

PERSONAL INFORMATION

Živaljić Nikolina



📍 Grjevačka 113, 21312 Podstrana (Hrvatska)

☎ (+385) 98 450 809

✉ nikolina.zivaljic@gradst.hr

WORK EXPERIENCE

11/09/2020. - today

associate professor

University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Split, Croatia

01/05/2015.–11.09/2020.

assistant professor

University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Split, Croatia

01/04/2002.–30/04/2015.

PhD student

University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Split, Croatia

01/04/2000.–31/03/2002.

Civil Engineer

Čarići d.o.o., Dubrovnik, Croatia

EDUCATION AND TRAINING

13/01/2006.–09/05/2012.

Ph.D.

University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Split, Croatia

01/04/2000.–12/01/2006.

Master of Science

University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Split, Croatia

01/10/1994.–10/2/2000.

Civil Engineer

University of Zagreb, Faculty of Civil Engineering, Zagreb, Croatia

PERSONAL SKILLS

Mother tongue(s)

Croatian

Other language(s)

English language

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

B2: Independent user
Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

Projects and research

Participation in the project "Implementation of modern scientific and research infrastructure at FGAG to smart specialization in green and energy efficient construction - INFRA FGAG", (KK.01.1.1.02.0027), 2018-2021, co-financed from the State Budget of the Republic of Croatia and by the EU from the European Fund for Regional Development Project within the Operational Program "Competitiveness and Cohesion".

Participation in the creation of the HRZZ scientific project "Development of numerical models of reinforced concrete and stone masonry structures exposed to seismic load based on discrete cracks"

Active participation in the research work of scientific projects funded by the Ministry of Science and the Republic of Croatia: "Nonlinear stability and load-bearing capacity of linear and flat structures" (0083051) and "Nonlinear dynamic analysis of three-dimensional reinforced concrete structures" (083-0831541-1532).

Participation in the work of research institutions abroad (-Participation in the implementation of experimental testing of stone structures on the seismic platform IZIS in Skopje; Queen Mary University of London)

Social competences

Communication skills in verbal and written exchange of ideas and information

Presentation skills - participation in international scientific and professional meetings as a lecturer

Team work - participation in work on several scientific and professional projects

Head of the quality improvement committee of FGAG

Vice Dean for Human Resources and Quality Management

Member of the Croatian Society for Mechanics

Member of the Association of Civil Engineers of Split

Scientific papers published in journals in the last 10 years:

Živaljić, N.; Balić, I.; Smoljanović, H.; Munjiza, A.; „Seismic analysis of the historical masonry towers with different support conditions“, International journal of architectural heritage, (2023) <https://doi.org/10.1080/15583058.2023.2235310>

Smoljanović, H.; Balić, I.; Trogrlić, B.; Živaljić, N.; Munjiza, A.; „Finite strain numerical model for the nonlinear analysis of thin shells“, Engineering structures, 234 (2021), 111964, 19
doi:10.1016/j.engstruct. 2021.111964

Smoljanović, H.; Živaljić, N.; Nikolić, Ž. ; Munjiza, A. „Numerical Simulation of the Ancient Protiron Structure Model Exposed to Seismic Loading“, International journal of architectural heritage, 15 (2021) 5 ; str. 779-789 . 10.1080/15583058.2019.1648588

Nikolić, Ž.; Krstevska, L.; Smoljanović, H.; Živaljić, N. „Modelling of the Influence of Metal Connectors on the Resistance of Historical Dry-Stone Masonry Structures“, International journal of architectural heritage, 14 (2020) 10 ; str. 1468-1483 . 10.1080/15583058.2019.1613455

Munjiza, A. ; Smoljanović, H. ; Živaljić, N.; Mihanović, A.; Divić, V.; Uzelac, I.; Nikolić, Ž.; Balić, I.; Trogrlić, B. „Structural applications of the combined finite- discrete element method“ Computational particle mechanics, 7 (2020) str. 1029-1046 . 10.1007/s40571-019-00286-5

Munjiza, A., Smoljanović, H., Živaljić, N., Mihanović, A., Divić, V., Uzelac, I., Nikolić, Ž., Balić, I. & Trogrlić, B. (2019) Structural applications of the combined finite- discrete element method. Computational Particle Mechanics, 5, 1-18 doi:10.1007/s40571-019-00286-5.

Živaljić, N., Nikolić, Ž., Smoljanović, H. & Munjiza, A. (2019) Numerical simulation of reinforced concrete structures under impact loading. Materialwissenschaft und Werkstofftechnik, 50 (5), 599-610 doi:<https://doi.org/10.1002/mawe.201800181>.

Nikolić, Ž., Krstevska, L., Smoljanović, H. & Živaljić, N. (2019) Modelling of the Influence of Metal Connectors on the Resistance of Historical Dry-Stone Masonry Structures. International Journal of Architectural Heritage, 13, 1-16 doi:10.1080/15583058.2019.1613455.

