

PERSONAL INFORMATION

Vlatko SHESHOV



📍 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165, Skopje, Republic of North Macedonia

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ORCID ID [0000-0002-1692-2064](https://orcid.org/0000-0002-1692-2064)

<https://www.researchgate.net/profile/Vlatko-Sheshov>

Sex Male | Date of birth July 6, 1969 | Nationality Macedonian

Current Position: Professor and Director

RESEARCH INTERESTS

Summary

Prof. Vlatko Sesov, PhD has been working at IZIIS since 1994. His research interests are: soil dynamics, liquefaction and its remediation, local site effects, seismic zonation, physical modelling and model testing. Vlatko Sesov was doctoral and postdoctoral researcher at the University of Tokyo, Japan (2003 - 2005), visiting professor at the Ruhr University, Bochum, Germany (2008 - 2009). He is former President of Macedonian Geotechnical Society and Macedonian member of Technical Committee (TC203) Earthquake Geotechnical Engineering and Associated Problems of the International Society for Soil Mechanics and Geotechnical Engineering, ISSMGE and European committee for standardization Technical Committee TC 250 Eurocodes. He was national coordinator of DG-ECHO project: INFRA-NAT – Increased Resilience of Critical Infrastructure to Natural and Human-Induced Hazards (2018-2019) and Coordinator of CRISIS Comprehensive RiSk assessment of basic services and transport InfraStructure (2020 – 2022). National delegate to the IAEE (2018-..)

WORK EXPERIENCE

September 2017- present

General Director of IZIIS

2013 – present

Professor

📍 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165, Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)

Subjects: Geotechnical Engineering, Soil Dynamics and Foundation, Soil-Structure Interaction. MSc and PhD courses at IZIIS (<http://www.iziis.ukim.edu.mk/en/about-studies/>)





Business or sector Public university

2007 – 2016

Head of the Department

Geotechnics and Special Structures & Laboratory for Dynamics of soils and foundations, University "Ss. Cyril and Methodius" in Skopje, Institute of Earthquake Engineering and Engineering Seismology – IZIIS

Business or sector Public university

- 2019-2020 Visiting Professor,  
University of Pavia - Università di Pavia, Italy. Foundation Engineering and Earth retaining Structures”  
, master course in Civil Engineering For Mitigation Of Risk From Natural Hazards at the Department of  
Civil Engineering and Architecture 2019/2020 academic year,  
  
**Business or sector** Public university
- 2008 - 2009 Visiting Professor:  
  
 Ruhr-University, Faculty of Civil Engineering, Bochum, Germany; Course : Earthquake  
engineering and Engineering Seismology, on Master Programme : Computational Engineering  
  
**Business or sector** Public university
- 2008 - 2013 Associate professor  
  
 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of  
earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165,  
Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)
- 2003 –2008 Assistant professor  
  
 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of  
earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165,  
Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)
- Writing scientific papers & reports, performing drills on master courses, participation in design of  
structures (structural engineering part), preparation of technical design documentations, revision of  
technical design documentation, participation in research and application projects in the field of  
earthquake engineering etc.
- Business or sector** Public university
- 1994 –2003 Research assistant  
  
 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of  
earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165,  
Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)
- participation in research and application projects in the field of earthquake engineering, preparing  
and technical assistance in laboratory testing at Geo lab etc.
- Business or sector** Public university

## EDUCATION AND TRAINING

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### 1997 - 2003 Doctor of technical science in the field of earthquake engineering

📍 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165, Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)

- Dynamic of soils and foundation, soil liquefaction, laboratory testing , mitigation measures, pile performance in liquefiable soils , pile group effects, Soil-Structure Interaction .

### 1994 - 1997 Master of technical science in the field of earthquake engineering

📍 Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia. Institute of earthquake engineering and engineering seismology, IZIIS, Todor Aleksandrov 165, Skopje, Republic of North Macedonia, [www.iziis.edu.mk](http://www.iziis.edu.mk)

- Evaluation of Seismic Resistance of New and Existing RC Buildings; Finite Element Method; Vulnerability of Structures; Engineering Seismology; Dynamics of Structures; Experimental Mechanics; Soil Dynamics and foundations, Seismic site response, local site effects, seismic design parameters

### 1988 - 1993 Bachelor degree, Graduated civil engineer

University "Ss. Cyril and Methodius", Faculty of Civil Engineering, Republic of North Macedonia

- More than 40 courses during 5 year of study. Starting from Technical Mechanics, Civil Engineering Materials, Theory of Elasticity and Plasticity, Analysis of Structures, Reinforced Concrete Structures, Steel Structures, Timber Structures, Bridges, Dynamics of Structures, Theory of shells etc.

