbul, August 24-29, 2014, Paper no. 423
 - Demetriu, S., Văcăreanu, R., Lungu, D., Pavel, F., Arion, C., Iancovici, M., Aldea, A., Neagu, C. (2014). Ground motion prediction equations for Vrancea intermediate-depth earthquakes. Proceedings of the 9th International Conference on Structural Dynamics, EURO DYN 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, pp. 435 – 442
 - Pavel F, Văcăreanu R, Neagu C, Arion C (2014) Probabilistic seismic hazard assessment for Romania. Part I: Selection of GMPEs. In: Văcăreanu R, Ionescu C (eds) Proceedings of the 5th National Conference on Earthquake Engineering & 1st National Conference on Earthquake Engineering and Seismology, CONSPRESS, Bucharest, pp. 213-220.
 - Aldea A, Văcăreanu R, Lungu D, Demetriu S, Pavel F (2014) Probabilistic seismic hazard assessment for Romania. Part II: Sensitivity analysis. Proceedings of the 5th National Conference on Earthquake Engineering & 1st National Conference on Earthquake Engineering and Seismology, CONSPRESS, Bucharest, pp. 221-228.
 - Văcăreanu 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: Văcăreanu 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.
 - Văcăreanu, 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.
 - Văcăreanu, R., Lungu, D., Mărmureanu, G., Cioflan, C., Aldea, A., Arion, C., Neagu, C., Demetriu, S., Pavel, F. (2013). Statistics of seismicity for Vrancea subcrustal source. Proceedings of the International Conference on Earthquake Engineering SE-50 EEE, Skopje, Macedonia, Paper no. 138.
 - Pavel, F., Aldea, A., Văcăreanu, R. (2013). Near-field strong ground motion records from Vrancea earthquakes. Proceedings of the International Conference on Earthquake Engineering SE-50 EEE, Skopje, Macedonia, Paper no. 190.
 - Pavel, F., Văcăreanu, R., Arion, C., Neagu, C. (2013). Analysis of ground motions recorded in Bucharest during recent Vrancea earthquakes. Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics 2013 (VEESD 2013), Vienna, Austria, Paper no. 180.
 - Popa, V., Văcăreanu, R., Karadogan, F. (2013). Post-Earthquake Investigation and Seismic Evaluation of a Damaged RC Building in Van, Turkey. Paper no. 21-145. Proceedings, 10th International Conference on Urban Earthquake Engineering (10CUEE), Tokyo, Japan. 9 pp.

September 2022

Prof. Radu Văcăreanu, Ph.D.