Smoljanović, H., Živaljić, N., Nikolić, Ž. & Munjiza, A. (2019) Numerical Simulation of the Ancient Protiron Structure Model Exposed to Seismic Loading. International Journal of Architectural Heritage, 13, 1-11 doi:10.1080/15583058.2019.1648588.

Nikolić, Ž., Živaljić, N. & Smoljanović, H. (2019) Three-Dimensional Finite-Discrete Element

Framework for the Fracturing of Reinforced Concrete Structures. Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku, 26 (5), 1314-1326 doi:10.17559/TV-20181002104740.

Smoljanović, H., Uzelac, I., Trogrlić, B., Živaljić, N. & Munjiza, A. (2018) A computationally efficient numerical model for a dynamic analysis of beam type structures based on the combined finite- discrete element method. Materialwissenschaft und Werkstofftechnik, 49 (5), 651-665 doi:10.1002/mawe.201700277.

Nikolić, Ž., Živaljić, N. & Smoljanović, H. (2018) Influence of ductility classes on seismic response of reinforced concrete structures. Coupled systems mechanics, 7 (2), 177-195 doi:10.12989/csm.2018.7.2.177.

Smoljanović, H., Živaljić, N., Nikolić, Ž. & Munjiza, A. (2018) Numerical analysis of 3D dry-stone masonry structures by combined finite-discrete element method. International journal of solids and structures, 136-137, 150-167 doi:10.1016/j.ijsolstr.2017.12.012.

Nikolić, Ž., Živaljić, N., Smoljanović, H. & Balić, I. (2017) Numerical modelling of reinforced-concrete structures under seismic loading based on the finite element method with discrete inter-element cracks. Earthquake engineering & structural dynamics, 46 (1), 159-178 doi:10.1002/eqe.2780.

Smoljanović, H., Živaljić, N., Nikolić, Ž. & Munjiza, A. (2017) Numerical model for confined masonry structures based on finite discrete element method. International journal for engineering modelling, 30 (1/4), 19-35. (<https://www.bib.irb.hr/895587>).

Smoljanović, H., Nikolić, Ž., Živaljić, N. & Balić, I. (2016) Stability of rigid blocks exposed to single-pulse excitation. Acta mechanica, 227 (6), 1671-1684 doi:10.1007/s00707-016-1589-2.

Balić, I., Živaljić, N., Smoljanović, H. & Trogrlić, B. (2016) Seismic resistance of dry stone arches under in-plane seismic loading. Structural engineering and mechanics, 58 (2), 243-257 doi:10.12989/sem.2016.58.2.243.

Nikolić, Ž., Smoljanović, H. & Živaljić, N. (2016) Numerical Modelling of Dry Stone Masonry Structures Based on Finite-Discrete Element Method. International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering, 10 (8), 1032-1040.

Nikolić, Ž., Smoljanović, H. & Živaljić, N. (2016) Numerical analysis of masonry structures by finite-discrete element model. International Journal of Masonry Research and Innovation, 1 (4), 330-350 doi:10.1504/IJMRI.2016.081269.

Smoljanović, H., Nikolić, Ž. & Živaljić, N. (2015) A combined finite-discrete numerical model for analysis of masonry structures. Engineering fracture mechanics, 136, 1-14 doi:10.1016/j.engfracmech.2015.02.006.

Smoljanović, H., Nikolić, Ž. & Živaljić, N. (2015) A finite-discrete element model for dry stone masonry structures strengthened with steel clamps and bolts. Engineering structures, 90, 117-129 doi:10.1016/j.engstruct.2015.02.004.

Živaljić, N., Nikolić, Ž. & Smoljanović, H. (2014) Computational aspects of the combined finite–discrete element method in modelling of plane reinforced concrete structures. Engineering fracture mechanics, 131, 669-686 doi:10.1016/j.engfracmech.2014.10.017.

Smoljanović, H., Živaljić, N. & Nikolić, Ž. (2013) A combined finite-discrete element analysis of dry stone masonry structures. Engineering structures, 52, 89-100 doi:10.1016/j.engstruct.2013.02.010.

Živaljić, N., Smoljanović, H. & Nikolić, Ž. (2013) A combined finite-discrete element model for RC structures under dynamic loading. Engineering computations, 30 (7), 982-1010 doi:10.1108/EC-03-2012-0066.

Smoljanović, H., Živaljić, N. & Nikolić, Ž. (2013) Pregled metoda za modeliranje povijesnih zidanih konstrukcija. Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 65 (7), 603-618.

Smoljanović, H., Živaljić, N. & Nikolić, Ž. (2013) Nelinearna analiza građevinskih konstrukcija kombiniranom metodom konačno-diskretnih elemenata. Građevinar : časopis Hrvatskog saveza građevinskih inženjera, 65 (4), 331-344.

Živaljić, N., Smoljanović, H. & Nikolić, Ž. (2012) Sensitivity analysis of numerical parameters in FEM/DEM model for RC structures. International journal for engineering modelling, 25 (1-4), 7-17.

Mihanović, A., Trogrlić, B. & Živaljić, N. (2010) A two-phase loading model of the cable structures. International journal for engineering modelling, 23 (1-4), 13-21.