### April –Oct. 2000 Study stay – international

The University of Tokyo, Civil Engineering Department, Geotechnical Laboratory, Tokyo, Japan, (experimental part of PhD thesis )

### Nov. 2003 - Oct. 2005 Study stay – international

The University of Tokyo, Civil Engineering Department, Geotechnical Laboratory, Tokyo, Japan, JSPS Program

### Sept.2013 - June.2014 Study stay – international

The University of California, Davis, Civil and Environmental Engineering, California, USA, The Fulbright Visiting Scholar Program

## PERSONAL SKILLS

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Mother tongue(s) Macedonian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Croatian	C1	C1	B2	B2	B2
Bulgarian	A1	A1	A1	A1	A1
Serbian	C1	C1	B2	B2	B2
Replace with name of language certificate. Enter level if known.					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
 Common European Framework of Reference for Languages

**Communication skills**

- Excellent communication skills gained through years of experience as a teacher, as well as communication with external stakeholders
- Team worker – in various types of teams, (research teams, engineering project design teams)
- Presentation on scientific conferences/workshops/seminars
- Capacity to communicate technical and specialised information
- Intercultural skills gained through Intranational study experience

**Organisational / managerial skills**

- Organizational and coordination skills gained through participation in organization of three large scientific events among which one was the European conference on earthquake engineering with more than 800 participants (2010) and several workshops
- Managerial skills gained through leadership of projects
- Management experience – 9 years as head of department , 5 years as general director

**Job-related skills**

- Knowledge of earthquake geotechnical engineering
- Knowledge of European legislation in geotechnical engineering
- Mentoring master and doctoral international candidates
- Administration of European funded project – National Contact Point

**Computer skills**

- Proficient with Microsoft Office programmes
- Competent with sector specific software packages for geotechnical engineering

**Conferences & Presentations**

Attendance and presentations on international conferences in the past five years:  
 2022 – 5th ReSylab – Rijeka, Croatia  
 2021 - 17WCEE, Sendai, Japan  
 2021 - 1CroCEE, Zagreb, Croatia  
 2019 - SeismiCON, London, UK  
 2018 – 16 ECEE, Thessaloniki, Greece

**Evaluation of research results**

- Technical Reviewer for Soils and Foundations, Soil Dynamics, Geotechnical and Geological Engineering.....

**Projects Selected scientific projects in the past 5 years:**COORDINATOR

- CRISIS Comprehensive RISK assessment of basic services and transport InfraStructure, Union Civil Protection Mechanism (UCPM) External Action Grant, No. 101004830, 2020-2022)

Partner coordinator

- NCP\_WIDERA.NET - Transnational Network of National Contact Points (NCPs) for Widening Participation and Strengthening the European Research Area, Horizon Europe. 2022 – 2025, National contact point
- ERIES - Engineering Research Infrastructures for European Synergies, Horizon Europe, GA No. 101058684, 2022 – 2025
- L2BR Learn to be Resilient, Union Civil Protection Mechanism (UCPM) UCPM-2020-KN-AG, No. 101017950, (2021-2023).
- INFRA-NAT – Increased Resilience of Critical Infrastructure to Natural and Human-Induced Hazards. (UCPM) 2018-2020
- NCP\_WIDE.NET - WIDESPREAD Transnational network of National Contact Points (National coordinator), H2020, 2015 - 20

Member

- PARFORCE, Partnership for virtual laboratories in civil engineering”, European Commission, ERASMUS+ Strategic Partnership, KA226- Partnership for Digital Education Readiness, ID: KA226-409D7578, (2021-2023).

Expert

- World Bank-Integrating Seismic Risk Considerations into Energy Efficiency Investments in the Western Balkans, Activity 1\_Baseline Definition, Technical Proposal Selection #1265632, 2020, Researcher and Expert.

