

PERSONAL INFORMATION

Smoljanović Hrvoje

📍 Kotorska 5, 21000 Split (Hrvatska)

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WORK EXPERIENCE

09/2021. - today

associate professor

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

02/2016.–09/2021.

assistant professor

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

10/2007.–07/2013.

PhD student

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

12/2005.–10/2007.

Civil Engineer

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

EDUCATION AND TRAINING

07/2007.–07/2013.

Ph.D.

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

10/2001.–12/2005.

Civil Engineer

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

PERSONAL SKILLS

Mother tongue(s)

Croatian

Other language(s)

English language

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English language	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 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)

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 department for Theory of structures in FGAG
Member of the Croatian Society for Mechanics
Member of the Association of Civil Engineers of Split

Scientific papers published in journals in the last 5 years:

Smoljanović, Hrvoje; Balić, Ivan; Munjiza, Ante; Hristovski, Viktor; Rotation-Free Based Numerical Model for Nonlinear Analysis of Thin Shells // Buildings, 11 (2021), 12; 657, 25
doi:10.3390/buildings11120657

Kustura, Mladen; Smoljanovic, Hrvoje; Nikolic, Zeljana; Krstevska, Lidija; Experimental and numerical analysis of the global behaviour of the 1: 9 scale model of the Old Bridge in Mostar // Coupled Systems Mechanics, 10 (2021), 1; 1-19 doi:10.12989/csm.2021.10.1.001

Balić, Ivan; Smoljanović, Hrvoje; Trogrlić, Boris; Munjiza, Ante; Seismic Analysis of the Bell Tower of the Church of St. Francis of Assisi on Kaptol in Zagreb by Combined Finite-Discrete Element Method // Buildings, 11 (2021), 8; 373, 17 doi:10.3390/buildings11080373

Smoljanović, Hrvoje; Balić, Ivan; Trogrlić, Boris; Živaljić, Nikolina; Munjiza, Ante; 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, Hrvoje; Živaljić, Nikolina; Nikolić, Željana; Munjiza, Ante; Numerical Simulation of the Ancient Protiron Structure Model Exposed to Seismic Loading // International Journal of Architectural Heritage, 15 (2021), 5; 779-789 doi:10.1080/15583058.2019.1648588

Smoljanović, Hrvoje; Balić, Ivan; Munjiza, Ante; Akmadžić, Vlaho; Trogrlić, Boris; Analysis of dynamic stability of beam structures // Acta mechanica, 231 (2020), 11; 4701-4715 doi:10.1007/s00707-020-02793-6

Munjiza, Ante; Smoljanović, Hrvoje; Živaljić, Nikolina; Mihanović, Ante; Divić, Vladimir; Uzelac, Ivana; Nikolić, Željana; Balić, Ivan; Trogrlić, Boris; Structural applications of the combined finite- discrete element method // Computational particle mechanics, 7 (2020), 1029-1046 doi:10.1007/s40571-019-00286-5

Nikolić, Željana; Krstevska, Lidija; Smoljanović, Hrvoje; Živaljić, Nikolina; Modelling of the Influence of Metal Connectors on the Resistance of Historical Dry-Stone Masonry Structures // International Journal of Architectural Heritage, 14 (2020), 10; 1468-1483 doi:10.1080/15583058.2019.1613455

Munjiza, Antonio; Galić, Mirela; Smoljanović, Hrvoje; Marović, Pavao; Mihanović, Ante; Živaljić, Nikolina; Williams, John; Avital, Eldad; Aspects of the hybrid finite discrete element simulation technology in science and engineering // International journal for engineering modelling, 32 (2019), 2-4; 45-55 doi:10.31534/engmod.2019.2-4.ri.01m

Nikolić, Željana; Živaljić, Nikolina; Smoljanović, Hrvoje; Three-Dimensional Finite-Discrete Element Framework for the Fracturing of Reinforced Concrete Structures // Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku, 26 (2019), 5; 1314-1326 doi:10.17559/TV-20181002104740

Mihanović, Ante; Smoljanović, Hrvoje; Trogrlić, Boris; Munjiza, Ante; A new robust and computationally efficient numerical model for the analysis of beam type truss structures // Rad Hrvatske akademije znanosti i umjetnosti. Tehničke znanosti, 536 (2019), 61-79 doi:10.21857/y26kec3z79

Živaljić, Nikolina; Nikolić, Željana; Smoljanović, Hrvoje; Munjiza, Ante; Numerical simulation of reinforced concrete structures under impact loading // Materialwissenschaft und Werkstofftechnik, 50

(2019), 5; 599-610 doi:<https://doi.org/10.1002/mawe.201800181>

Nikolić, Željana; Krstevska, Lidija; Marović, Pavao; Smoljanović, Hrvoje; Experimental investigation of seismic behaviour of the ancient Protiron monument model // *Earthquake engineering & structural dynamics*, 48 (2019), 6; 573-593 doi:10.1002/eqe.3149

Uzelac, Ivana; Smoljanović, Hrvoje; Batinić, Milko; Peroš, Bernardin; Munjiza, Ante; A model for thin shells in the combined finite- discrete element method // *Engineering Computations*, 35 (2018), 1; 377-394 doi:10.1108/ec-09-2016-0338

Uzelac Glavinić, Ivana; Smoljanović, Hrvoje; Galić, Mirela; Munjiza, Ante; Mihanović, Ante; Computational aspects of the combined finite- discrete element method in static and dynamic analysis of shell structures // *Materialwissenschaft und Werkstofftechnik*, 49 (2018), 5; 635-651 doi:10.1002/mawe.201700276

Smoljanović, Hrvoje; Uzelac, Ivana; Trogrlić, Boris; Živaljić, Nikolina; Munjiza, Ante; 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 (2018), 5; 651-665 doi:10.1002/mawe.201700277

Smoljanović, Hrvoje; Živaljić, Nikolina; Nikolić, Željana; Munjiza, Ante; Numerical analysis of 3D dry-stone masonry structures by combined finite-discrete element method // *International journal of solids and structures*, 136-137 (2018), 150-167 doi:10.1016/j.ijsolstr.2017.12.012

Nikolić, Željana; Živaljić, Nikolina; Smoljanović, Hrvoje; Influence of ductility classes on seismic response of reinforced concrete structures // *Coupled systems mechanics*, 7 (2018), 2; 177-195 doi:10.12989/csm.2018.7.2.177 (međunarodna recenzija, članak, znanstveni)