**Memberships**

- International Society for Soil Mechanics and Geotechnical Engineering, ISSMGE
- National delegate to the International Association of Earthquake Engineering, (IAEE)
- Macedonian Association of Earthquake Engineering, (MAEE)
- National contact point (NCP) - Widening Participation and ERA
- Macedonian Geotechnical Association (former President 2010-2014)

**ATTACHMENT**

- List of the publications in the main research field (in the last 5 years)

**Most relevant publications in the last 5 years (International Journals)**

1. V. Sheshov, R. Apostolska, Z. Bozinovski, M. Vitanova, et al., Reconnaissance analysis on buildings damaged during Durres earthquake Mw6.4, 26 November 2019, Albania: effects to non-structural element. Bulletin of Earthquake Engineering, <https://doi.org/10.1007/s10518-021-01271-1>. October 2021
2. Edip, K., Sheshov, V., Wu, W. & Bojadjieva J. Numerical modelling of saturated boundless media with infinite elements. Acta Geotech. (2021). <https://doi.org/10.1007/s11440-020-01139-9>
3. Bojadjieva, J., Sheshov, V., Edip, K. et al. Local Site Effects in Definition of Seismic Design Parameters for Historical Monuments. Soil Mech Found Eng 57, 407–414 (2020). <https://doi.org/10.1007/s11204-020-09685-w>
4. K. Edip, V. Sesov, C. Buterweg and J. Bojadjieva . Development of coupled numerical model for simulation of multiphase soil. Computers and Geotechnics , (2018) DOI: 10.1016/j.compgeo.2017.08.016
5. Bojadjieva, J., Sheshov, V. & Bonnard C. Hazard and risk assessment of earthquake-induced landslides—case study. (2018), LANDSLIDES, International Consortium on Landslides, Springer Verlag. DOI: 10.1007/s10346-017-0905-9
6. K. Edip M. Garevski V. Sheshov J. Bojadjieva. Boundary Effects in Simulation of Soil-Structure Interaction Problems. Journal of Soil Mechanics and Foundation Engineering (2017) DOI: 10.1007/s11204-017-9464-2
7. K. Edip, M. Garevski, V. Sheshov, J. Bojadjieva , T. Kitanovski Numerical Investigation of Reservoir Problems , Academia Journal of Scientific Research (2017) DOI: 10.15413/ajsr.2016.0152

**Most relevant publications in the last 5 years (Conferences & Workshops)**

1. Sesov Vlatko, Apostolska Roberta, Salic Radmila, Bojadzieva Julijana, Vitanova Marija Edip Kemal, Bogdanovic Aleksandra, Stojmanovska Marta ,Borzi Barbara, Zuccolo Elisa, Francesca Bozzoni , Pitilakis Dimitrios, Evi Riga, Fotopoulou Stavroula, Christos Petridis, Stefanoski Stevko , Shkodrani Neritan, Baballëku Markel, (2022). Seismic resilience through cross-border cooperation and European research networking - CRISIS project, 3th ECEES, Bucharest, Romania, 2022.
2. V. Sheshov, K. Edip, J. Bojadjieva, T. Kitanovski J. Chaneva and D. Ivanovski , Development of New Model for Numerical Simulation of Dynamic Problems in Soil Media, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020, Paper N° C003285
3. Vlatko Sheshov, Roberta Apostolska, Zivko Bozinovski et al, Post-Earthquake Mission in Durres, Albania, from Science to Practice, Proceedings of 1st Croatian Conference on Earthquake Engineering, 1CroCEE, Zagreb, Croatia - March 22nd to 24nd, 2021
4. Julijana Bojadjieva, Vlatko Sheshov, Kemal Edip et al., Harmonized approach for mapping the earthquake-induced landslide hazard at the cross-border region between N. Macedonia, Greece and Albania, Proceedings of the 5th Regional Symposium on Landslides, Rijeka, 2022
5. Vlatko Sheshov , Experimental Investigations on Performance of Pile Foundation in Liquefied Ground, 2nd International Conference on Seismic Design and Analysis of Structures and Foundations, SeismiCON 2019, London, UK
6. Sesov V., Edip K., Bojadjieva J., Kitanovski T., Chaneva J., Performance of pile group subjected to lateral flow of liquefied ground, ESC2018-S31-579, 36th General Assembly of the European Seismological Commission, 2018
7. Kemal EDIP , Vlatko SHESHOV , et al, Coupled approach in simulation of earth dam, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018
8. Bojadjieva J., Sesov V., Edip K., Kitanovski T., Chaneva J., Cyclic response of Skopje sand by triaxial and model tests, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, June 2018

Date: Skopje, 4 June 2022

Signature: Vlatko Sheshov

